

City of Vacaville

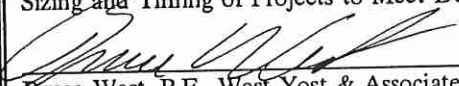
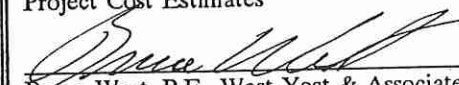
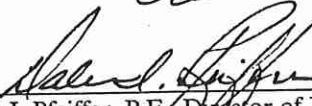
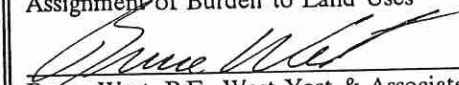

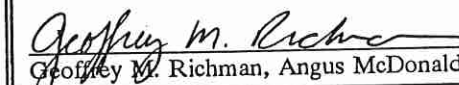

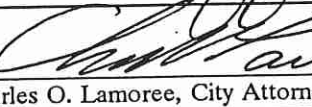
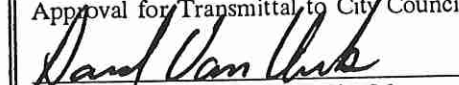
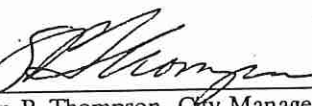
***DRAINAGE DETENTION AND
CONVEYANCE FEES***

Development Impact Fee Update — 1992

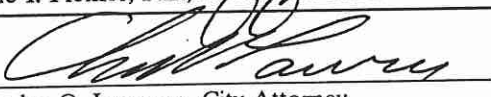
**City Council Review Draft
December 8, 1992 (33940.75)**

SUMMARY OF RESPONSIBILITIES

Drainage Development Impact Fees

Prepared By	Approved By
Sizing and Timing of Projects to Meet Demand  Bruce West, P.E., West Yost & Associates	 Dale I. Pfeiffer, P.E., Director of Public Works
Project Cost Estimates  Bruce West, P.E., West Yost & Associates	 Dale I. Pfeiffer, P.E., Director of Public Works
Assignment of Burden to Land Uses  Bruce West, P.E., West Yost & Associates	 Dale I. Pfeiffer, P.E., Director of Public Works
Development Impact Fee Estimate  Geoffrey M. Richman, Angus McDonald & Associates	 Dale I. Pfeiffer, P.E., Director of Public Works
Legal Adequacy and Form	 Charles O. Lamoree, City Attorney
Approval for Transmittal to City Council  David Van Kirk, Assistant City Manager	 John P. Thompson, City Manager

SUMMARY OF RESPONSIBILITIES
Drainage Development Impact Fees

Prepared By	Approved By
Sizing and Timing of Projects to Meet Demand  Bruce West, P.E., West Yost & Associates	 Dale I. Pfeiffer, P.E., Director of Public Works
Project Cost Estimates  Bruce West, P.E., West Yost & Associates	 Dale I. Pfeiffer, P.E., Director of Public Works
Assignment of Burden to Land Uses  Bruce West, P.E., West Yost & Associates	 Dale I. Pfeiffer, P.E., Director of Public Works
Development Impact Fee Estimate  Geoffrey M. Richman, Angus McDonald & Associates	 Dale I. Pfeiffer, P.E., Director of Public Works
Legal Adequacy and Form	 Charles O. Lamoree, City Attorney
Approval for Transmittal to City Council  David Van Kirk, Assistant City Manager	 John P. Thompson, City Manager

LIST OF TABLES AND FIGURES

Table 1	SUMMARY OF INCREASED DEMAND	16
	<i>Drainage</i> Development Impact Fees	
Figure 2	DRAINAGE DETENTION FEE ZONES (Map)	17
	<i>Drainage</i> Development Impact Fees	
Figure 3	CAPITAL IMPROVEMENTS — DETENTION (Map)	18
	<i>Drainage</i> Development Impact Fees	
Table 4	PROJECT COSTS AND SOURCES OF FINANCING	19
	<i>Drainage</i> Development Impact Fees	
Table 5	RELATIONSHIP TO LAND USE	22
	<i>Drainage</i> Development Impact Fees	
Table 6	SUMMARY OF DRAINAGE DETENTION FEE — ZONE 1	23
	<i>Drainage</i> Development Impact Fees	
Table 7	SUMMARY OF DRAINAGE DETENTION FEE — ZONE 2	24
	<i>Drainage</i> Development Impact Fees	
Table 8	SUMMARY OF CITYWIDE CONVEYANCE FEE	25
	<i>Drainage</i> Development Impact Fees	
Table 9	CASH FLOW ANALYSIS — ZONE 1 DETENTION FEE	26
	<i>Drainage</i> Development Impact Fees	
Table 10	CASH FLOW ANALYSIS — ZONE 2 DETENTION FEE	28
	<i>Drainage</i> Development Impact Fees	
Table 11	CASH FLOW ANALYSIS — CITYWIDE CONVEYANCE FEE	30
	<i>Drainage</i> Development Impact Fees	
Table 12	USE OF DEVELOPMENT IMPACT FEES IN PRIOR YEARS	32
	<i>Drainage</i> Development Impact Fees	

1 **Purpose Of The Fees**

2 The City of Vacaville adopted an updated *General Plan (R-2)** in 1990. The City also
3 adopted a *Planned Growth Ordinance* on September 24, 1991 and published its first *Growth*
4 *Audit (R-3)* in 1992. Finally, the City of Vacaville adopted Ordinance No. 1477 which
5 consolidated all of Vacaville's previous Ordinances relating to Development Impact Fees
6 into a single Ordinance. The general purpose of all of Vacaville's Development Impact
7 Fees is to provide a means to finance the public improvements required to meet the
8 objectives of the *General Plan* and the *Planned Growth Ordinance*.

9 The specific purpose of the *Drainage* Development Impact Fee is to assure financing for the
10 projects listed in the *Drainage Master Plan (R-5)*. Development Impact Fees, together with
11 other sources of financing available to the City of Vacaville, are necessary to finance public
12 improvements to implement the *General Plan*, the *Planned Growth Ordinance* and the
13 *Drainage Master Plan*. Development Impact Fees will assure an equitable distribution of
14 costs between the existing City and new development in Vacaville.

15 The City of Vacaville intends to participate aggressively in State and Federal programs that
16 may become available to finance public improvements. The City is not prepared to depend
17 on State and Federal grant funding to pay for public improvement projects that are essential
18 to the growth and development of Vacaville. Accordingly, State and Federal programs will
19 be used for opportunities that may occur to improve services and amenities to the residents
20 and employees in Vacaville. These potential revenue sources will not be used as a
21 substitute for revenues that are directly under the control of the Vacaville City Council.
22 New funding sources will be applied toward the revenues for the Impact Fee, if such funds
23 are specifically designated for projects on the Project List.

24 The *Drainage Master Plan* and the *Drainage* Development Impact Fees described in the
25 present Report finances drainage improvements for the period to January 1, 2010. It should
26 be understood that the public improvements required to implement the *Drainage Master*
27 *Plan* have been designed to be implemented in a timely manner, over this entire planning
28 period. The service capacity or the cost over some arbitrarily-selected span of years during
29 that planning period may be higher or lower than the average amount of capacity added or
30 cost incurred during the entire planning period. It is frequently necessary to construct
31 projects in their entirety rather than be able to add very small increments of capacity each

32 * Underscored numbers in parentheses refer to References listed at the end of this Development Impact
33 Fee Report.

1 year directly in response to demand. Thus, the "average cost" may vary significantly from
2 year to year, over the planning period.

3 The Development Impact Fees necessary to construct public improvements are subject to
4 revision because of several factors. These factors include the impossibility of forecasting
5 exactly the rate and location of development in Vacaville, variations in the cost of
6 construction of public improvements and variation in the standards that may be applicable
7 in the future to the design of individual public improvements.

8 The City of Vacaville intends to review its *Drainage* Development Impact Fees resolution
9 annually at or near the start of the fiscal year. Any change in Development Impact Fees
10 would generally be effective on January 1 of the following year. The change in
11 Development Impact Fees will reflect changes in the *Engineering News Record San Francisco*
12 *Bay Area Construction Cost Index* and would also reflect any changes in design standards or
13 costs of projects that had occurred during the previous fiscal year. In addition, the City
14 intends to assure that the *General Plan* and the *Drainage Master Plan* remain responsive to
15 City policy and changing development conditions in Vacaville. The City intends to review
16 both the *General Plan* and the comprehensive *Drainage Master Plan* on a five-year cycle.
17 Policies in an amended *General Plan* will be incorporated into all of the City's Facilities
18 Master Plans and into each Impact Fee Ordinance and Resolution. At the same time, a
19 five-year forecast of growth and development for an additional five years will be added to
20 the planning period for each *Master Plan* document.

21 Information about changes in the availability of State/Federal grants and loans or other
22 sources of revenue will be incorporated into the Fee programs during the annual review.
23 In general, adjustments to the Fee calculation will be made at the annual review if changes
24 in other sources of revenue on a cumulative basis equal or exceed 10 percent of the cost of
25 one year's funding for the projects in the *Drainage* Capital Improvement Plan. Should the
26 annual cumulative outside sources of funds be less than 10 percent, the adjustment will be
27 made at the next update.

28 **Development Being Served**

29 As noted previously, the *Drainage Master Plan* and the *Drainage* Development Impact Fees
30 are designed to provide the required 10-year and 100-year storm frequency capacity to
31 January 1, 2010. The City of Vacaville has prepared a development forecast for this time
32 period (R-1) that is being used for the 1992 update of all of the Development Impact Fees
33 in Vacaville.

1 The development forecast on which the calculation of the *Drainage* Development Impact
2 Fees was based differs slightly from the development forecasts that were used for other of
3 Vacaville's development impact fees updated in 1992. Vacaville's development forecasts are
4 subject to continuing refinement. The *Drainage* Development Impact Fees were based on
5 the best available forecast, at the time the fee was adopted.

6 All of Vacaville's Development Impact Fees are based on the concept that public services
7 are provided both to residents and to employees in Vacaville. The capacity to provide
8 public services must be made available for both residents and employees. In general, non-
9 residential land uses are equated to residential land uses in terms of the burden that they
10 place on each class of public improvements (e.g., roads, water systems, sewer systems,
11 drainage).

