

**APPENDIX E**

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**OPINION OF PROBABLE COST TABLES**

**NORTH VINEYARD STATION SPECIFIC PLAN**  
**DRAINAGE MASTER PLAN**  
**UPDATE AND PHASING**

**OPINION OF PROBABLE COSTS**  
**PREFERRED DRAINAGE PLAN**  
**DRAINAGE FACILITIES SUMMARY**

Sheet 1 of 1

Project No.	Project Name	On-Site or Off-Site	Project Description	Sheet Linked	Total, \$
<b>DRAINAGE FACILITY IMPROVEMENTS</b>					
(See Also Roadway Section for Additional Bridges/Culverts)					
<b>DRAINAGE CORRIDOR IMPROVEMENTS</b>					
3.1	Elder Creek Reach 3 (Improved Channel to W. Boundary)				
3.1.1 A	Elder Creek Reach 3A - Off-Site Channel Improvements	Off	Off-Site Channel Construction (Approx. 1,830 L.F.)	Yes	273,000
3.1.1 B	Elder Creek Reach 3B - Off-Site Channel Improvements	Off	Off-Site Channel Construction (Approx. 3,020 L.F.)	Yes	460,000
3.2	Elder Creek Reach 1A (W. Boundary to Florin Road)				
3.2.1 A	Elder Creek Reach 1A (a) - Channel Improvements	On	Channel Construction (Approx. 2,650 L.F.)	Yes	363,000
3.2.1 B	Elder Creek Reach 1A (b) - Channel Improvements	On	Channel Construction (Approx. 2,910 L.F.)	Yes	400,000
3.2.2	Elder Creek Reach 1A - Drainage Parkway	On	Channel Parkway Construction (Approx. 5,560 L.F.)	Yes	132,000
3.2.3	Elder Creek Reach 1A (a) - McCoy Lane Crossing	On	(3) 8'x6' Box Culvert Construction W/Headwalls (+/- 40' R/W)	Yes	152,000
3.2.4	Elder Creek Reach 1A (b) - CCTC Railroad Bridge Crossing	On	Construct New Bridge @ Elder Creek and CCT Railroad Crossing	Yes	367,000
3.3	Elder Creek Reach 1B (Upstream of Florin Road)				
3.3.1	Elder Creek Reach 1B - Off-Site Channel Improvements	Off	Channel Construction (Approx. 1,400 L.F.)	Yes	283,000
3.4	Left Blank For Additions	----	----	----	----
3.5	Gerber Creek Reach 2A (W. Boundary to Gerber Road Crossing No. 4)				
3.5.1 A	Gerber Creek Reach 2A (a) - Channel Improvements	On	Channel Construction (Approx. 3,350 L.F.)	Yes	407,000
3.5.1 B	Gerber Creek Reach 2A (b) - Channel Improvements	On	Channel Construction (Approx. 3,750 L.F.)	Yes	584,000
3.5.2	Gerber Creek Reach 2A - Drainage Parkway	On	Channel Parkway Corridor Construction (Approx. 7,100 L.F.)	Yes	168,000
3.5.3	Gerber Creek Reach 2A (a) - Passalis Lane Crossing (West)	On	(3) 8'x6' Box Culvert Construction W/Headwalls (56' R/W)	Yes	167,000
3.5.4	Gerber Creek Reach 2A (b) - Passalis Lane Crossing (East)	On	(3) 8'x6' Box Culvert Construction W/Headwalls (56' R/W)	Yes	167,000
3.5.5	Gerber Creek Reach 2A (b) - CCTC Railroad Bridge Crossing	On	Construct New Bridge @ Elder Creek and CCTC Railroad	Yes	294,000
3.6	Gerber Creek Reach 2B (Gerber Road Crossing No. 4 to Crossing No. 3)				
3.6.1	Gerber Creek Reach 2B - Off-Site Channel Improvements	Off	Channel Construction (Approx. 2,030 L.F.)	Yes	293,000
3.7	Gerber Creek Reach 2C (Gerber Road Crossing No. 3 to Crossing No. 2)				
3.7.1	Gerber Creek Reach 2C Channel Improvements	On	Channel Construction (Approx. 3,680 L.F.)	Yes	380,000
3.7.2	Gerber Creek Reach 2C - Drainage Parkway	On	Drainage Parkway Corridor Construction (Approx. 3,680 L.F.)	Yes	87,000
3.7.3	Gerber Creek Temporary Overspill Channel	On	Gerber Creek Temporary Overspill Channel	Yes	287,000
3.8	Arterial Roadway Drainage Crossings (Also Identified in Roadway CIP)	Off	Portion of Arterial Roadway Drainage Crossings (Roadway Proj. No. 4.14)	No	41,000
<b>SUBTOTAL DRAINAGE CORRIDOR IMPROVEMENTS</b>					
<b>STORMWATER DETENTION POND IMPROVEMENTS</b>					
3.9	Detention Pond E24B (Elder Creek Reach 1A (a))	On	7.4 Ac. Water Quality Detention Pond Construction	Yes	670,000
3.10	Detention Pond E26 (Elder Creek Reach 1A (b))	On	22 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	1,208,000
3.11	Detention Pond E24A (Gerber Creek Reach 2A (a))	On	12 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	870,000
3.12	Detention Pond G41 (Gerber Creek Reach 2A (b))	On	10.6 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	918,000
3.13	Detention Pond G46 (Gerber Creek Reach 2C)	On	16 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	1,427,000
<b>SUBTOTAL STORMWATER DETENTION POND IMPROVEMENTS</b>					
<b>WETLANDS MITIGATION*</b>					
<b>TOTAL DRAINAGE FACILITY IMPROVEMENTS COST</b>					
					<b>10,398,000</b>

\*To be provided after completion of environmental evaluation by others.



NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
UPDATE AND PHASING

OPINION OF PROBABLE COSTS  
PHASE A1

Sheet 1 of 1

Project No.	Project Name	On-Site or Off-Site	Project Description	Sheet Linked	Total, \$
<b>DRAINAGE FACILITY IMPROVEMENTS</b>					
(See also Roadway Section for Additional Bridges/Culverts)					
<b>DRAINAGE CORRIDOR IMPROVEMENTS</b>					
<b>3.1</b>	<b>Elder Creek Reach 3 (Improved Channel to W. Bndry)</b>				
3.1.1 A	Elder Creek Reach 3A - Off-Site Channel Improvements	Off	Off-Site Channel Construction (Approx. 1,830 L.F.)	Yes	0
3.1.1 B	Elder Creek Reach 3B - Off-Site Channel Improvements	Off	Off-Site Channel Construction (Approx. 3,020 L.F.)	Yes	0
<b>3.2</b>	<b>Elder Creek Reach 1A (W. Bndry to Florin Rd.)</b>				
3.2.1 A	Elder Creek Reach 1A (a) - Channel Improvements	On	Channel Construction (Approx. 2,650 L.F.)	Yes	0
3.2.1 B	Elder Creek Reach 1A (b) - Channel Improvements	On	Channel Construction (Approx. 2,910 L.F.)	Yes	0
3.2.2	Elder Creek Reach 1A - Drainage Parkway	On	Channel Parkway Construction (Approx. 5,560 L.F.)	Yes	0
3.2.3	Elder Creek Reach 1A (a) - McCoy Lane Crossing	On	(3) 8'x6' Box Culvert Construction W/Headwalls (+/- 40' R/W)	Yes	0
3.2.4	Elder Creek Reach 1A (b) - CCTC Railroad Bridge Crossing	On	Construct New Bridge @ Elder Creek and CCT Railroad Crossing	Yes	0
<b>3.3</b>	<b>Elder Creek Reach 1B (Upstream of Florin Rd.)</b>				
3.3.1	Elder Creek Reach 1B - Off-Site Channel Improvements	Off	Channel Construction (Approx. 1,400 L.F.)	Yes	0
<b>3.4</b>	<b>Left Blank For Additions</b>	----	----	----	----
<b>3.5</b>	<b>Gerber Creek Reach 2A (W. Bndry to Gerber Rd. Crossing No. 4)</b>				
3.5.1 A	Gerber Creek Reach 2A (a) - Channel Improvements	On	Channel Construction (Approx. 3,350 L.F.)	Yes	101,750
3.5.1 B	Gerber Creek Reach 2A (b) - Channel Improvements	On	Channel Construction (Approx. 3,750 L.F.)	Yes	0
3.5.2	Gerber Creek Reach 2A - Drainage Parkway	On	Channel Parkway Corridor Construction (Approx. 7,100 L.F.)	Yes	42,000
3.5.3	Gerber Creek Reach 2A (a) - Passalis Lane Crossing (West)	On	(3) 8'x6' Box Culvert Construction W/Headwalls (56' R/W)	Yes	0
3.5.4	Gerber Creek Reach 2A (b) - Passalis Lane Crossing (East)	On	(3) 8'x6' Box Culvert Construction W/Headwalls (56' R/W)	Yes	0
3.5.5	Gerber Creek Reach 2A (b) - CCTC Railroad Bridge Crossing	On	Construct New Bridge @ Elder Creek and CCTC Railroad	Yes	0
<b>3.6</b>	<b>Gerber Creek Reach 2B (Gerber Rd. Crossing 4 to Crossing 3)</b>				
3.6.1	Gerber Creek Reach 2B - Off-Site Channel Improvements	Off	Channel Construction (Approx. 2,030 L.F.)	Yes	0
<b>3.7</b>	<b>Gerber Creek Reach 2C (Gerber Rd. Crossing 3 to Crossing 2)</b>				
3.7.1	Gerber Creek Reach 2C Channel Improvements	On	Channel Construction (Approx. 3,680 L.F.)	Yes	0
3.7.2	Gerber Creek Reach 2C - Drainage Parkway	On	Drainage Parkway Corridor Construction (Approx. 3,680 L.F.)	Yes	0
3.7.3	Gerber Creek Temporary Overspill Channel	On	Gerber Creek Temporary Overspill Channel	Yes	0
<b>3.8</b>	<b>Arterial Roadway Drainage Crossings (also identified in Roadway CIP)</b>	Off	Portion of Arterial Roadway Drainage Crossings (Roadway Proj. No. 4.14)	No	0
<b>SUBTOTAL DRAINAGE CORRIDOR IMPROVEMENTS</b>					<b>143,750</b>
<b>STORMWATER DETENTION POND IMPROVEMENTS</b>					
3.9	Detention Pond E24B (Elder Creek Reach 1A (a))	On	7.4 Ac. Water Quality Detention Pond Construction	Yes	0
3.10	Detention Pond E26 (Elder Creek Reach 1A (b))	On	22 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	0
3.11	Detention Pond E24A (Gerber Creek Reach 2A (a))	On	12 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	0
3.12	Detention Pond G41 (Gerber Creek Reach 2A (b))	On	10.6 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	918,000
3.13	Detention Pond G46 (Gerber Creek Reach 2C)	On	16 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	0
<b>SUBTOTAL STORMWATER DETENTION POND IMPROVEMENTS</b>					<b>918,000</b>
<b>WETLANDS MITIGATION*</b>					
<b>TOTAL DRAINAGE FACILITY IMPROVEMENTS COST</b>					<b>1,061,750</b>

\*To be provided after completion of environmental evaluation by others.

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
UPDATE AND PHASING

OPINION OF PROBABLE COSTS  
PHASE A2

Sheet 1 of 1

Project No.	Project Name	On-site or Off-site	Project Description	Sheet Linked	Total, \$
<b>DRAINAGE FACILITY IMPROVEMENTS</b>					
(See also Roadway Section for Additional Bridges/Culverts)					
<b>DRAINAGE CORRIDOR IMPROVEMENTS</b>					
<b>3.1</b>	<b>Elder Creek Reach 3 (Improved Channel to W. Bndry)</b>				
3.1.1 A	Elder Creek Reach 3A - Off-Site Channel Improvements	Off	Off-Site Channel Construction (Approx. 1,830 L.F.)	Yes	0
3.1.1 B	Elder Creek Reach 3B - Off-Site Channel Improvements	Off	Off-Site Channel Construction (Approx. 3,020 L.F.)	Yes	0
<b>3.2</b>	<b>Elder Creek Reach 1A (W. Bndry to Florin Rd.)</b>				
3.2.1 A	Elder Creek Reach 1A (a) - Channel Improvements	On	Channel Construction (Approx. 2,650 L.F.)	Yes	0
3.2.1 B	Elder Creek Reach 1A (b) - Channel Improvements	On	Channel Construction (Approx. 2,910 L.F.)	Yes	400,000
3.2.2	Elder Creek Reach 1A - Drainage Parkway	On	Channel Parkway Construction (Approx. 5,560 L.F.)	Yes	66,000
3.2.3	Elder Creek Reach 1A (a) - McCoy Lane Crossing	On	(3) 8'x6' Box Culvert Construction W/Headwalls (+/- 40' R/W)	Yes	152,000
3.2.4	Elder Creek Reach 1A (b) - CCTC Railroad Bridge Crossing	On	Construct New Bridge @ Elder Creek and CCT Railroad Crossing	Yes	367,000
<b>3.3</b>	<b>Elder Creek Reach 1B (Upstream of Florin Rd.)</b>				
3.3.1	Elder Creek Reach 1B - Off-Site Channel Improvements	Off	Channel Construction (Approx. 1,400 L.F.)	Yes	0
<b>3.4</b>	<b>Left Blank For Additions</b>	----	----	----	----
<b>3.5</b>	<b>Gerber Creek Reach 2A (W. Bndry to Gerber Rd. Crossing No. 4)</b>				
3.5.1 A	Gerber Creek Reach 2A (a) - Channel Improvements	On	Channel Construction (Approx. 3,350 L.F.)	Yes	101,750
3.5.1 B	Gerber Creek Reach 2A (b) - Channel Improvements	On	Channel Construction (Approx. 3,750 L.F.)	Yes	0
3.5.2	Gerber Creek Reach 2A - Drainage Parkway	On	Channel Parkway Corridor Construction (Approx. 7,100 L.F.)	Yes	42,000
3.5.3	Gerber Creek Reach 2A (a) - Passalis Lane Crossing (West)	On	(3) 8'x6' Box Culvert Construction W/Headwalls (56' R/W)	Yes	0
3.5.4	Gerber Creek Reach 2A (b) - Passalis Lane Crossing (East)	On	(3) 8'x6' Box Culvert Construction W/Headwalls (56' R/W)	Yes	0
3.5.5	Gerber Creek Reach 2A (b) - CCTC Railroad Bridge Crossing	On	Construct New Bridge @ Elder Creek and CCTC Railroad	Yes	0
<b>3.6</b>	<b>Gerber Creek Reach 2B (Gerber Rd. Crossing 4 to Crossing 3)</b>				
3.6.1	Gerber Creek Reach 2B - Off-Site Channel Improvements	Off	Channel Construction (Approx. 2,030 L.F.)	Yes	0
<b>3.7</b>	<b>Gerber Creek Reach 2C (Gerber Rd. Crossing 3 to Crossing 2)</b>				
3.7.1	Gerber Creek Reach 2C Channel Improvements	On	Channel Construction (Approx. 3,680 L.F.)	Yes	0
3.7.2	Gerber Creek Reach 2C - Drainage Parkway	On	Drainage Parkway Corridor Construction (Approx. 3,680 L.F.)	Yes	0
3.7.3	Gerber Creek Temporary Overspill Channel	On	Gerber Creek Temporary Overspill Channel	Yes	0
<b>3.8</b>	<b>Arterial Roadway Drainage Crossings (also identified in Roadway CIP)</b>	Off	Portion of Arterial Roadway Drainage Crossings (Roadway Proj. No. 4.14)	No	0
<b>SUBTOTAL DRAINAGE CORRIDOR IMPROVEMENTS</b>					<b>1,128,750</b>
<b>STORMWATER DETENTION POND IMPROVEMENTS</b>					
3.9	Detention Pond E24B (Elder Creek Reach 1A (a))	On	7.4 Ac. Water Quality Detention Pond Construction	Yes	670,000
3.10	Detention Pond E26 (Elder Creek Reach 1A (b))	On	22 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	1,208,000
3.11	Detention Pond E24A (Gerber Creek Reach 2A (a))	On	12 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	0
3.12	Detention Pond G41 (Gerber Creek Reach 2A (b))	On	10.6 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	0
3.13	Detention Pond G46 (Gerber Creek Reach 2C)	On	16 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	0
<b>SUBTOTAL STORMWATER DETENTION POND IMPROVEMENTS</b>					<b>1,878,000</b>
<b>WETLANDS MITIGATION*</b>					
<b>TOTAL DRAINAGE FACILITY IMPROVEMENTS COST</b>					<b>3,006,750</b>