12 In the case of *Drainage*, land uses were compared in terms of their storm water runoff
13 characteristics. Factors were derived to convert gross acres of land into the equivalent
14 number of acres of land developed as single-family residences. This equivalence was
15 expressed in Residential Acre Equivalent (RAEs). The number of additional RAEs was
16 used as the basic determinant of demand for additional capacity to deal with storm water
runoff. A forecast of RAEs for *Drainage* is shown in Table 1. This forecast is based on the
City's Development Forecast that was cited previously.

19 Five separate Detention Zones were defined for Vacaville's watersheds. These Zones are
20 illustrated in Figure 2 and are discussed in the present Report beginning on page 6. The
21 Detention Zones are described more completely in the *Drainage Master Plan (R-5)*.

22 Table 1 shows a division of development in each Detention Zone into two categories:

- 23 ● **Pre-paid.** Projects in Vacaville for which a subdivision map has been filed have
24 already paid a development impact fee for storm water conveyance improvements.
25 These development projects are not subject to an additional fee for conveyance
26 improvements that will transport storm water beyond their Detention Zone.
27 However, these projects are subject to requirements for storm water detention
28 facilities.
- 29 ● **Not Pre-paid.** Development projects that have not yet filed a subdivision map are
30 subject both to a Citywide *Drainage* impact fee for facilities that will convey storm
31 water and requirements for detention basins in their Detention Zone.

1 **Level Of Service And Timing Standard**

2 **Service Standard**

3 The Vacaville General Plan and *Drainage Master Plan* report describes Vacaville's existing
4 LOS for *Drainage* and the LOS that will be achieved over the planning period. The City
5 of Vacaville's target for *Drainage* LOS for new development is summarized below.

- 6 ● Storm drainage pipelines and open channels Citywide shall be designed to
7 successfully convey runoff from the 10-year frequency storm event.
- 8 ● Detention basins and detention systems in the Alamo Creek Watershed upstream of
9 Peabody Road shall be designed to prevent an increase in runoff over pre-
10 development conditions, plus an additional 10 percent reduction in runoff for the 10-
11 year and 100-year frequency storm events.
- 12 ● Detention basins and detention systems in the Alamo Creek Watershed downstream
13 of Peabody Road, and elsewhere in the City, shall be designed to prevent an increase
14 in runoff over pre-development conditions for the 10-year and 100-year frequency
15 events.

16 It should be understood that the LOS target for the planning period, together with the
17 estimate of increase in demand for services that was summarized in Table 1, was used
18 directly to calculate the size and the timing for each planned *Drainage* project. Accordingly,
19 there is a direct relationship both between the forecast of future development and the target
20 for LOS and the size and cost of each *Drainage* project that will be constructed.

21 Areas within the City of Vacaville that are already developed do not necessarily enjoy the
22 level of service that will be provided to newly developing areas. As is frequently the case
23 in California cities, development that occurred many years ago may not have been subject
24 to the same standards for flood control and drainage that are currently applicable. The City
25 of Vacaville is considering a program that would bring improved flood control to existing
26 sections of the city. In no case will remedies for existing deficiencies be financed with
27 development-related charges, such as Development Impact Fees.

28 **Timing Standard**

29 The timing (i.e., the year[s] of construction) of planned public improvements is often a key
30 consideration that affects the success of a program for expanding public services' capacity.
31 The City of Vacaville has set a target such that capacity is sought to be available to serve

1 demand, but not to anticipate demand. The City's targets are subject to the risks and
2 uncertainty that were noted above regarding rate and location of development, future costs
3 of capital improvements projects, etc.

4 The standards for timing of construction of *Drainage* improvements are as follows:

- 5 ● Wherever possible, the land ultimately required for each improvement included in
6 the *Drainage Master Plan* will be preserved before development occurs in an area.
- 7 ● The phasing of *Drainage* improvements will depend primarily upon development
8 planning and other land use decisions. Phasing of improvements should occur such
9 that system capacities are in place prior to development, yet as close to development
10 actually occurring so as not to expend funds prematurely.

11 **Planned *Drainage* Facilities**

12 Table 4 summarizes the *Drainage* projects that have been planned to provide the capacity
13 to serve the increased demand summarized in Table 1. More detailed project descriptions,
14 detailed cost estimates and information about timing of construction relative to demand for
15 capacity are included for each project in the *Project List* Section of the present *Drainage*
16 *Development Impact Fees Report*.

17 Table 4 and the supporting exhibits in the *Project List* Section is referred to subsequently
18 as the *Drainage Capital Improvement Plan (CIP)*. This CIP meets the requirements
19 described in Government Code § 66002.

20 A 4 percent administrative charge is included in the calculation of the Fee. The
21 administrative charge will be used for City staff time to collect, monitor, and account for
22 the Fee revenues, perform an annual review of the fee program, and prepare a major review
23 of the fee program, to be performed every five years.

24 **Detention Basin Fees**

25 The *Drainage* Impact Fee that was collected in Vacaville in 1992 and earlier years was used
26 primarily for storm water conveyance facilities. The fee collected in 1993 and subsequently
27 will have two components—a component for storm water detention facilities within a
28 watershed and a component for storm water conveyance facilities that is comparable to the
29 previous *Drainage* Impact Fee. The fee component for detention differs for the Zones that
30 were illustrated in Figure 2.

1 The Detention Zone boundaries shown in Figure 2 are an illustration rather than a precise
2 definition. The precise definition of Detention Zones is subject to change, depending on
3 landowners' development plans and their intentions regarding on-site detention of storm
4 water. The City of Vacaville Public Works Director may make changes in the Detention
5 Zone boundaries to reflect future conditions. A map maintained by the Public Works
6 Director, which is available for public inspection, will constitute the then-current definition
7 of Detention Zone boundaries.

8 The CIP for detention basins in Zones 1 and 1A shows a total of eight basins that will be
9 constructed or expanded. These detention basins will accommodate the runoff of the entire
10 Horse Creek and Gibson Canyon Creek watersheds. The major landowners in Zone 1A are
11 required to construct the new detention basins in their Detention Zone as a condition of
12 development approval. This requirement is in lieu of paying a *Drainage Detention Fee*.

13 Detention facilities in Zone 1 will be constructed by the City of Vacaville. These detention
14 facilities will be financed by a *Drainage Detention Fee* applicable to Zone 1.

15 Detention facilities for Detention Zone 2 are also illustrated in Figure 3. The location of
16 future development that has been forecast, together with the hydrologic characteristics of
17 Zone 2, make it impractical to offer landowners the option either to detain storm water on-
18 site or to pay an impact fee. A practical *Drainage* facility depends on the detention basins'
19 being located generally as illustrated in Figure 3 and constructed in the sequence shown in
20 Table 4. Accordingly, property owners in Zone 2 do not have an option. The *Drainage*
21 Detention Fee for Zone 2 will be due from all Zone 2 landowners at the time that
22 subdivision takes place.

23 Detention Zone 2A consists of Lower Lagoon Valley. Landowners in Zone 2A are required
24 to retain stormwater runoff on-site as a condition of development approval. This
25 requirement is in lieu of paying a *Drainage Detention Fee*.

26 Detention Zone 2B consists of the Foxboro Villages subdivisions. An existing detention
27 basin was constructed to accommodate runoff from the Foxboro Villages West subdivision
28 as a requirement of development approval. This requirement is in lieu of paying a *Drainage*
29 Detention Fee.

30 Citywide Conveyance Fee

31 The *Drainage conveyance* items shown in Table 4 benefit all new development in Vacaville.
32 Properties for which the pre-existing *Drainage* fee has not already been paid will be

1 responsible for detaining stormwater on-site or paying a *Drainage* Conveyance Fee and for
2 financing the new *Drainage* conveyance improvements.

3 The Drainage Conveyance Fee will fund three programs: Stormwater System Studies,
4 Stormwater Monitoring Program and the Storm Drain Upgrade Program. The latter
5 Program has three primary types of projects: 1) Channel improvements to accommodate
6 growth; 2) storm drain upsizing to accommodate growth; and 3) water quality improvements
7 to meet future Environmental Protection Agency (EPA) Clean Water Act requirements.
8 Since the program for complying with the State will not take place until late 1994, the
9 Water Quality portion of the Conveyance Fees collected will be kept in reserve until 1994/95
10 or when the National Pollutant Discharge Elimination System (NPDES) permit is approved
11 by the State.

12 **Stormwater System Studies.** Engineering studies will consist of review and incorporation
13 of drainage aspects of new development submittals into the Citywide storm drainage
14 hydrologic and hydraulic computer models. This is especially important where new
15 developments include on-site detention. Recent studies of uniform on-site detention
16 systems in major urban areas show that the proliferation of small on-site detention basins
do not prevent downstream flooding unless they are designed and operated in a coordinated
plan. The Citywide hydrologic model prepared under the City of Vacaville Storm Drainage
19 *Master Plan* provides the analytical tool necessary to maintain such a coordinated plan.
20 When new development proposals are submitted to the City, proposed drainage features will
21 be incorporated into the City Drainage Models (as has been done for the Lower Lagoon
22 Valley Project), and the performance of the system evaluated. In this manner, impacts at
23 locations in the drainage system other than at the specific new development project can be
24 determined and mitigation measures evaluated.

25 The Stormwater System Studies will run between \$25,000 to \$50,000 per year, depending
26 on the rate of growth. The demand for these Studies is generated solely by growth.
27 Accordingly, they are totally development fee-funded.

28 **Stormwater Monitoring Program.** The Vacaville Storm *Drainage Master Plan* placed
29 considerable emphasis on the use of computer modeling for determination of existing and
30 future hydrologic conditions. Conceptual design of future storm drainage and detention
31 improvements were based upon the growth induced incremental increase in precipitation
32 runoff between existing and future conditions. The accuracy of model input data regarding
33 precipitation and runoff abstraction coefficients becomes increasingly important when
34 estimating runoff volumes for detention storage. The reliance on computer modeling of the
35 storm drainage system to estimate detention basin volumes required to mitigate for future
36 growth has resulted in the need to collect supporting data to verify hydrologic assumptions

1 and calibrate the models. This is usually done by utilizing precipitation and streamflow
2 gauge data.

3 The City of Vacaville presently has only one precipitation gauging station, even though
4 precipitation rates appear to vary widely across the City. There are no streamflow gauges
5 on any of the Ulatis Creek Watershed streams within the Drainage Study Area. The
6 establishment of additional precipitation and streamflow gauging stations is necessary to
7 calibrate the hydrologic and hydraulic computer models and more accurately determine
8 detention basin size.

9 In addition to precipitation and flow monitoring, monitoring for stormwater quality is
10 needed. Water quality monitoring is required to identify existing levels of pollutants
11 produced by urban runoff. Levels of constituents for various watersheds will be determined
12 from flow weighted composite samples collected at selected sites. Concurrently, water
13 quality monitoring results from other California communities conducting monitoring under
14 the NPDES permit program will be reviewed for applicability to Vacaville. Results of these
15 studies will serve as the basis for forecasting pollutant loads and planning appropriate water
16 quality "Best Management Practices" (BMP) (programs and structural facilities) for both
17 existing urbanization and new development projects.

18 The total cost of the Stormwater Monitoring Program is projected at \$35,000, equally shared
19 between development impact fees and the rate payer. This program will begin in 1992/93
20 through 1995/96. This comprises about five percent (5%) of the Total Conveyance Fee
21 collected through the year 2010.

22 **Storm Drain Upgrade Program.** This Program is composed of three components:

23 **Channel Improvements.** Creek and channel stabilization projects are needed to
24 accommodate either increased or larger quantity flows caused by development. This
25 would occur when there exists tie-ins to creeks and development growth is causing
26 increased flows into these mains, therefore bank stabilization is required. There are
27 also areas where channel improvements (such as widening or straightening) can
28 increase flows until a future detention basin is constructed downstream. Twenty-five
29 percent (25%) of the Conveyance Fee is dedicated for Channel improvements over
30 the life of the CIP program.

31 **Storm Drain Upsizing.** In certain instances it may be advantageous for the City to
32 upsize pipelines to serve future development and improvement performance of the
33 entire system. It is not possible to identify specific improvements at this time, so this
34 CIP establishes a budget for a typical level of effort needed in a given year. The

1 percentage of the Conveyance Fee set aside for pipeline enlargements is 10 percent
2 (10%) over the eighteen-year CIP.

3 **Water Quality Improvements.** As noted previously, by late 1994, the City will be
4 required to submit a National Pollutant Discharge Elimination System (NPDES)
5 permit for the entire City. That permit will be a combination of data developed by
6 the monitoring program as it relates to storm water quality. Improvements may be
7 water quality detention, modifications to existing and proposed detention basins, or
8 pipeline outfall retrofit improvements. Retrofitting existing basins (where
9 development is still occurring) may cost \$10,000 to \$20,000 per acre foot. New
10 basins solely for water quality may cost \$150,000 to \$200,000 per 100 acres of
11 drainage area. **The water quality improvements comprise 30 percent over the CIPs**
12 **from 1992/93 through 2009/2010.**

13 Sources Of Financing

14 Selection of sources of financing for drainage improvements was based on the principles
described in the following paragraphs:

16 **Existing Deficiencies.** As noted previously, the standards for flood control that are
17 incorporated into Vacaville's General Plan represent standards and practices that are
18 applicable to new development at the present time. There are areas in the existing
19 developed portion of Vacaville where these standards have not been met. Vacaville is
20 considering alternative programs and alternative sources of financing that would improve
21 flood control in the existing incorporated area. The City is also considering alternative ways
22 to finance improved flood control in the existing city and to finance the ongoing cost of
23 *Drainage* system maintenance, citywide.

24 In no case will improvements to the existing system that benefit only existing development
25 be financed from sources of financing related directly to growth and development.

26 **Capacity To Serve New Development.** Local governmental fiscal realities in the 1990s have
27 caused the City of Vacaville to conclude that traditional sources of financing to pay for
28 public improvements to serve new development are no longer available. The time when
29 State and Federal grants were available to finance new capacity has passed away. The
30 current situation is one of increasing fiscal constraints on cities throughout California.
31 Development fees and comparable charges are the only reliable sources of financing that
32 is within the control of the City of Vacaville to provide to the capacity to serve new
development.

- 1 ● **Development Impact Fees**, collected at or near the time of development, are used
2 wherever practical to finance the expansion and capacity that are necessary to meet
3 Vacaville's LOS targets and to accommodate the demand for new capacity as closely
4 as practical to the time when development will occur.

- 5 ● **Enhancements to Development Impact Fees**, such as borrowing (with interest)
6 between Development Impact Fee accounts or employing other comparable devices,
7 are used if traditional Development Impact Fees, considered alone, would not
8 produce sufficient cash in time to build each public improvement before Vacaville's
9 Timing Standard would be exceeded

10 Another possible enhancement to Development Impact Fees involves the use of a
11 "two-tier" Fee. The cost in the early years of a Development Impact Fee program
12 may exceed the average cost over the planning period, because of the necessity to
13 build public improvements as usable segments. (For example, a freeway interchange
14 must be constructed as a complete and usable improvement.) A two-tier Fee
15 provides a higher average Fee in early years. The amount above the long term
16 average is subject to a contingent reimbursement. Development projects that occur
17 later in the planning period may be available to repay those who necessarily financed
18 improvements in the early years of the planning period.

- 19 ● **Development-related Bond Financing** (e.g., conventional special assessment bonds or
20 Mello-Roos Community Facilities Districts), will be considered, if conventional
21 Development Impact Fees, or enhanced versions of these Development Impact Fees,
22 are simply incapable of providing sufficient cash flow to fund an improvement before
23 Vacaville's timing standard is exceeded. An example would be a sewer plant
24 expansion that cannot practically be staged in small increments and that must be
25 available early in the planning period, because the existing capacity is already being
26 used or is already spoken for.

27 **State and Federal Grants And Loans.** Vacaville intends to participate aggressively in State
28 and Federal programs that may be approved by the Legislature, the Congress or the voters
29 in the future. Vacaville would use these future sources of revenues to fund projects that
30 would be highly desirable but that are not, strictly speaking, required to meet established
31 LOS targets and accommodate planned growth.

1 **Relationship To Land Use**

2 As noted previously, demand for *Drainage* Facilities in Vacaville is generated by the land
3 uses that are being accommodated. The measure of demand is "Residential Acre
4 Equivalents", or RAEs. The relationship between land use and demand for capacity for
5 *Drainage* facilities is summarized below and in Table 5.

6 The RAE factors were derived from the relationship between runoff coefficients standard
7 in hydrologic engineering analyses for determining storm water runoff from various land
8 uses. These runoff coefficients are the basis for estimating variations in runoff peaks and
9 volumes due to varying amounts of impervious surface area. In Vacaville, typical
10 residential, commercial and industrial subdivisions were measured and evaluated based on
11 the acreage of impervious surface. The relationships that were found closely followed
12 recognized runoff coefficients used in standard hydrologic calculations. The relative value
13 of RAE factors, when based upon a base of 1.0 for single-family residential land use, are
14 shown in Table 5.

15 **The Development Impact Fee**

16 The *Drainage* Development Impact Fees are shown in Tables 6, 7, and 8. Separate *Drainage*
17 Detention Fees are shown for the separate Detention Zones (Tables 6 and 7). Land
18 development projects throughout the City that have not previously paid a *Drainage* fee (i.e.,
19 land development projects that have not yet recorded a final map) will also be required to
20 pay a *Drainage* Conveyance Fee (Table 8).

21 In the future, the *Drainage* Impact Fee for detention will be due at the time of subdivision,
22 as is presently the case. The *Drainage* Conveyance Fee will be due at the time a first
23 building permit for each land development project is issued. During an interim period, land
24 development projects that have already paid the previously-existing *Drainage* fee but that
25 have not received development entitlements will be required to pay the *Drainage* Detention
26 Fee applicable to their Zone. This Detention Fee will be due at the time of building
27 permit.

28 The primary basis for levying the Detention Fee is per gross acre for the land use categories
29 shown in Tables 6, 7, and 8. If a land development project has already been subdivided
30 (i.e., if the *Drainage* Detention Fee is due at the time of building permit), then the alternate
31 basis of levying the fee shown in Table 6 and Table 7 will be applicable. These land
32 development projects will pay a fee per dwelling unit for residential land uses, and a fee per

1 net acre for other land uses. The basis for levying the Conveyance Fee is per dwelling unit
2 for residential land uses, and per net acre for other land uses.

3 The Two-tier Concept

4 The Development Impact Fees have two components:

- 5 ● **Portion Not Subject To Contingent Reimbursement:** This component of each Fee
6 is charged for the entire planning period.
- 7 ● **Portion Subject To Contingent Reimbursement:** The situation of having a portion
8 of the total Fee subject to contingent reimbursement is brought on by having a
9 significantly higher proportion of project costs to finance in the earlier years of the
10 fee program. This would result in cash flow problems that would make it impossible
11 for improvements to be funded in a timely manner if only a single uniform fee were
12 charged. The two-component fee has to be imposed on new development in the
13 earlier years of the fee program to insure funding for improvements in a timely
14 manner.

15 If development occurs according to the forecast, the additional charge will not be
16 imposed for the entire planning period. Those who develop in the early years and
17 pay the two-component fee will be reimbursed for the second component from fee
18 receipts from future development if, and when, that development occurs. The
19 reimbursement will include interest over the period it is outstanding. The
20 reimbursement is not guaranteed, as it is subject to several contingencies. Examples
21 of contingencies that could affect the timing or the amount of reimbursement
22 include:

- 23 ● The rate and location of future development in Vacaville;
- 24 ● Future standards for construction of future public improvements; and
- 25 ● Cost of future public improvements.

26 If adverse contingencies occur, then the future reimbursement may be reduced or
27 eliminated.

28 Full reimbursement for the second component of each fee is also contingent on the actual
29 cost of projects being equal to, or less than, the estimated cost.

1 **Method of Calculation**

2 The portion of each Fee not subject to contingent reimbursement is approximately equal
3 to the total cost of all improvements, divided by the total number of RAEs that have been
4 forecast to develop by January 1, 2010. This relationship is approximate, rather than exact,
5 because the balances in the fee accounts earn interest, and interest is earned by, and paid
6 on, the outstanding portion of the fee that is subject to contingent reimbursement.

7 The calculation of the portion of the Fee subject to contingent reimbursement is more
8 complex. This portion of the Fee is necessary because the portion not subject to
9 reimbursement fails to meet the cash flow demands of the Capital Improvement Plan. A
10 heuristic algorithm is employed and successive modifications of three separate variables are
11 made. The first two variables are the level of the portion of the Fee subject to contingent
12 reimbursement and the years the contingent portion is collected. The third variable is the
13 years in which the portion subject to contingent reimbursement, plus accrued interest, is
14 repaid from the funds then available in the Development Impact Fee account.