\*To be provided after completion of environmental evaluation by others.

**NORTH VINEYARD STATION SPECIFIC PLAN**  
**DRAINAGE MASTER PLAN**  
**UPDATE AND PHASING**

**OPINION OF PROBABLE COSTS**  
**PHASE C**

Sheet 1 of 1

Project No.	Project Name	On-Site or Off-Site	Project Description	Sheet Linked	Total, \$
<b>DRAINAGE FACILITY IMPROVEMENTS</b>					
(See also Roadway Section for Additional Bridges/Culverts)					
<b>DRAINAGE CORRIDOR IMPROVEMENTS</b>					
<b>3.1 Elder Creek Reach 3 (Improved Channel to W. Badry)</b>					
3.1.1 A	Elder Creek Reach 3A - Off-Site Channel Improvements	Off	Off-Site Channel Construction (Approx. 1,830 L.F.)	Yes	0
3.1.1 B	Elder Creek Reach 3B - Off-Site Channel Improvements	Off	Off-Site Channel Construction (Approx. 3,020 L.F.)	Yes	0
<b>3.2 Elder Creek Reach 1A (W. Badry to Florin Rd.)</b>					
3.2.1 A	Elder Creek Reach 1A (a) - Channel Improvements	On	Channel Construction (Approx. 2,650 L.F.)	Yes	0
3.2.1 B	Elder Creek Reach 1A (b) - Channel Improvements	On	Channel Construction (Approx. 2,910 L.F.)	Yes	0
3.2.2	Elder Creek Reach 1A - Drainage Parkway	On	Channel Parkway Construction (Approx. 5,560 L.F.)	Yes	0
3.2.3	Elder Creek Reach 1A (a) - McCoy Lane Crossing	On	(3) 8'x6' Box Culvert Construction W/Headwalls (+/- 40' R/W)	Yes	0
3.2.4	Elder Creek Reach 1A (b) - CCTC Railroad Bridge Crossing	On	Construct New Bridge @ Elder Creek and CCT Railroad Crossing	Yes	0
<b>3.3 Elder Creek Reach 1B (Upstream of Florin Rd.)</b>					
3.3.1	Elder Creek Reach 1B - Off-Site Channel Improvements	Off	Channel Construction (Approx. 1,400 L.F.)	Yes	0
3.4	Left Blank For Additions	****	****	****	****
<b>3.5 Gerber Creek Reach 2A (W. Badry to Gerber Rd. Crossing No. 4)</b>					
3.5.1 A	Gerber Creek Reach 2A (a) - Channel Improvements	On	Channel Construction (Approx. 3,350 L.F.)	Yes	0
3.5.1 B	Gerber Creek Reach 2A (b) - Channel Improvements	On	Channel Construction (Approx. 3,750 L.F.)	Yes	0
3.5.2	Gerber Creek Reach 2A - Drainage Parkway	On	Channel Parkway Corridor Construction (Approx. 7,100 L.F.)	Yes	0
3.5.3	Gerber Creek Reach 2A (a) - Passalis Lane Crossing (West)	On	(3) 8'x6' Box Culvert Construction W/Headwalls (56' R/W)	Yes	0
3.5.4	Gerber Creek Reach 2A (b) - Passalis Lane Crossing (East)	On	(3) 8'x6' Box Culvert Construction W/Headwalls (56' R/W)	Yes	0
3.5.5	Gerber Creek Reach 2A (b) - CCTC Railroad Bridge Crossing	On	Construct New Bridge @ Elder Creek and CCTC Railroad	Yes	0
<b>3.6 Gerber Creek Reach 2B (Gerber Rd. Crossing 4 to Crossing 3)</b>					
3.6.1	Gerber Creek Reach 2B - Off-Site Channel Improvements	Off	Channel Construction (Approx. 2,030 L.F.)	Yes	0
<b>3.7 Gerber Creek Reach 2C (Gerber Rd. Crossing 3 to Crossing 2)</b>					
3.7.1	Gerber Creek Reach 2C Channel Improvements	On	Channel Construction (Approx. 3,680 L.F.)	Yes	0
3.7.2	Gerber Creek Reach 2C - Drainage Parkway	On	Drainage Parkway Corridor Construction (Approx. 3,680 L.F.)	Yes	0
3.7.3	Gerber Creek Temporary Overspill Channel	On	Gerber Creek Temporary Overspill Channel	Yes	287,000
3.8	Arterial Roadway Drainage Crossings (also identified in Roadway CIP)	Off	Portion of Arterial Roadway Drainage Crossings (Roadway Proj. No. 4.14)	No	0
<b>SUBTOTAL DRAINAGE CORRIDOR IMPROVEMENTS</b>					<b>287,000</b>
<b>STORMWATER DETENTION POND IMPROVEMENTS</b>					
3.9	Detention Pond E24B (Elder Creek Reach 1A (a))	On	7.4 Ac. Water Quality Detention Pond Construction	Yes	0
3.10	Detention Pond E26 (Elder Creek Reach 1A (b))	On	22 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	0
3.11	Detention Pond E24A (Gerber Creek Reach 2A (a))	On	12 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	0
3.12	Detention Pond G41 (Gerber Creek Reach 2A (b))	On	10.6 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	0
3.13	Detention Pond G46 (Gerber Creek Reach 2C)	On	16 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	1,427,000
<b>SUBTOTAL STORMWATER DETENTION POND IMPROVEMENTS</b>					<b>1,427,000</b>
<b>WETLANDS MITIGATION*</b>					
<b>TOTAL DRAINAGE FACILITY IMPROVEMENTS COST</b>					<b>1,714,000</b>

\*To be provided after completion of environmental evaluation by others.