15 A project phasing schedule is prepared, as determined by the development forecast and the
16 adopted service standard, showing the timing of the expenditures required for each
17 improvement. This schedule is shown in Table 4. The RAE forecast is then converted into
18 a forecast of the amount of fee not subject to contingent reimbursement and fee subject to
19 contingent reimbursement that will be collected in each year. The fee, and cost of capital
20 improvements are inflated, for purposes of analysis, at the same rate (5 percent per year).
21 However, the recommended fee is set at its level on January 1 to account for inflation
22 during the course of the current year, and the fact that the fee will be updated only once
23 each year.

24 The amount of both components of each fee, along with the years the portion subject to
25 contingent reimbursement is imposed and subsequently repaid, are successively manipulated
26 until:

- 27 ● All projects have been constructed at their then actual-year cost;
- 28 ● All yearly deficits in the Development Impact Fee account have been eliminated;
- 29 ● The portion subject to contingent reimbursement, along with accumulated interest
30 due, has been fully repaid;
- 31 ● Only a nominal surplus remains in the Development Impact Fee account.

1 Tables 9, 10 and 11 show the detailed financial analysis for each Fee. The analysis identifies
2 forecast Fee revenues, interest earnings on both components of the Fee and their respective
3 balances, expenditures for improvements, and repayments of the portion subject to
4 contingent reimbursement, all on an annual basis.

5 The *Drainage* Conveyance Fee is calculated on the basis of site acreage for non-residential
6 land uses rather than per square foot of building area, as is used for most other City Fees.
7 For most projects, the *Drainage* Conveyance Fee is based on site acreage. For projects
8 which have multiple parcels sharing parking or other common facilities, such as retail
9 shopping centers, a special methodology will be followed. The concept is that each building
10 would pay its pro rata share of the Fee for the entire center. This share is on the basis of
11 building area versus parcel size. The steps in calculating the *Drainage* Conveyance Fee per
12 parcel are listed below:

- 13 1. Determine the acreage of the shopping center;
- 14 2. Determine the amount of building floor area (square feet) for
15 each parcel; add the floor areas of all buildings to yield the
16 total floor area for the shopping center as a whole;
- 17 3. Calculate what percentage of the total building floor area
18 within the shopping center is located on each parcel;
- 19 4. Calculate the *Drainage* Conveyance Fee for the shopping center
20 as a whole by multiplying the entire acreage by the fee per
21 acre; and
- 22 5. Calculate the Fee per parcel by multiplying the Fee for the
23 center as a whole by the percentages calculated in step (3)
24 above.

25 Exception Procedure

26 The City recognizes that Best Management Practices can be implemented most efficiently
27 by measures taken within a drainage subzone or at an on-site detention basin. If measures
28 are taken that deal with water quality requirements on-site and that do not increase the
29 capacity required for the City's stormwater conveyance system. An application can be made
30 for a reduction in the *Drainage* Conveyance Fee that would otherwise be due. If the water
31 quality impacts and/or channel improvement impacts of a drainage subzone are partially or
32 completely mitigated, then the *Drainage* Conveyance Fee will be proportionally reduced.

1 Certain of the projects in Table 4 that would be financed with the *Drainage* Conveyance Fee
2 are intended to maintain water quality. The costs of these projects may change as the City
3 makes final decisions about preserving water quality. The City will be aided in identifying
4 the necessary costs by the Water Quality Monitoring Program that is financed in part by the
5 Drainage Conveyance Fee.

6 Expenditure Of Impact Fees In Prior Years

7 As noted previously, the *Drainage* Development Impact Fees described in the present
8 Report were designed to provide required public improvements through January 1, 2010.
9 Table 7 shows the use that has been made of collected funds from January 1, 1989 through
10 June 30, 1992, the date just before the July 1, 1992 starting point for the time period
11 included in the present Report.

Table 1

SUMMARY OF INCREASED DEMAND
Drainage Development Impact Fees

Detention Zone (a)	Total Gross Acres 1) (b)	Additional Development (Residential Acre Equivalents [RAEs])		
		Pre-paid (c)	Not Pre-paid (d)	Total (e)
1	543	323	350	673
1A	306	67	377	444
Subtotal	849	390	727	1,117
2	2,326	120	2,484	2,604
2A	484	0	746	746
2B	125	0	130	130
Subtotal	2,935	120	3,360	3,480
Msc. Dvlpmnt.	449	81	455	536
TOTAL	4,233	591	4,542	5,133

Source: City of Vacaville.

Figure 2

DRAINAGE DETENTION FEE ZONES
Drainage Development Impact Fees

See separate pocket for this map.

Figure 3

CAPITAL IMPROVEMENTS — DETENTION
Drainage Development Impact Fees

See separate pocket for this map.

City of Vacaville Development Impact Fee Update — 1992
City Council Review Draft: December 8, 1992 (33940.75)

Table 4

PROJECT COST AND SOURCES OF FINANCING
Drainage Development Impact Fees

Year	Proj. No.	Project Description	Zone 1 Detention	Zone 2 Detention	Citywide Conveyance	Rehab.	Local Impact	Area Of Local Impact
1992-93	1	Pine Tree Creek Channel Improvements				45		North
	2	N. Horse Creek channel riprap west of Hwy 505			25	25	22	
	3	Stormwater monitoring Program						
		Annual Total	0	0	25	70	22	
1993-94	4	Pine Tree Creek Crossing of Browns Villy Rd				135		
	5	5 AF Ulatia Creek Basin #1		188				
	6	Stormwater monitoring Program			50	50		
	7	Stormwater system studies			25			
	8	Storm Drain Replacement Program				100		
	Annual Total	0	188	75	285	0		
1994-95	9	40 AF Laguna Creek Basin Land Acquisition		350				
	10	Allison Parkway 36" Storm Drain Upgrade			80	75		
	11	Stormwater monitoring Program			50	50		
	12	Stormwater system studies			50			
	13	Storm Drain Upgrade Program			125			
	14	Storm Drain Replacement Program				125		
	Annual Total	0	350	305	250	0		
1995-96	15	8 AF North Horse Basin #4 (Phase 1)					285	Northeast
	16	Stormwater Monitoring Program			50	50		
	17	Stormwater system studies			50			
	18	Storm Drain Upgrade Program			125			
	19	Storm Drain Replacement Program				125		
	Annual Total	0	0	225	175	285		
1996-97	20	S. Branch N. Horse Ck. channel improvements					172	Northeast
	21	N. Branch N. Horse Ck. channel improvements					234	Northeast
	22	40 AF Laguna Creek Basin Construction		968				
	23	5 AF North Horse Basin #1 (Phase 1)	285					
	24	Stormwater system studies/fee review			100			
	25	Storm Drain Upgrade Program			125			
	26	Storm Drain Replacement Program				125		
	Annual Total	285	968	225	125	406		
1997-98	27	4 AF Ulatia Basin #2		156				
	28	Stormwater system studies			50			
	29	Storm Drain Upgrade Program			125			
	30	Storm Drain Replacement Program				125		
	Annual Total	0	156	175	125	0		
1998-99	31	35 AF Alamo Basin #1 Land Acquisition		385				
	32	Stormwater system studies			50			
	33	Storm Drain Upgrade Program			125			
	34	Storm Drain Replacement Program				125		
	Annual Total	0	385	175	125	0		

City of Vacaville Development Impact Fee Update — 1992
City Council Review Draft: December 8, 1992 (33940.75)

Table 4

PROJECT COST AND SOURCES OF FINANCING
Drainage Development Impact Fees
(Continued)

Year	Proj. No.	Project Description	Zone 1 Detention	Zone 2 Detention	Citywide Conveyance	Rehab.	Area of Local Impact	Local Impact
1999-2000	35	S. Branch S. Horse Ck. channel improvements						
	36	4 AF North Horse Basin #2	156				17	North
	37	M. Branch S. Horse Ck. channel improvements						
	38	15 AF Alamo Basin #2 Land Acquisition		200			137	North
	39	Stormwater system studies			50			
	40	Storm Drain Upgrade Program			125			
	41	Storm Drain Replacement Program				125		
		Annual Total	156	200	175	125	154	
2000-01	42	6 AF North Horse Basin #1 (Phase 2)	299					
	43	35 AF Alamo Basin #1 Construction		772				
	44	Stormwater system studies			50			
	45	Storm Drain Upgrade Program			125			
	46	Storm Drain Replacement Program				125		
		Annual Total	299	772	175	125	0	
2001-02	47	12 AF North Horse Basin #3						
	48	7 AF Alamo Creek Basin #3 Land Acquisition		95			414	Northeast
	49	Stormwater system studies			50			
	50	Storm Drain Upgrade Program			125			
	51	Storm Drain Replacement Program				125		
		Annual Total	0	95	175	125	414	
2002-03	52	N. Branch S. Horse Ck. channel improvements						
	53	4 AF Middle Horse Basin	156				180	North
	54	Stormwater system studies			50			
	55	Storm Drain Upgrade Program			125			
	56	Storm Drain Replacement Program				125		
		Annual Total	156	0	175	125	180	
2003-04	57	5 AF Ulatis Basin #3		188				
	58	Stormwater system studies			50			
	59	Storm Drain Upgrade Program			125			
	60	Storm Drain Replacement Program				125		
			Annual Total	0	188	175	125	0
2004-05	61	3 AF North Horse Basin #1 (Phase 3)	156					
	62	Stormwater system studies			50			
	63	Storm Drain Upgrade Program			125			
	64	Storm Drain Replacement Program				125		
			Annual Total	156	0	175	125	0
2005-06	65	15 AF Alamo Basin #2 Construction		311				
	66	Stormwater system studies			50			
	67	Storm Drain Upgrade Program			125			
	68	Storm Drain Replacement Program				125		
			Annual Total	0	311	175	125	0

City of Vacaville Development Impact Fee Update — 1992
City Council Review Draft: December 8, 1992 (33940.75)

Table 4

PROJECT COST AND SOURCES OF FINANCING
Drainage Development Impact Fees
(Continued)

Year	Proj. No.	Project Description	Zone 1 Detention	Zone 2 Detention	Citywide Conveyance	Rehab.	Area of Local Impact	Local Impact
2006-07	69	12 AF North Horse Basin #4 (Phase 2)					414 Northeast	
	70	Stormwater system studies			50			
	71	Storm Drain Upgrade Program			125			
	72	Storm Drain Replacement Program				125		
		Annual Total	0	0	175	125	414	
2007-08	73	6 AF Putah Canal Basin Modifications	234					
	74	Stormwater system studies			50			
	75	Storm Drain Upgrade Program			125			
	76	Storm Drain Replacement Program				125		
		Annual Total	234	0	175	125	0	
2008-09	77	4 AF North Horse Basin #4 (Phase 3)					156 Northeast	
	78	7 AF Alamo Creek Basin #3 Construction		150				
	79	Stormwater system studies			50			
	80	Storm Drain Upgrade Program			125			
	81	Storm Drain Replacement Program				125		
		Annual Total	0	150	175	125	156	
2009-10	82	Stormwater system studies			25			
	83	Storm Drain Upgrade Program			60			
	84	Storm Drain Replacement Program				60		
		Annual Total	0	0	85	60	0	
Program Totals			1,286	3,763	3,040	2,465	2,031	

NOTE: Additional improvements beyond those listed may be necessary if development occurs beyond that indicated in forecasts, or if development is dispersed in a significantly different manner.

Source: West Yost & Associates.

[A]D:\P\1751\DRAINAGE\CASE109.WK3{#WY-PROJ-LIST}

Table 5

RELATIONSHIP TO LAND USE
Drainage Development Impact Fees

LAND USE CATEGORY	RAE FACTOR
Single-family residential	1.0
Multi-family residential	1.3
Commercial	1.8
Industrial	1.8

Notes:

1. RAE = Residential Acre Equivalent.

Source: West Yost & Associates.

Table 6

SUMMARY OF DRAINAGE DETENTION FEE — ZONE 1
Drainage Development Impact Fees

02-Dec-92
10:27 AM

	Portion Not Subject To Contingent Reimbursement	Portion Subject To Contingent Reimbursement	Total
Per RAE	\$2,000	\$169	\$2,169

Charge Per Unit

Land Use Category	Unit	RAE	Portion Not Subject To Contingent Reimbursement	Portion Subject To Contingent Reimbursement	Total	Coverage Ratio	Units	Fee Per Unit Applicable At Building Permit See Note (1)
RESIDENTIAL								
Single Family	Acre	1.00	\$2,000	\$169	\$2,169	4.0	Dwelling Unit	\$542
Multi-Family	Acre	1.30	\$2,599	\$220	\$2,819	12.0	Dwelling Unit	\$235
NON-RESIDENTIAL								
Commercial	Acre	1.80	\$3,599	\$305	\$3,904	105.3%	Net Acre	\$4,111
Office	Acre	1.80	\$3,599	\$305	\$3,904	105.3%	Net Acre	\$4,111
Industrial	Acre	1.80	\$3,599	\$305	\$3,904	105.3%	Net Acre	\$4,111
INSTITUTIONAL								
Hospital	Acre	1.80	\$3,599	\$305	\$3,904	105.3%	Net Acre	\$4,111
Church	Acre	1.80	\$3,599	\$305	\$3,904	105.3%	Net Acre	\$4,111

Note: Figures are expressed in July 1, 1992 dollars.

(1) Fee applicable at building permit applies only to those projects that have paid the Conveyance Fee at the final map stage. The Fee per unit shown is the total Fee which includes the portion subject to contingent reimbursement.

A conversion factor of 1.053 was applied to calculate the fee for those projects that will be paying the fee at the time of building permit.

Source: Angus McDonald & Associates.

[A]D:\P\1751\DRAINAGE\CASE109.WK3\FEE-SUMMARY-B)

City of Vacaville Development Impact Fee Update — 1992
 City Council Review Draft: December 8, 1992 (33940.75)

Table 7

SUMMARY OF DRAINAGE DETENTION FEE — ZONE 2
City of Vacaville - Drainage Fee

02-Dec-92
10:27 AM

	Portion Not Subject To Contingent Reimbursement	Portion Subject To Contingent Reimbursement	Total
Per RAE	\$1,567	\$743	\$2,310

Charge Per Unit

Land Use Categories	Unit	RAE	Portion Not Subject To Contingent Reimbursement	Portion Subject To Contingent Reimbursement	Total	Coverage Ratio	Units	Fee Per Unit Applicable At Building Permit See Note (1)
RESIDENTIAL								
Single Family	Acre	1.00	\$1,567	\$743	\$2,310	4.0	Dwelling Unit	\$578
Multi-Family	Acre	1.30	\$2,037	\$966	\$3,003	12.0	Dwelling Unit	\$250
NON-RESIDENTIAL								
Commercial	Acre	1.80	\$2,820	\$1,338	\$4,158	105.3%	Net Acre	\$4,379
Office	Acre	1.80	\$2,820	\$1,338	\$4,158	105.3%	Net Acre	\$4,379
Industrial	Acre	1.80	\$2,820	\$1,338	\$4,158	105.3%	Net Acre	\$4,379
INSTITUTIONAL								
Hospital	Acre	1.80	\$2,820	\$1,338	\$4,158	105.3%	Net Acre	\$4,379
Church	Acre	1.80	\$2,820	\$1,338	\$4,158	105.3%	Net Acre	\$4,379

Note: Figures are expressed in July 1, 1992 dollars.

(1) Fee applicable at building permit applies only to those projects that have paid the Conveyance Fee at the final map stage. The Fee per unit shown is the total Fee which includes the portion subject to contingent reimbursement.

A conversion factor of 1.053 was applied to calculate the fee for those projects that will be paying the fee at the time of building permit.

Source: Angus McDonald & Associates.

[A]D:\P\1751\DRAINAGE\CASE109.WK3(@FEE-SUMMARY-A)

Table 8

SUMMARY OF CITYWIDE CONVEYANCE FEE
 City of Vacaville - Drainage Fee

02-Dec-92
 05:53 PM

				Portion Not Subject To Contingent Reimbursement	Portion Subject To Contingent Reimbursement	Total
Per RAE				\$652	\$0	\$652
Charge Per Unit						
Land Use Categories	RAE Factor Per Gross Acre	Conversion Factor	Units	Portion Not Subject To Contingent Reimbursement	Portion Subject To Contingent Reimbursement	Total
RESIDENTIAL						
Single Family	1.00	4.0	Dwelling Unit	\$163	\$0	\$163
Multi-Family	1.30	12.0	Dwelling Unit	\$71	\$0	\$71
NON-RESIDENTIAL						
Commercial	1.80	105.3%	Net Acre	\$1,236	\$0	\$1,236
Office	1.80	105.3%	Net Acre	\$1,236	\$0	\$1,236
Industrial	1.80	105.3%	Net Acre	\$1,236	\$0	\$1,236
INSTITUTIONAL						
Hospital	1.80	105.3%	Net Acre	\$1,236	\$0	\$1,236
Church	1.80	105.3%	Net Acre	\$1,236	\$0	\$1,236

Note: Figures are expressed in July 1, 1992 dollars.

Source: Angus McDonald & Associates.

[A]D:\P\1751\DRAINAGE\CASE106.WK3(@FEE-SUMMARY-C)

Table 9

**CASH FLOW ANALYSIS
 City of Vacaville - Drainage Fee
 Zone 1 - Detention Fee**

02-Dec-92
 10:27 AM

BUILDOUT SUMMARY							
Financing Equivalent Dwelling Units For The Time Period Annual Average Cumulative	Total	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
	673	63	63	63	63	32	32
		63	63	63	63	32	32
		63	125	188	250	282	314
DEVELOPMENT FEE SCHEDULE							
Fee Per Equivalent Dwelling Unit (January 1, 1992 Dollars)							
Portion of Fee Not Subject To Contingent Reimbursement		\$1,950	\$1,950	\$1,950	\$1,950	\$1,950	\$1,950
Portion of Fee Subject To Contingent Reimbursement		\$165	\$165	\$165	\$165	\$165	\$165
Fee Per Equivalent Dwelling Unit (In Actual-Year Dollars)							
Portion of Fee Not Subject To Contingent Reimbursement		\$2,000	\$2,102	\$2,210	\$2,323	\$2,442	\$2,568
Portion of Fee Subject To Contingent Reimbursement		\$169	\$178	\$187	\$197	\$207	\$217
ANALYSIS OF SOURCES AND USES OF FUNDS - ACTUAL YEAR DOLLARS							
Funds Not Subject to Contingent Reimbursement from Prior Periods	Total	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Funds Subject to Contingent Reimbursement from Prior Periods	\$0						
Beginning Fund Balance	\$0	\$0	\$139,970	\$295,772	\$468,753	\$660,361	\$404,702
Revenues:							
Portion Not Subject To Contingent Reimbursement	\$1,985,581	\$125,218	\$131,638	\$138,387	\$145,482	\$77,022	\$80,971
Portion Subject To Contingent Reimbursement	\$148,284	\$10,595	\$11,139	\$11,710	\$12,310	\$6,517	\$6,851
Loan From Redevelopment	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenues	\$2,133,865	\$135,813	\$142,776	\$150,097	\$157,792	\$83,539	\$87,822
Expenditures:							
For Public Improvements	\$2,188,715	\$0	\$0	\$0	\$0	\$371,227	\$0
Reimbursement of Fee and Interest	\$264,741	\$0	\$0	\$0	\$0	\$0	\$0
Repay Redevelopment Loan	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures	\$2,453,456	\$0	\$0	\$0	\$0	\$371,227	\$0
Net Revenues (Expenditures)	(\$319,591)	\$135,813	\$142,776	\$150,097	\$157,792	(\$287,688)	\$87,822
Interest Earnings on Fund Balance	\$322,050	\$4,157	\$13,026	\$22,884	\$33,816	\$32,029	\$27,714
Fund Balance - End of Period	\$2,459	\$139,970	\$295,772	\$468,753	\$660,361	\$404,702	\$520,238
CONTINGENT REIMBURSEMENT ANALYSIS - ACTUAL YEAR DOLLARS							
Funds Subject To Contingent Reimbursement From Prior Periods	Total	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Reimbursement Due - Start of Period	\$0						
Collections - Portion Subject to Contingent Reimbursement	\$148,284	\$10,595	\$11,139	\$11,710	\$12,310	\$6,517	\$6,851
Reimbursements - This Period	\$264,741	\$0	\$0	\$0	\$0	\$0	\$0
Net Collections (Reimbursements)	(\$116,457)	\$10,595	\$11,139	\$11,710	\$12,310	\$6,517	\$6,851
Interest Accrued - This Period	\$116,457	\$324	\$1,016	\$1,785	\$2,638	\$3,385	\$4,008
Reimbursement Account Balance Due - End of Period	(\$0)	\$10,920	\$23,074	\$36,569	\$51,518	\$61,420	\$72,279
BORROWING FROM REDEVELOPMENT - ACTUAL YEAR DOLLARS							
Borrowings From Redevelopment From Prior Periods	Total	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Borrowings Due - Start of Period	\$0						
Borrowings - Subject To Repayment	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Repayments - This Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Borrowing (Repayments)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest Accrued - This Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Loan Account Balance Due - End of Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Program Name: @WORK-AREA							
City of Vacaville - Drainage Fee							
Average Cost Per EDU Through End of Program	\$1,988						
Maximum Cumulative Average Cost Per EDU During Program	\$2,153						
Total Fee (January 1, 1992 Dollars)	\$2,115						
Portion of Fee - Not Subject To Contingent Reimbursement	\$1,950	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Portion of Fee - Subject To Contingent Reimbursement	\$165	YES	YES	YES	YES	YES	YES
Minimum Fund Balance	\$2,459						
Final Balance Not Subject to Contingent Reimbursement	\$2,459						
Final Reimbursement Account Balance	\$0						
Final Loan Account Balance	\$0						
Fund Balance - End of Period	\$2,459	\$139,970	\$295,772	\$468,753	\$660,361	\$404,702	\$520,238
Total Reimbursement In Period	\$264,741	\$0	\$0	\$0	\$0	\$0	\$0
Total Repay Redevelopment In Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Source: Angus McDonald & Associates.							