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
UPDATE AND PHASING

OPINION OF PROBABLE COSTS  
PHASE D

Sheet 1 of 1

Project No.	Project Name	On-Site or Off-Site	Project Description	Sheet Linked	Total, \$
<b>DRAINAGE FACILITY IMPROVEMENTS</b>					
(See also Roadway Section for Additional Bridges/Culverts)					
<b>DRAINAGE CORRIDOR IMPROVEMENTS</b>					
3.1	Elder Creek Reach 3 (Improved Channel to W. Bndry)				
3.1.1 A	Elder Creek Reach 3A - Off-Site Channel Improvements	Off	Off-Site Channel Construction (Approx. 1,830 L.F.)	Yes	273,000
3.1.1 B	Elder Creek Reach 3B - Off-Site Channel Improvements	Off	Off-Site Channel Construction (Approx. 3,020 L.F.)	Yes	460,000
3.2	Elder Creek Reach 1A (W. Bndry to Florin Rd.)				
3.2.1 A	Elder Creek Reach 1A (a) - Channel Improvements	On	Channel Construction (Approx. 2,650 L.F.)	Yes	363,000
3.2.1 B	Elder Creek Reach 1A (b) - Channel Improvements	On	Channel Construction (Approx. 2,910 L.F.)	Yes	0
3.2.2	Elder Creek Reach 1A - Drainage Parkway	On	Channel Parkway Construction (Approx. 5,560 L.F.)	Yes	66,000
3.2.3	Elder Creek Reach 1A (a) - McCoy Lane Crossing	On	(3) 8'x6' Box Culvert Construction W/Headwalls (+/- 40' R/W)	Yes	0
3.2.4	Elder Creek Reach 1A (b) - CCTC Railroad Bridge Crossing	On	Construct New Bridge @ Elder Creek and CCT Railroad Crossing	Yes	0
3.3	Elder Creek Reach 1B (Upstream of Florin Rd.)				
3.3.1	Elder Creek Reach 1B - Off-Site Channel Improvements	Off	Channel Construction (Approx. 1,400 L.F.)	Yes	0
3.4	Left Blank For Additions				
3.5	Gerber Creek Reach 2A (W. Bndry to Gerber Rd. Crossing No. 4)				
3.5.1 A	Gerber Creek Reach 2A (a) - Channel Improvements	On	Channel Construction (Approx. 3,350 L.F.)	Yes	203,500
3.5.1 B	Gerber Creek Reach 2A (b) - Channel Improvements	On	Channel Construction (Approx. 3,750 L.F.)	Yes	584,000
3.5.2	Gerber Creek Reach 2A - Drainage Parkway	On	Channel Parkway Corridor Construction (Approx. 7,100 L.F.)	Yes	84,000
3.5.3	Gerber Creek Reach 2A (a) - Passalis Lane Crossing (West)	On	(3) 8'x6' Box Culvert Construction W/Headwalls (56' R/W)	Yes	167,000
3.5.4	Gerber Creek Reach 2A (b) - Passalis Lane Crossing (East)	On	(3) 8'x6' Box Culvert Construction W/Headwalls (56' R/W)	Yes	167,000
3.5.5	Gerber Creek Reach 2A (b) - CCTC Railroad Bridge Crossing	On	Construct New Bridge @ Elder Creek and CCTC Railroad	Yes	0
3.6	Gerber Creek Reach 2B (Gerber Rd. Crossing 4 to Crossing 3)				
3.6.1	Gerber Creek Reach 2B - Off-Site Channel Improvements	Off	Channel Construction (Approx. 2,030 L.F.)	Yes	0
3.7	Gerber Creek Reach 2C (Gerber Rd. Crossing 3 to Crossing 2)				
3.7.1	Gerber Creek Reach 2C Channel Improvements	On	Channel Construction (Approx. 3,680 L.F.)	Yes	0
3.7.2	Gerber Creek Reach 2C - Drainage Parkway	On	Drainage Parkway Corridor Construction (Approx. 3,680 L.F.)	Yes	0
3.7.3	Gerber Creek Temporary Overspill Channel	On	Gerber Creek Temporary Overspill Channel	Yes	0
3.8	Arterial Roadway Drainage Crossings (Also identified in Roadway CIP)	Off	Portion of Arterial Roadway Drainage Crossings (Roadway Proj. No. 4.14)	No	0
<b>SUBTOTAL DRAINAGE CORRIDOR IMPROVEMENTS</b>					<b>2,367,500</b>
<b>STORMWATER DETENTION POND IMPROVEMENTS</b>					
3.9	Detention Pond E24B (Elder Creek Reach 1A (a))	On	7.4 Ac. Water Quality Detention Pond Construction	Yes	0
3.10	Detention Pond E26 (Elder Creek Reach 1A (b))	On	22 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	0
3.11	Detention Pond E24A (Gerber Creek Reach 2A (a))	On	12 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	870,000
3.12	Detention Pond G41 (Gerber Creek Reach 2A (b))	On	10.6 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	0
3.13	Detention Pond G46 (Gerber Creek Reach 2C)	On	16 Ac. Flood Control/Water Quality Detention Pond Construction	Yes	0
<b>SUBTOTAL STORMWATER DETENTION POND IMPROVEMENTS</b>					<b>870,000</b>
<b>WETLANDS MITIGATION*</b>					
<b>TOTAL DRAINAGE FACILITY IMPROVEMENTS COST</b>					<b>3,237,500</b>

\*To be provided after completion of environmental evaluation by others.

**NORTH VINEYARD STATION SPECIFIC PLAN**

**DRAINAGE MASTER PLAN  
UPDATE AND PHASING**

**DRAINAGE CORRIDOR COST SUMMARY**

Project No.	Project Name	Total Cost, \$
3.1.1 A	Elder Creek Reach 3A - Off-Site Channel Improvements	273,000
3.1.1 B	Elder Creek Reach 3B - Off-Site Channel Improvements	460,000
3.2.1 A	Elder Creek Reach 1A (a) - Channel Improvements	363,000
3.2.1 B	Elder Creek Reach 1A (b) - Channel Improvements	400,000
3.2.2	Elder Creek Reach 1A - Drainage Parkway	132,000
3.2.3	Elder Creek Reach 1A (a) - McCoy Lane Crossing	152,000
3.2.4	Elder Creek Reach 1A (b) - CCTC Railroad Bridge Crossing	367,000
3.3.1	Elder Creek Reach 1B - Off-Site Channel Improvements	283,000
3.5.1 A	Gerber Creek Reach 2A (a) - Channel Improvements	407,000
3.5.1 B	Gerber Creek Reach 2A (b) - Channel Improvements	584,000
3.5.2	Gerber Creek Reach 2A - Drainage Parkway	168,000
3.5.3	Gerber Creek Reach 2A (a) - Passalis Lane Crossing (West)	167,000
3.5.4	Gerber Creek Reach 2A (b) - Passalis Lane Crossing (East)	167,000
3.5.5	Gerber Creek Reach 2A (b) - CCTC Railroad Bridge Crossing	294,000
3.6.1	Gerber Creek Reach 2B - Off-Site Channel Improvements	293,000
3.7.1	Gerber Creek Reach 2C Channel Improvements	380,000
3.7.2	Gerber Creek Reach 2C - Drainage Parkway	87,000
3.7.3	Gerber Creek Temporary Overspill Channel	287,000
3.8	Arterial Roadway Drainage Crossings	41,000





NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.1.1B DETAIL SHEET

PROJECT NO. :	3.1.1 B			
PROJECT NAME:	Elder Creek Reach 3B - Off-Site Channel Improvements			
PROJECT DESCRIPTION:	Off-Site Channel Construction (Approx. 3,020 L.F.)			
	From D/S Of Elk Grove-Florin Road			
	To Western Specific Plan Boundary			
PROJECT COSTS:				
	<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>
	Channel -Excavation	60,000	c.y.	\$3.30
	Channel-Erosion Control	3,020	l.f.	\$5.00
	Channel-Landscaping	3,020	l.f.	\$31.00
	(Channel Area Only)			
	Maintenance Road	3,775	l.f.	\$15.00
	(12' wide @ 1.25 x channel length, excav. & A.B. only)			
			<b>Subtotal</b>	<b>\$363,300</b>
			<b>15% Contingency</b>	<b>\$54,500</b>
			<b>Construction Cost</b>	<b>\$417,800</b>
			<b>10% Engineering</b>	<b>\$41,800</b>
	Channel-Land Acquis. (high)	11.24	ac.	\$100,000
			<b>Total Cost</b>	<b>\$460,000</b>
FUNDING SOURCES:				
NOTES:	1. Hec 2 Sections 4.799 to 5.402			
	2. Split Reach 3 into 3A & 3B to accommodate phasing discussions.			
	3. Added Channel land acquisition acreages which assume no existing easements.			
	4. Added maintenance road, 11-13-97			
	5. Revised maint. Rd. width per Pete Ghelfi. Revised unit cost. 2-4-98			
	6. Moved wetland mitigation to proj. no. 3.100 & 3.101. 2-11-98			
	7. Revised unit costs 4-11-00.			

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.2.1A DETAIL SHEET

PROJECT NO. :		3.2.1 A		
PROJECT NAME:		Elder Creek Reach 1A (a) - Channel Improvements		
PROJECT DESCRIPTION:		Channel Construction (Approx. 2,650 L.F.) From Western Specific Plan Boundary To Basin E24B		
PROJECT COSTS:				
	<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>
	Channel -Excavation	58,000	c.y.	\$3.30
	Channel-Erosion Control	2,650	l.f.	\$5.00
	Channel-Landscaping (Channel Area Only)	2,650	l.f.	\$31.00
			<b>Subtotal</b>	<b>\$286,800</b>
			<b>15% Contingency</b>	<b>\$43,000</b>
			<b>Construction Cost</b>	<b>\$329,800</b>
			<b>10% Engineering</b>	<b>\$33,000</b>
	Channel-Land Acquis. (high)	8.31	ac.	\$100,000
			<b>Total Cost</b>	<b>\$363,000</b>
FUNDING SOURCES:				
NOTES:	1. Hec 2 Sections 5.840 TO 6.365			
	2. Split Reach 1A into 1A(a) & 1B(b) to accommodate phasing discussions.			
	3. Added Channel land acquisition acreages which assume no existing easements.			
	4. Moved wetland mitigation to proj. no. 3.100 & 3.101. 2-11-98			
	5. Revised unit costs 4-11-00.			

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.2.1B DETAIL SHEET

PROJECT NO. :		3.2.1 B		
PROJECT NAME:		Elder Creek Reach 1A (b) - Channel Improvements		
PROJECT DESCRIPTION:		Channel Construction (Approx. 2,910 L.F.)		
		From Basin E24B		
		To Florin Road		
PROJECT COSTS:				
	<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>
	Channel -Excavation	64,000	c.y.	\$3.30
	Channel-Erosion Control	2,910	l.f.	\$5.00
	Channel-Landscaping ( Channel Area Only)	2,910	l.f.	\$31.00
				<b>Subtotal</b>
				<b>\$316,000</b>
				<b>15% Contingency</b>
				<b>\$47,400</b>
				<b>Construction Cost</b>
				<b>\$363,400</b>
				<b>10% Engineering</b>
				<b>\$36,300</b>
	Channel-Land Acquis. (high)	9.12	ac.	\$100,000
				<b>Total Cost</b>
				<b>\$400,000</b>
FUNDING SOURCES:				
NOTES:	1. Hec 2 Sections 6.365 TO 7.000			
	2. Split Reach 1A into 1A(a) & 1B(b) to accommodate phasing discussions.			
	3. Added Channel land acquisition acreages which assume no existing easements.			
	4. Moved wetland mitigation to proj. no. 3.100 & 3.101. 2-11-98			
	5. Revised unit costs 4-11-00.			

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.2.2 DETAIL SHEET

PROJECT NO. :	3.2.2			
PROJECT NAME:	Elder Creek Reach 1A - Drainage Parkway			
PROJECT DESCRIPTION:	Channel Parkway Construction (Approx. 5,560 L.F.) From Western Specific Plan Boundary To Florin Road			
PROJECT COSTS:				
	<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u> <u>Total Cost</u>
	Joint Use Ped./Bike Path (12' wide @ 1.25 x channel length, excav. & A.B. only)	6,950	l.f.	\$15.00   \$104,250
			<b>Subtotal</b>	<b>\$104,300</b>
			<b>15% Contingency</b>	<b>\$15,600</b>
			<b>Construction Cost</b>	<b>\$119,900</b>
			<b>10% Engineering</b>	<b>\$12,000</b>
			<b>Total Cost</b>	<b>\$132,000</b>
FUNDING SOURCES:				
NOTES:	1. The pedestrian/bicycle path quantities are based on 1.25 times the channel length. At the time of reimbursement, cost will be based on actual length.			
	2. Rev. unit cost to include only excav. & A.B. The costs for A.C., striping, signing & bollards, & D.G. shoulders included in Park & Rec. CIP. 2-5-97			
	3. Rev. unit cost 11-13-97			
	4. Revised maint. Rd. width per Pete Ghelfi. Revised unit cost. 2-4-98			



NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN

UPDATE AND PHASING

PROJECT NUMBER 3.2.3 DETAIL SHEET

PROJECT NO. :	3.2.3			
PROJECT NAME:	Elder Creek Reach 1A (a) - McCoy Lane Crossing			
PROJECT DESCRIPTION:	(3) 8'x6' Box Culvert Construction W/Headwalls (+/- 40' R/W) Elder Creek @ McCoy Lane Road Crossing			
PROJECT COSTS:				
<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
(3) 8' x 6' Conc. Box Culverts	50	l.f.	\$1,200.00	\$60,000
Headwall & Wingwalls	2	each	\$25,000	\$50,000
Erosion Protection	1	Lump Sum	\$10,000.00	\$10,000
		<b>Subtotal</b>		<b>\$120,000</b>
		<b>15% Contingency</b>		<b>\$18,000</b>
		<b>Construction Cost</b>		<b>\$138,000</b>
		<b>10% Engineering</b>		<b>\$13,800</b>
		<b>Total Cost</b>		<b>\$152,000</b>
FUNDING SOURCES:				
NOTES:	1. Channel excav. included in Elder Creek reach 1A channel improvements.			