AJD:\P\1751\DRAINAGE\CASE109.WK3(@CASH-FLOW-B)

Table 9 (continued)

CASH FLOW ANALYSIS
 City of Vacaville - Drainage Fee
 Zone 1 - Detention Fee

1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
32	32	32	29	29	29	29	29	34	34	34	17
32	32	32	29	29	29	29	29	34	34	34	17
345	377	408	437	466	495	524	552	587	621	656	673

\$1,950, \$165	\$1,950 \$165	\$1,950 \$165	\$1,950 \$165	\$1,950 \$165	\$1,950 \$165	\$1,950 \$165	\$1,950 \$165	\$1,950 \$165	\$1,950 \$165	\$1,950 \$0	\$1,950 \$0
\$2,699 \$228	\$2,838 \$240	\$2,983 \$252	\$3,136 \$265	\$3,297 \$279	\$3,466 \$293	\$3,643 \$308	\$3,830 \$324	\$4,027 \$341	\$4,233 \$358	\$4,450 \$0	\$4,678 \$0

1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
\$520,238	\$647,558	\$544,322	\$192,888	\$305,993	\$148,595	\$269,602	\$91,410	\$220,641	\$388,844	\$30,912	\$35,721
\$85,122	\$89,487	\$94,075	\$90,514	\$95,154	\$100,033	\$105,162	\$110,554	\$138,269	\$145,359	\$152,811	\$80,323
\$7,203	\$7,572	\$7,960	\$7,659	\$8,052	\$8,464	\$8,898	\$9,355	\$11,700	\$12,300	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$92,325	\$97,059	\$102,035	\$98,173	\$103,206	\$108,497	\$114,060	\$119,908	\$149,969	\$157,658	\$152,811	\$80,323
\$0	\$236,082	\$475,691	\$0	\$274,289	\$0	\$303,136	\$0	\$0	\$528,290	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000	\$114,741
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$236,082	\$475,691	\$0	\$274,289	\$0	\$303,136	\$0	\$0	\$528,290	\$150,000	\$114,741
325	(\$139,024)	(\$373,656)	\$98,173	(\$171,083)	\$108,497	(\$189,076)	\$119,908	\$149,969	(\$370,632)	\$2,811	(\$34,418)
1,996	\$35,787	\$22,222	\$14,932	\$13,685	\$12,510	\$10,884	\$9,323	\$18,234	\$12,700	\$1,998	\$1,155
\$647,558	\$544,322	\$192,888	\$305,993	\$148,595	\$269,602	\$91,410	\$220,641	\$388,844	\$30,912	\$35,721	\$2,459

1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
\$72,279	\$84,172	\$97,180	\$111,393	\$126,175	\$142,275	\$159,796	\$178,848	\$199,548	\$223,946	\$250,470	\$111,367
\$7,203	\$7,572	\$7,960	\$7,659	\$8,052	\$8,464	\$8,898	\$9,355	\$11,700	\$12,300	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000	\$114,741
\$7,203	\$7,572	\$7,960	\$7,659	\$8,052	\$8,464	\$8,898	\$9,355	\$11,700	\$12,300	(\$150,000)	(\$114,741)
\$4,690	\$5,437	\$6,253	\$7,123	\$8,049	\$9,057	\$10,154	\$11,346	\$12,698	\$14,225	\$10,897	\$3,374
\$84,172	\$97,180	\$111,393	\$126,175	\$142,275	\$159,796	\$178,848	\$199,548	\$223,946	\$250,470	\$111,367	\$0

1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Levy Portion Subject To Contingent Reimbursement Yes/No	
										2008/09	2009/10
YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO

\$647,558	\$544,322	\$192,888	\$305,993	\$148,595	\$269,602	\$91,410	\$220,641	\$388,844	\$30,912	\$35,721	\$2,459
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000	\$114,741
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Table 10

CASH FLOW ANALYSIS
City of Vacaville - Drainage Fee
Zone 2 - Detention Fee

02-Dec-92
 10:27 AM

FINANCING SUMMARY		Total	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Financing Equivalent Dwelling Units								
For The Time Period		2,604	152	152	152	152	157	157
Annual Average			152	152	152	152	157	157
Cumulative			152	304	456	607	765	922
DEVELOPMENT FEE SCHEDULE								
Fee Per Equivalent Dwelling Unit (January 1, 1992 Dollars)								
Portion of Fee Not Subject To Contingent Reimbursement			\$1,528	\$1,528	\$1,528	\$1,528	\$1,528	\$1,528
Portion of Fee Subject To Contingent Reimbursement			\$725	\$725	\$725	\$725	\$725	\$725
Fee Per Equivalent Dwelling Unit (In Actual-Year Dollars)								
Portion of Fee Not Subject To Contingent Reimbursement			\$1,567	\$1,647	\$1,732	\$1,820	\$1,914	\$2,012
Portion of Fee Subject To Contingent Reimbursement			\$743	\$782	\$822	\$864	\$908	\$955
ANALYSIS OF SOURCES AND USES OF FUNDS - ACTUAL YEAR DOLLARS								
Funds Not Subject to Contingent Reimbursement from Prior Periods		Total	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Funds Subject to Contingent Reimbursement from Prior Periods		\$0						
Beginning Fund Balance		\$0	\$0	\$361,592	\$546,862	\$555,164	\$1,009,603	\$229,515
Revenues:								
Portion Not Subject To Contingent Reimbursement		\$6,386,716	\$237,951	\$250,151	\$262,976	\$276,459	\$300,699	\$316,116
Portion Subject To Contingent Reimbursement		\$1,277,914	\$112,902	\$118,691	\$124,776	\$131,173	\$142,675	\$149,990
Loan From Redevelopment		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenues		\$7,664,630	\$350,853	\$368,842	\$387,752	\$407,633	\$443,374	\$466,106
Expenditures:								
For Public Improvements		\$5,680,576	\$0	\$210,770	\$412,509	\$0	\$1,260,870	\$213,616
Reimbursement of Fee and Interest		\$2,346,847	\$0	\$0	\$0	\$0	\$0	\$0
Repay Redevelopment Loan		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt Service		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures		\$8,027,423	\$0	\$210,770	\$412,509	\$0	\$1,260,870	\$213,616
Net Revenues (Expenditures)		(\$362,793)	\$350,853	\$158,072	(\$24,757)	\$407,633	(\$817,496)	\$252
Interest Earnings on Fund Balance		\$366,781	\$10,739	\$27,198	\$33,058	\$46,807	\$37,408	\$2
Fund Balance - End of Period		\$3,988	\$361,592	\$546,862	\$555,164	\$1,009,603	\$229,515	\$503,925
CONTINGENT REIMBURSEMENT ANALYSIS - ACTUAL YEAR DOLLARS								
Funds Subject To Contingent Reimbursement From Prior Periods		Total	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Reimbursement Due - Start of Period		\$0	\$0	\$116,358	\$245,877	\$389,676	\$548,961	\$729,949
Collections - Portion Subject to Contingent Reimbursement		\$1,277,914	\$112,902	\$118,691	\$124,776	\$131,173	\$142,675	\$149,990
Reimbursements - This Period		\$2,346,847	\$0	\$0	\$0	\$0	\$0	\$0
Net Collections (Reimbursements)		(\$1,068,933)	\$112,902	\$118,691	\$124,776	\$131,173	\$142,675	\$149,990
Interest Accrued - This Period		\$1,068,933	\$3,456	\$10,828	\$19,023	\$28,111	\$38,313	\$49,729
Reimbursement Account Balance Due - End of Period		\$0	\$116,358	\$245,877	\$389,676	\$548,961	\$729,949	\$929,667
BORROWING FROM REDEVELOPMENT - ACTUAL YEAR DOLLARS								
Borrowings From Redevelopment From Prior Periods		Total	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Borrowings Due - Start of Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Borrowings - Subject To Repayment		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Repayments - This Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Borrowing (Repayments)		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest Accrued - This Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Loan Account Balance Due - End of Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0
PROGRAM SUMMARY								
Program Name: @WORK-AREA								
City of Vacaville - Drainage Fee								
Average Cost Per EDU Through End of Program		\$1,503						
Maximum Cumulative Average Cost Per EDU During Program		\$2,254						
Total Fee (January 1, 1992 Dollars)		\$2,253						
Portion of Fee - Not Subject To Contingent Reimbursement		\$1,528						
Portion of Fee - Subject To Contingent Reimbursement		\$725	YES	YES	YES	YES	YES	YES
Minimum Fund Balance		\$3,988						
Final Balance Not Subject To Contingent Reimbursement		\$3,988						
Final Reimbursement Account Balance		\$0						
Final Loan Account Balance		\$0						
Fund Balance - End of Period		\$3,988	\$361,592	\$546,862	\$555,164	\$1,009,603	\$229,515	\$503,925
Total Reimbursement In Period		\$2,346,847	\$0	\$0	\$0	\$0	\$0	\$0
Total Repay Redevelopment In Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Source: Angus McDonald & Associates.

AJD:\P\1751\DRAINAGE\CASE109.WK3(@CASH-FLOW-A)

Table 11

**CASH FLOW ANALYSIS
 City of Vacaville - Drainage Fee
 Citywide Conveyance Fee**

02-Dec-92
 05:53 PM

WILDOUT SUMMARY		Total	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Financing Equivalent Dwelling Units								
For The Time Period		4,542	202	202	202	202	291	291
Annual Average			202	202	202	202	291	291
Cumulative			202	405	607	809	1,101	1,392

DEVELOPMENT FEE SCHEDULE								
Per Equivalent Dwelling Unit (January 1, 1992 Dollars)								
Portion of Fee Not Subject To Contingent Reimbursement		\$636	\$636	\$636	\$636	\$636	\$636	\$636
Portion of Fee Subject To Contingent Reimbursement		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Per Equivalent Dwelling Unit (In Actual-Year Dollars)								
Portion of Fee Not Subject To Contingent Reimbursement		\$652	\$686	\$721	\$758	\$797	\$837	\$837
Portion of Fee Subject To Contingent Reimbursement		\$0	\$0	\$0	\$0	\$0	\$0	\$0

ANALYSIS OF SOURCES AND USES OF FUNDS - ACTUAL YEAR DOLLARS								
Funds Not Subject to Contingent Reimbursement from Prior Periods		Total	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Funds Subject to Contingent Reimbursement from Prior Periods		\$255,239						
Beginning Fund Balance		\$0						
		\$255,239	\$379,521	\$459,279	\$267,481	\$154,689	\$101,493	\$101,493
Revenues:								
Portion Not Subject To Contingent Reimbursement		\$4,677,845	\$131,937	\$138,702	\$145,813	\$153,289	\$232,177	\$244,081
Portion Subject To Contingent Reimbursement		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Loan From Redevelopment		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenues		\$4,677,845	\$131,937	\$138,702	\$145,813	\$153,289	\$232,177	\$244,081
Expenditures:								
For Public Improvements		\$5,096,616	\$26,661	\$84,084	\$359,472	\$278,781	\$293,074	\$239,634
Reimbursement of Fee and Interest		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Repay Redevelopment Loan		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt Service		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures		\$5,096,616	\$26,661	\$84,084	\$359,472	\$278,781	\$293,074	\$239,634
Net Revenues (Expenditures)		(\$418,771)	\$105,276	\$54,618	(\$213,659)	(\$125,491)	(\$60,897)	\$4
Interest Earnings on Fund Balance		\$172,306	\$19,006	\$25,140	\$21,860	\$12,699	\$7,701	\$0
Fund Balance - End of Period		\$8,774	\$379,521	\$459,279	\$267,481	\$154,689	\$101,493	\$112,352

CONTINGENT REIMBURSEMENT ANALYSIS - ACTUAL YEAR DOLLARS								
Funds Subject To Contingent Reimbursement From Prior Periods		Total	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
		\$0						
Reimbursement Due - Start of Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Collections - Portion Subject to Contingent Reimbursement		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reimbursements - This Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Collections (Reimbursements)		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest Accrued - This Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reimbursement Account Balance Due - End of Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0

BORROWING FROM REDEVELOPMENT - ACTUAL YEAR DOLLARS								
Borrowings From Redevelopment From Prior Periods		Total	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
		\$0						
Borrowings Due - Start of Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Borrowings - Subject To Repayment		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Repayments - This Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Borrowing (Repayments)		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest Accrued - This Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Loan Account Balance Due - End of Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Program Name: @WORK-AREA								
City of Vacaville - Drainage Fee								
Average Cost Per EDU Through End of Program		\$640						
Maximum Cumulative Average Cost Per EDU During Program		\$640						
Total Fee (January 1, 1992 Dollars)		\$636	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Portion of Fee - Not Subject To Contingent Reimbursement		\$636						
Portion of Fee - Subject To Contingent Reimbursement		\$0	NO	NO	NO	NO	NO	NO
Minimum Fund Balance		\$8,774						
Final Balance Not Subject To Contingent Reimbursement		\$8,774						
Final Reimbursement Account Balance		\$0						
Final Loan Account Balance		\$0						
Fund Balance - End of Period		\$8,774	\$379,521	\$459,279	\$267,481	\$154,689	\$101,493	\$112,352
Total Reimbursement In Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Repay Redevelopment In Period		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Source: Angus McDonald & Associates.

\\JD:\P\1751\DRAINAGE\CASE106.WK3(@CASH-FLOW-C)

Table 12

USE OF DEVELOPMENT IMPACT FEES IN PRIOR YEARS
Drainage Development Impact Fees

Fund #361 Storm Drain Fee

(Analysis of Capital Improvement Funds for Storm Drain Fees 6/30/91 — 6/30/92)

Fund Balance at 6/30/91	\$1,922,025.97
Revenue	64,446.00
Interest Income	106,454.51
Expended & Purchase Orders	(981,316.91)
Existing CIP Projects	<u>(915,524.87)</u>
Available Balance at 6/30/92	\$ 196,084.70
Redevelopment Deferred Agreements (92/93)	22,783.26
Deferred Receivables (92/93)	<u>36,371.00</u>
Total Available Balance at 6/30/92	<u>\$ 255,238.96</u>

REFERENCES

Drainage Development Impact Fees

- R-1 Vacaville, City of. *Updated Text and Data for the Development Forecast*. By Gregory J. Werner, Director of Community Development. June 26, 1992. (Revised July 28, 1992.)
- R-2 Vacaville, City of. *General Plan*. August, 1990.
- R-3 Vacaville, City of. *Growth Audit 1992*.
- R-4 Vacaville, City of. *Ordinance 1447 (Growth Management)* Adopted Sept. 24, 1991.
- R-5 West Yost & Associates. *City of Vacaville Storm Drainage Master Plan*. Davis, California: Forthcoming.

Figure 3
 CITY of VACAVILLE
 Capital Improvements
 (Detention)



- LEGEND**
- FEE ZONE BOUNDARY
 - ⊙ EXISTING DETENTION AREA WITHIN ZONE 1 TO BE EXPANDED
 - EXISTING DETENTION AREA- NO CHANGE
 - NEW DETENTION AREA WITHIN ZONE 1
 - APPROXIMATE LOCATION OF NEW DETENTION AREAS WITHIN ZONE 2

NOTES

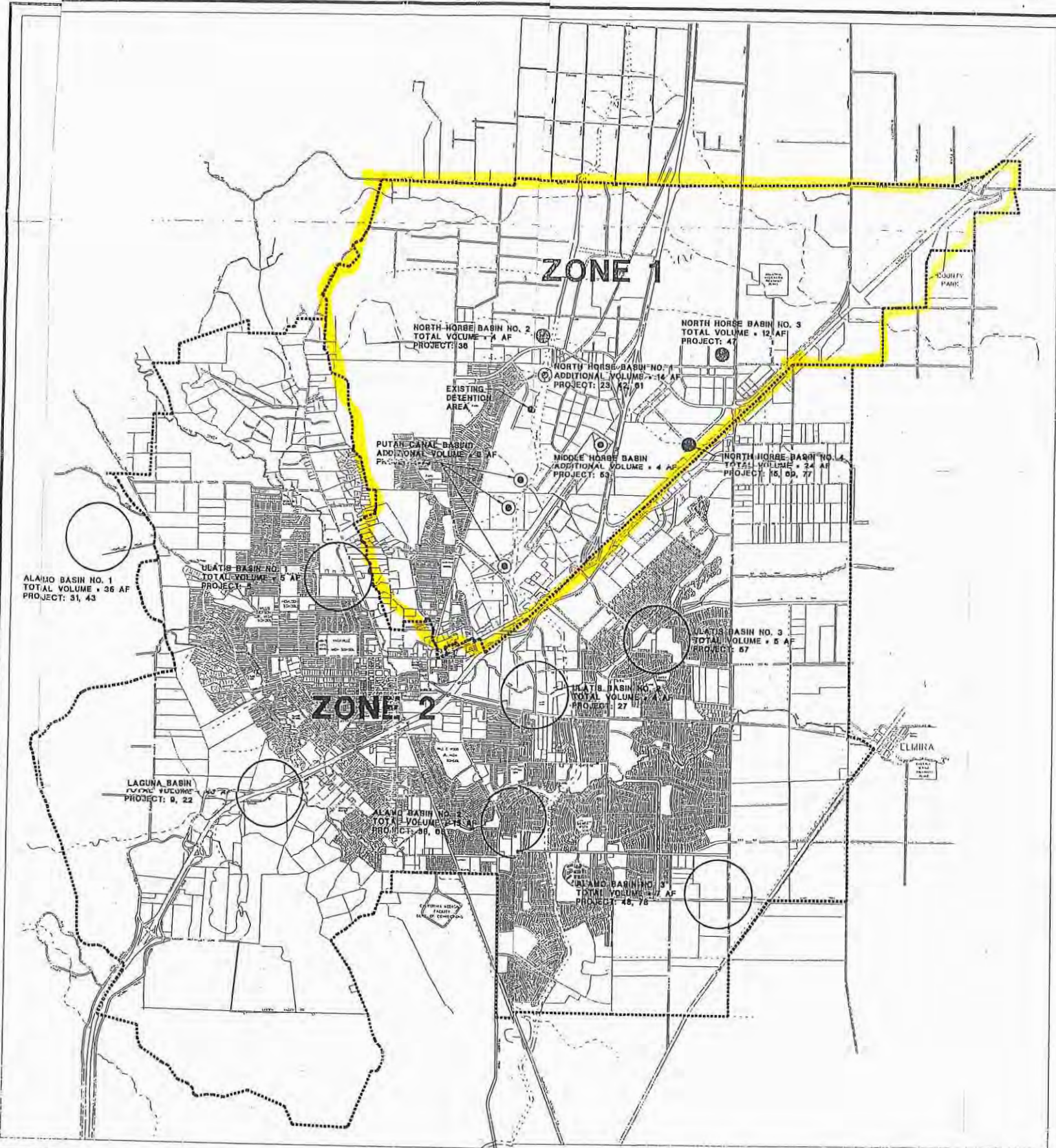
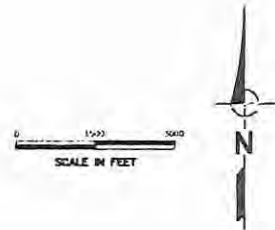