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.2.4 DETAIL SHEET

PROJECT NO. :	3.2.4			
PROJECT NAME:	Elder Creek Reach 1A (b) - CCTC Railroad Bridge Crossing			
PROJECT DESCRIPTION:	Construct New Bridge @ Elder Creek and CCT Railroad Crossing			
PROJECT COSTS:				
Item	Quantity	Unit	Unit Cost	Total Cost
Construct New Bridge	1	Lump Sum	\$290,000.00	\$290,000
		<b>Subtotal</b>		<b>\$290,000</b>
		<b>15% Contingency</b>		<b>\$43,500</b>
		<b>Construction Cost</b>		<b>\$333,500</b>
		<b>10% Engineering</b>		<b>\$33,400</b>
		<b>Total Cost</b>		<b>\$367,000</b>
FUNDING SOURCES:				
NOTES:				
	1. Channel excav. included in Elder Creek Reach 1A channel improvements.			
	2. Per conversation with James Paluck on 1-7-97, the new SPTC Bridge construction over Middle Branch strawberry Creek just d/s of MBSC Det. Basin #1 was estimated by SPTC in 1995 at \$290,000. The project was completed in 1996; however, the County has not seen the final project cost. Steve believes it may come in low. Just u/s of this new bridge, MBSC channel bottom width is 50'. Proposed bottom width of Elder Creek u/s is 50'.			
	3. The possibility exists that the existing structure could be retrofitted for the new channel geometry and depth.			

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN

UPDATE AND PHASING

PROJECT NUMBER 3.3.1 DETAIL SHEET

PROJECT NO. :	3.3.1				
PROJECT NAME:	Elder Creek Reach 1B - Off-Site Channel Improvements				
PROJECT DESCRIPTION:	Channel Construction (Approx. 1,400 L.F.) Off-Site Upstream From Florin Road				
PROJECT COSTS:					
	<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
	Channel -Excavation	44,500	c.y.	\$3.30	\$146,850
	Channel-Erosion Control	1,400	l.f.	\$5.00	\$7,000
	Channel-Landscaping ( Channel Area Only)	1,400	l.f.	\$31.00	\$43,400
	Maintenance Road (12' wide @ 1.25 x channel length, excav. & A.B. only)	1,750	l.f.	\$15.00	\$26,250
				<b>Subtotal</b>	<b>\$223,500</b>
				<b>15% Contingency</b>	<b>\$33,500</b>
				<b>Construction Cost</b>	<b>\$257,000</b>
				<b>10% Engineering</b>	<b>\$25,700</b>
	Channel-Land Acquis. (high)	4.82	ac.	\$100,000	\$482,000
				<b>Total Cost</b>	<b>\$283,000</b>
FUNDING SOURCES:					
NOTES:	1. Hec 2 Sections 7.00 to 7.3				
	2. Per proposed Master Drainage Plan dated 3-13-96				
	3. Added maintenance road, 11-13-97				
	4. Revised maint. Rd. width per Pete Gheifi. Revised unit cost, 2-4-98				
	5. Moved wetland mitigation to proj. no. 3.100 & 3.101. 2-11-98				
	6. Revised unit costs 4-11-00.				

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.5.1A DETAIL SHEET

PROJECT NO. :		3.5.1 A		
PROJECT NAME:		Gerber Creek Reach 2A (a) - Channel Improvements		
PROJECT DESCRIPTION:		Channel Construction (Approx. 3,350 L.F.) From Confluence W/Elder Creek To U/S Waterman Road		
PROJECT COSTS:				
	<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>
	Channel -Excavation	61,000	c.y.	\$3.30
	Channel-Erosion Control	3,350	l.f.	\$5.00
	Channel-Landscaping ( Channel Area Only)	3,350	l.f.	\$31.00
			<b>Subtotal</b>	<b>\$321,900</b>
			<b>15% Contingency</b>	<b>\$48,300</b>
			<b>Construction Cost</b>	<b>\$370,200</b>
			<b>10% Engineering</b>	<b>\$37,000</b>
	Channel-Land Acquis. (high)	12.03	ac.	\$100,000
			<b>Total Cost</b>	<b>\$407,000</b>
FUNDING SOURCES:				
NOTES:	1. Hec 2 Sections 5.753 to 0.888			
	2. Split Reach 2A into 2A(a) & 2B(b) to accommodate phasing discussions.			
	3. Added Channel land acquisition acreages which assume no existing easements.			
	4. Moved wetland mitigation to proj. no. 3.100 & 3.101. 2-11-98			
	5. Revised unit costs 4-11-00.			



NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.5.1B DETAIL SHEET

PROJECT NO. :		3.5.1 B			
PROJECT NAME:		Gerber Creek Reach 2A (b) - Channel Improvements			
PROJECT DESCRIPTION:		Channel Construction (Approx. 3,750 L.F.)			
		From U/S Waterman Road			
		To Gerber Road Crossing No. 4			
PROJECT COSTS:					
	<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
	Channel -Excavation	99,000	c.y.	\$3.30	\$326,700
	Channel-Erosion Control	3,750	l.f.	\$5.00	\$18,750
	Channel-Landscaping ( Channel Area Only)	3,750	l.f.	\$31.00	\$116,250
					<b>Subtotal</b>
					<b>\$461,700</b>
					<b>15% Contingency</b>
					<b>\$69,300</b>
					<b>Construction Cost</b>
					<b>\$531,000</b>
					<b>10% Engineering</b>
					<b>\$53,100</b>
	Channel-Land Acquis. (high)	11.04	ac.	\$100,000	\$1,104,000
					<b>Total Cost</b>
					<b>\$584,000</b>
FUNDING SOURCES:					
NOTES:		1. Hec 2 Sections 0.888 to 1.524			
		2. Split Reach 2A into 2A(a) & 2B(b) to accommodate phasing discussions.			
		3. Added Channel land acquisition acreages which assume no existing easements.			
		4. Moved wetland mitigation to proj. no. 3.100 & 3.101. 2-11-98			
		5. Revised unit costs 4-11-00.			

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.5.2 DETAIL SHEET

PROJECT NO. :	3.5.2				
PROJECT NAME:	Gerber Creek Reach 2A - Drainage Parkway				
PROJECT DESCRIPTION:	Channel Parkway Corridor Construction (Approx. 7,100 L.F.) From Confluence W/Elder Creek to Gerber Road				
PROJECT COSTS:					
	<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
	Joint Use Ped./Bike Path	8,875	I.f.	\$15.00	\$133,125
	(12' wide @ 1.25 x channel length, excav. & A.B. only)				
				<b>Subtotal</b>	<b>\$133,100</b>
				<b>15% Contingency</b>	<b>\$20,000</b>
				<b>Construction Cost</b>	<b>\$153,100</b>
				<b>10% Engineering</b>	<b>\$15,300</b>
				<b>Total Cost</b>	<b>\$168,000</b>
FUNDING SOURCES:					
NOTES:	1. The pedestrian/bicycle path quantities are based on 1.25 times the channel length. At the time of reimbursement, cost will be based on actual length.				
	2. Rev. unit cost to include only excav. & A.B. The costs for A.C., striping, signing & bollards, & D.G. shoulders included in Park & Rec. CIP. 2-5-97				
	3. Rev. unit cost 11-13-97				
	4. Revised maint. Rd. width per Pete Ghelfi. Revised unit cost. 2-4-98				

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN

UPDATE AND PHASING

PROJECT NUMBER 3.5.3 DETAIL SHEET

PROJECT NO. :	3.5.3				
PROJECT NAME:	Gerber Creek Reach 2A (a) -Passalis Lane Crossing (West)				
PROJECT DESCRIPTION:	(3) 8'x6' Box Culvert Construction W/Headwalls (56' R/W) Gerber Creek @ Passalis Lane (West) Crossing				
PROJECT COSTS:					
	<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
	(3) 8' x 6' Conc. Box Culverts	60	I.f.	\$1,200.00	\$72,000
	Headwall & Wingwalls	2	each	\$25,000	\$50,000
	Erosion Protection	1	Lump Sum	\$10,000.00	\$10,000
			<b>Subtotal</b>		<b>\$132,000</b>
			<b>15% Contingency</b>		<b>\$19,800</b>
			<b>Construction Cost</b>		<b>\$151,800</b>
			<b>10% Engineering</b>		<b>\$15,200</b>
			<b>Total Cost</b>		<b>\$167,000</b>
FUNDING SOURCES:					
NOTES:	1. Channel excav. incl. in Gerber Creek reach 2A channel imp.				





NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.5.5 DETAIL SHEET

PROJECT NO. :	3.5.5				
PROJECT NAME:	Gerber Creek Reach 2A (b) - CCTC Railroad Bridge Crossing				
PROJECT DESCRIPTION:	Construct New Bridge @ Elder Creek and CCTC Railroad				
PROJECT COSTS:					
<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>	
Construct New Bridge	1	Lump Sum	\$232,000.00	\$232,000	
		<b>Subtotal</b>		<b>\$232,000</b>	
		<b>15% Contingency</b>		<b>\$34,800</b>	
		<b>Construction Cost</b>		<b>\$266,800</b>	
		<b>10% Engineering</b>		<b>\$26,700</b>	
		<b>Total Cost</b>		<b>\$294,000</b>	
FUNDING SOURCES:					
NOTES:					
	1. Channel excav. included in Gerber Creek Reach 2A channel improvements.				
	2. Per conversation with James Paluck on 1-7-97, the new SPTC Bridge construction over Middle Branch strawberry Creek just d/s of MBSC Det. Basin #1 was estimated by SPTC in 1995 at \$290,000. The project was completed in 1996; however, the County has not seen the final project cost. Steve believes it may come in low. Just u/s of this new bridge, MBSC channel bottom width is 50'. Proposed bottom width of Gerber Creek u/s is 40'. Therefore, use prorated cost.				
	3. The possibility exists that the existing structure could be retrofitted for the new channel geometry and depth.				

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.6.1 DETAIL SHEET

PROJECT NO. :	3.6.1			
PROJECT NAME:	Gerber Creek Reach 2B - Off-Site Channel Improvements			
PROJECT DESCRIPTION:	Channel Construction (Approx. 2,030 L.F.) Off-Site From Gerber Road Crossing No. 4 To Gerber Road Crossing No. 3			
PROJECT COSTS:				
	<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u> <u>Total Cost</u>
	Channel -Excavation	36,400	c.y.	\$3.30    \$120,120
	Channel-Erosion Control	2,030	l.f.	\$5.00    \$10,150
	Channel-Landscaping (Channel Area Only)	2,030	l.f.	\$31.00    \$62,930
	Maintenance Road (12' wide @ 1.25 x channel length, excav. & A.B. only)	2,540	l.f.	\$15.00    \$38,100
			<b>Subtotal</b>	<b>\$231,300</b>
			<b>15% Contingency</b>	<b>\$34,700</b>
			<b>Construction Cost</b>	<b>\$266,000</b>
			<b>10% Engineering</b>	<b>\$26,600</b>
	Channel-Land Acquis. (high)	6.98	ac.	\$100,000    \$698,000
			<b>Total Cost</b>	<b>\$293,000</b>
FUNDING SOURCES:				
NOTES:	1. Hec 2 Sections 1.524 to 1.900 2. Added Channel land acquisition acreages which assume no existing easements. 3. Added maintenance road, 11-13-97 4. Revised maint. Rd. width per Pete Ghelfi. Revised unit cost. 2-4-98 5. Moved wetland mitigation to proj. no. 3.100 & 3.101. 2-11-98 6. Revised unit costs 4-11-00.			

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.7.1 DETAIL SHEET

PROJECT NO. :	3.7.1			
PROJECT NAME:	Gerber Creek Reach 2C Channel Improvements			
PROJECT DESCRIPTION:	Channel Construction (Approx. 3,680 L.F.) From Gerber Road Crossing No. 3 To Gerber Road Crossing No. 2			
PROJECT COSTS:				
<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Channel -Excavation	50,900	c.y.	\$3.30	\$167,970
Channel-Erosion Control	3,680	l.f.	\$5.00	\$18,400
Channel-Landscaping ( Channel area only)	3,680	l.f.	\$31.00	\$114,080
		<b>Subtotal</b>		<b>\$300,500</b>
		<b>15% Contingency</b>		<b>\$45,100</b>
		<b>Construction Cost</b>		<b>\$345,600</b>
		<b>10% Engineering</b>		<b>\$34,600</b>
Channel-Land Acquis. (high)	9.61	ac.	\$100,000	\$961,000
		<b>Total Cost</b>		<b>\$380,000</b>
FUNDING SOURCES:				
NOTES:	1. Hec 2 Sections 1.900 to 2.725			
	2. Added Channel land acquisition acreages which assume no existing easements.			
	3. Moved wetland mitigation to proj. no. 3.100 & 3.101. 2-11-98			
	4. Revised unit costs 4-11-00.			

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.7.2 DETAIL SHEET

PROJECT NO. :	3.7.2				
PROJECT NAME:	Gerber Creek Reach 2C - Drainage Parkway				
PROJECT DESCRIPTION:	Drainage Parkway Corridor Construction (Approx. 3,680 L.F.) From Gerber Road Crossing No. 3 To Gerber Road Crossing No. 2				
PROJECT COSTS:					
	<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
	Joint Use Ped./Bike Path (12' wide @ 1.25 x channel length, excav. & A.B. only)	4,600	l.f.	\$15.00	\$69,000
				<b>Subtotal</b>	<b>\$69,000</b>
				<b>15% Contingency</b>	<b>\$10,400</b>
				<b>Construction Cost</b>	<b>\$79,400</b>
				<b>10% Engineering</b>	<b>\$7,900</b>
				<b>Total Cost</b>	<b>\$87,000</b>
FUNDING SOURCES:					
NOTES:	1. The pedestrian/bicycle path quantities are based on 1.25 times the channel length. At the time of reimbursement, cost will be based on actual length. 2. Rev. unit cost to include only excav. & A.B. The costs for A.C., striping, signing & bollards, & D.G. shoulders included in Park & Rec. CIP. 2-5-97 3. Rev. unit cost 11-13-97 4. Revised maint. Rd. width per Pete Ghelfi. Revised unit cost. 2-4-98				

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.7.3 DETAIL SHEET

PROJECT NO. :	3.7.3			
PROJECT NAME:	Gerber Creek Temporary Overspill Channel			
PROJECT DESCRIPTION:	Gerber Creek Temporary Overspill Channel From Eastern Plan Boundary To D/S Of Gerber Road Crossing No. 2			
PROJECT COSTS:				
<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Channel Excavation (5,000 l.f.)	37,000	c.y.	\$3.30	\$122,100
Temporary Road Crossings (Triple 48" Culverts at each)	3	each	\$35,000	\$105,000
		<b>Subtotal</b>		<b>\$227,100</b>
		<b>15% Contingency</b>		<b>\$34,100</b>
		<b>Construction Cost</b>		<b>\$261,200</b>
		<b>10% Engineering</b>		<b>\$26,100</b>
		<b>Total Cost</b>		<b>\$287,000</b>
FUNDING SOURCES:				
NOTES:	1. Added Temporary Channel Cost Estimate on 4-11-00.			

**NORTH VINEYARD STATION SPECIFIC PLAN**

**DRAINAGE MASTER PLAN  
UPDATE AND PHASING**

**DETENTION PONDS COST SUMMARY**

Project No.	Project Name	Total Cost, \$
3.9	Detention Pond E24B (Elder Creek Reach 1A (a))	670,000
3.10	Detention Pond E26 (Elder Creek Reach 1A (b))	1,208,000
3.11	Detention Pond E24A (Gerber Creek Reach 2A (a))	870,000
3.12	Detention Pond G41 (Gerber Creek Reach 2A (b))	918,000
3.13	Detention Pond G46 (Gerber Creek Reach 2C)	1,427,000

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.9 DETAIL SHEET

PROJECT NO. :	3.9			
PROJECT NAME:	Detention Pond E24B (Elder Creek Reach 1A (a))			
PROJECT DESCRIPTION:	7.4 Ac. Water Quality Detention Pond Construction			
PROJECT COSTS:				
<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Detention Pond - Excavation	80,280	c.y.	\$3.30	\$264,924
Detention Pond Outlet	1	Lump Sum	\$25,000	\$25,000
Weir Erosion Protection	1	Lump Sum	\$15,000	\$15,000
Detention Pond - Maint. Path (6" ab @ 10')	18,800	s.f.	\$1.00	\$18,800
Landscaping	1	Lump Sum	\$6,000	\$6,000
Pump Station	10	cfs	\$20,000	\$200,000
Detention Pond - Fencing	0	l.f.	\$11	\$0
		<b>Subtotal</b>		<b>\$529,700</b>
		<b>15% Contingency</b>		<b>\$79,500</b>
		<b>Construction Cost</b>		<b>\$609,200</b>
		<b>10% Engineering</b>		<b>\$60,900</b>
Detention Pond-Land Acquis. (high)	7.4	ac.	\$0	\$0
		<b>Total Costs</b>		<b>\$670,000</b>
FUNDING SOURCES:				
NOTES:	1. Landscaping assumed at \$1500/acre of basin area. 2. Basin is sized for NPDES Facility to serve onsite areas east of Elder Creek. Areas within the Elder Creek shed and located outside the S.P.A. and west of Elder Creek are assumed to provide adequate N.P.D.E.S. for future development as needed. 3. Revised Unit Costs on 4-11-00. 4. Added weir erosion protection on 4-11-00. 5. Revised Land Acquisition Acreage 4-13-00.			

NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
UPDATE AND PHASING

PROJECT NUMBER 3.10 DETAIL SHEET

PROJECT NO. :	3.10			
PROJECT NAME:	Detention Pond E26 (Elder Creek Reach 1A (b))			
PROJECT DESCRIPTION:	22 Ac. Flood Control/Water Quality Detention Pond Const			
PROJECT COSTS:				
<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Detention Pond - Excavation	189,580	c.y.	\$3.30	\$625,614
Outlet Structure	1	Lump Sum	\$60,000	\$60,000
Detention Pond - Maint. Path (6" ab @ 10')	42,000	s.f.	\$1.00	\$42,000
Landscaping	1	Lump Sum	\$27,000	\$27,000
Pump Station	10	cfs	\$20,000	\$200,000
Detention Pond - Fencing	0	l.f.	\$11	\$0
			<b>Subtotal</b>	<b>\$954,600</b>
			<b>15% Contingency</b>	<b>\$143,200</b>
			<b>Construction Cost</b>	<b>\$1,097,800</b>
			<b>10% Engineering</b>	<b>\$109,800</b>
Detention Pond-Land Acquis. (high)	22.0	ac.	\$0	\$0
			<b>Total Costs</b>	<b>\$1,208,000</b>
FUNDING SOURCES:				
NOTES:	1. Landscaping assumed at \$1500/acre of basin area.			
	2. Revised Unit Costs on 4-11-00.			
	3. Revised Land Acquisition Acreage 4-13-00.			



NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.11 DETAIL SHEET

PROJECT NO. :	3.11			
PROJECT NAME:	Detention Pond E24A (Gerber Creek Reach 2A (a))			
PROJECT DESCRIPTION:	12 Ac. Flood Control/Water Quality Detention Pond Construct			
PROJECT COSTS:				
<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Detention Pond - Excavation	163,290	c.y.	\$3.30	\$538,857
Inlet Structure	1	Lump Sum	\$42,000	\$42,000
Water Quality Outlet	1	Lump Sum	\$12,000	\$12,000
Flood Control Outlet	1	Lump Sum	\$22,000	\$22,000
Weir Erosion Protection	1	Lump Sum	\$25,000	\$25,000
Detention Pond - Maint. Path (6" ab @ 10')	30,000	s.f.	\$1.00	\$30,000
Landscaping	1	Lump Sum	\$18,000	\$18,000
Pump Station	0	cfs	\$20,000	\$0
Detention Pond - Fencing	0	l.f.	\$11	\$0
			<b>Subtotal</b>	<b>\$687,900</b>
			<b>15% Contingency</b>	<b>\$103,185</b>
			<b>Construction Cost</b>	<b>\$791,100</b>
			<b>10% Engineering</b>	<b>\$79,100</b>
Detention Pond-Land Acquis. (high)	14.0	ac.	\$0	\$0
			<b>Total Costs</b>	<b>\$870,000</b>
FUNDING SOURCES:				
NOTES:	1. Landscaping assumed at \$1500/acre of basin area.			
	2. Revised Unit Costs on 4-11-00.			
	3. Revised Land Acquisition Acreage 4-13-00.			



NORTH VINEYARD STATION SPECIFIC PLAN

DRAINAGE MASTER PLAN  
 UPDATE AND PHASING  
 PROJECT NUMBER 3.13 DETAIL SHEET

PROJECT NO. :	3.13			
PROJECT NAME:	Detention Pond G46 (Gerber Creek Reach 2C)			
PROJECT DESCRIPTION:	16 Ac. Flood Control/Water Quality Detention Pond Construction			
PROJECT COSTS:				
<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Detention Pond - Excavation	245,440	c.y.	\$3.30	\$809,952
Water Quality Outlet	1	Lump Sum	\$12,000	\$12,000
Flood Control Outlet	1	Lump Sum	\$22,000	\$22,000
Weir Erosion Protection	1	Lump Sum	\$25,000	\$25,000
Detention Pond - Maint. Path (6" ab @ 10')	35,000	s.f.	\$1.00	\$35,000
Landscaping	1	Lump Sum	\$24,000	\$24,000
Pump Station	10	cfs	\$20,000	\$200,000
Detention Pond - Fencing	0	l.f.	\$11	\$0
			<b>Subtotal</b>	<b>\$1,128,000</b>
			<b>15% Contingency</b>	<b>\$169,200</b>
			<b>Construction Cost</b>	<b>\$1,297,200</b>
			<b>10% Engineering</b>	<b>\$129,700</b>
Detention Pond-Land Acquis. (high)	17.0	ac.	\$0	\$0
			<b>Total Costs</b>	<b>\$1,427,000</b>
FUNDING SOURCES:				
NOTES:	1. Landscaping assumed at \$1500/acre of basin area. 2. Revised Unit Costs on 4-11-00. 3. Revised Land Acquisition Acreage 4-13-00.			