Figure 3

CITY of VACAVILLE

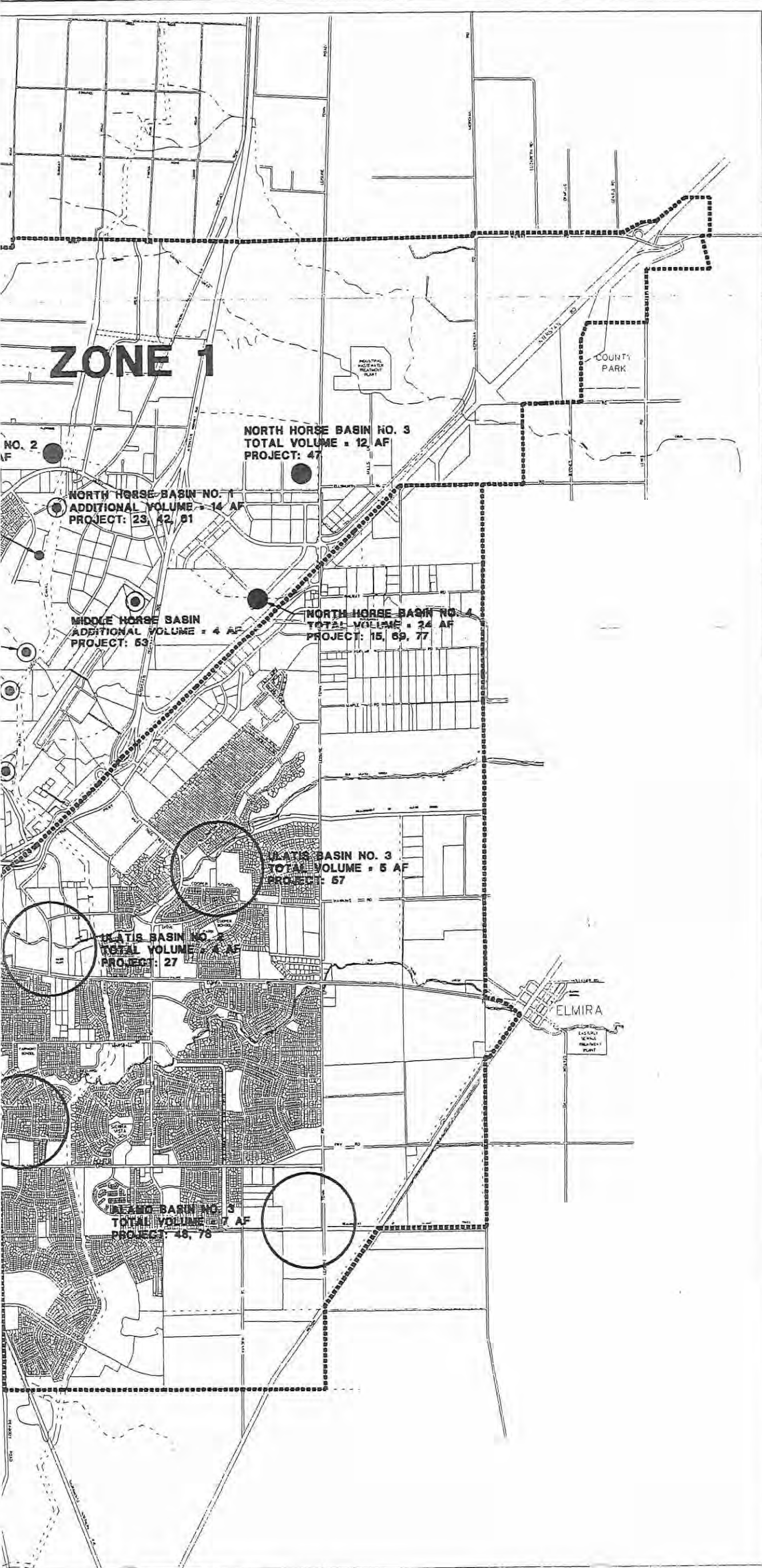
Capital Improvements
(Detention)

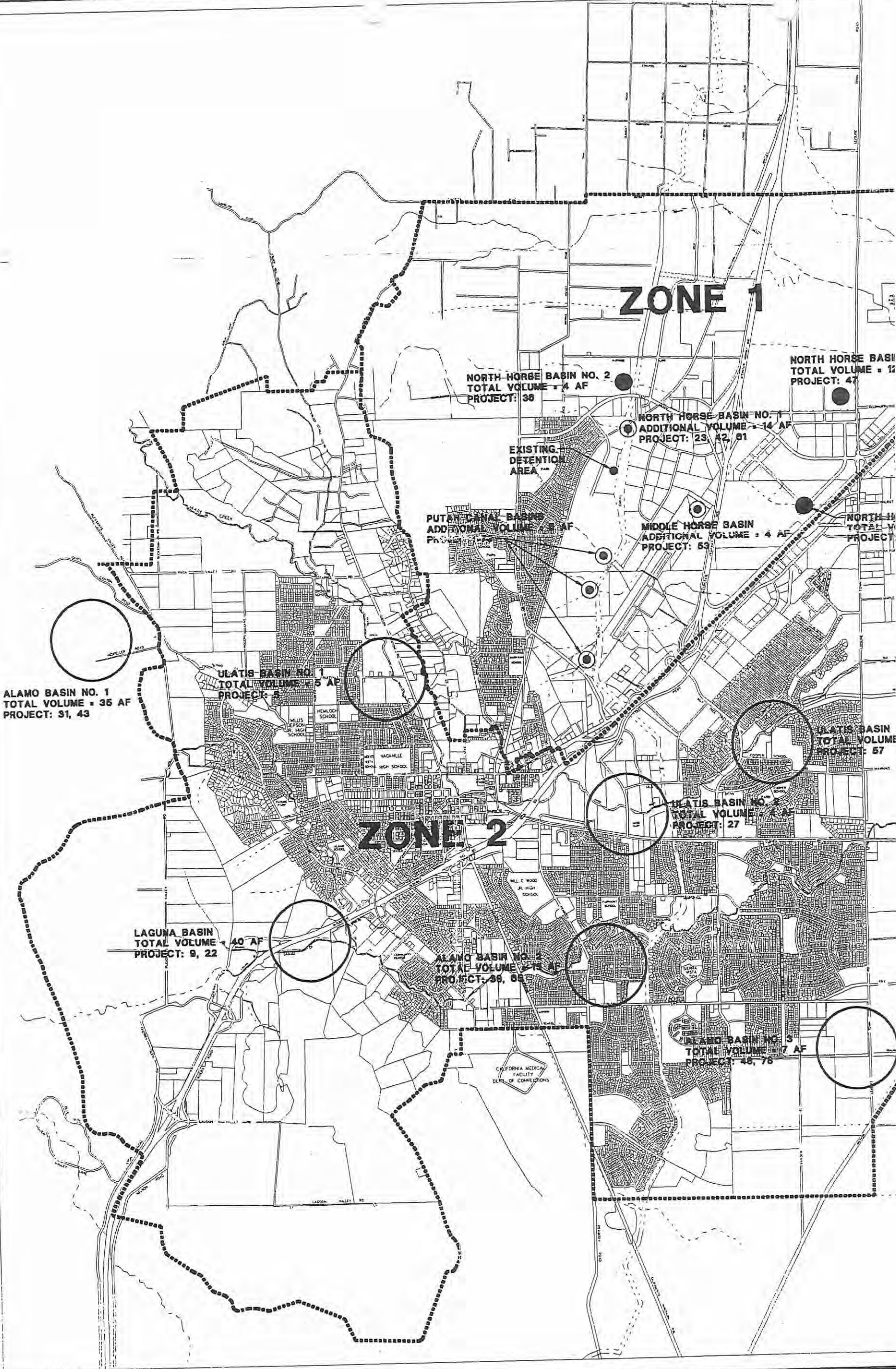


LEGEND

- FEE ZONE BOUNDARY
- ⊙ EXISTING DETENTION AREA WITHIN ZONE 1 TO BE EXPANDED
- EXISTING DETENTION AREA - NO CHANGE
- NEW DETENTION AREA WITHIN ZONE 1
- APPROXIMATE LOCATION OF NEW DETENTION AREAS WITHIN ZONE 2

NOTES





ZONE 1

NORTH HORSE BASIN NO. 2
TOTAL VOLUME = 4 AF
PROJECT: 38

NORTH HORSE BASIN
TOTAL VOLUME = 12
PROJECT: 47

NORTH HORSE BASIN NO. 1
ADDITIONAL VOLUME = 14 AF
PROJECT: 23, 42, 81

EXISTING
DETENTION
AREA

PUTNAM CANAL BASINS
ADDITIONAL VOLUME = 8 AF
PROJECT: 54

MIDDLE HORSE BASIN
ADDITIONAL VOLUME = 4 AF
PROJECT: 53

NORTH HORSE BASIN
TOTAL VOLUME = 12
PROJECT: 47

ALAMO BASIN NO. 1
TOTAL VOLUME = 36 AF
PROJECT: 31, 43

ULATIS BASIN NO. 1
TOTAL VOLUME = 5 AF
PROJECT: 5

ULATIS BASIN
TOTAL VOLUME = 57
PROJECT: 57

ULATIS BASIN NO. 2
TOTAL VOLUME = 7 AF
PROJECT: 27

ZONE 2

LAGUNA BASIN
TOTAL VOLUME = 40 AF
PROJECT: 9, 22

ALAMO BASIN NO. 2
TOTAL VOLUME = 15 AF
PROJECT: 35, 65

ALAMO BASIN NO. 3
TOTAL VOLUME = 17 AF
PROJECT: 45, 76

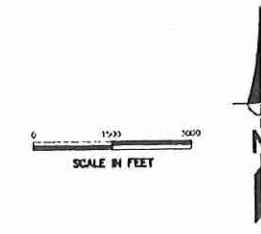
CALIFORNIA MEDICAL
FACILITY
DEPT. OF CORRECTIONS

DATE: SEPTEMBER 1, 1991
 PROJECT NUMBER: 81-12-17
 DRAW FILE BY: 81-12-17

Figure 3

CITY of VACAVILLE

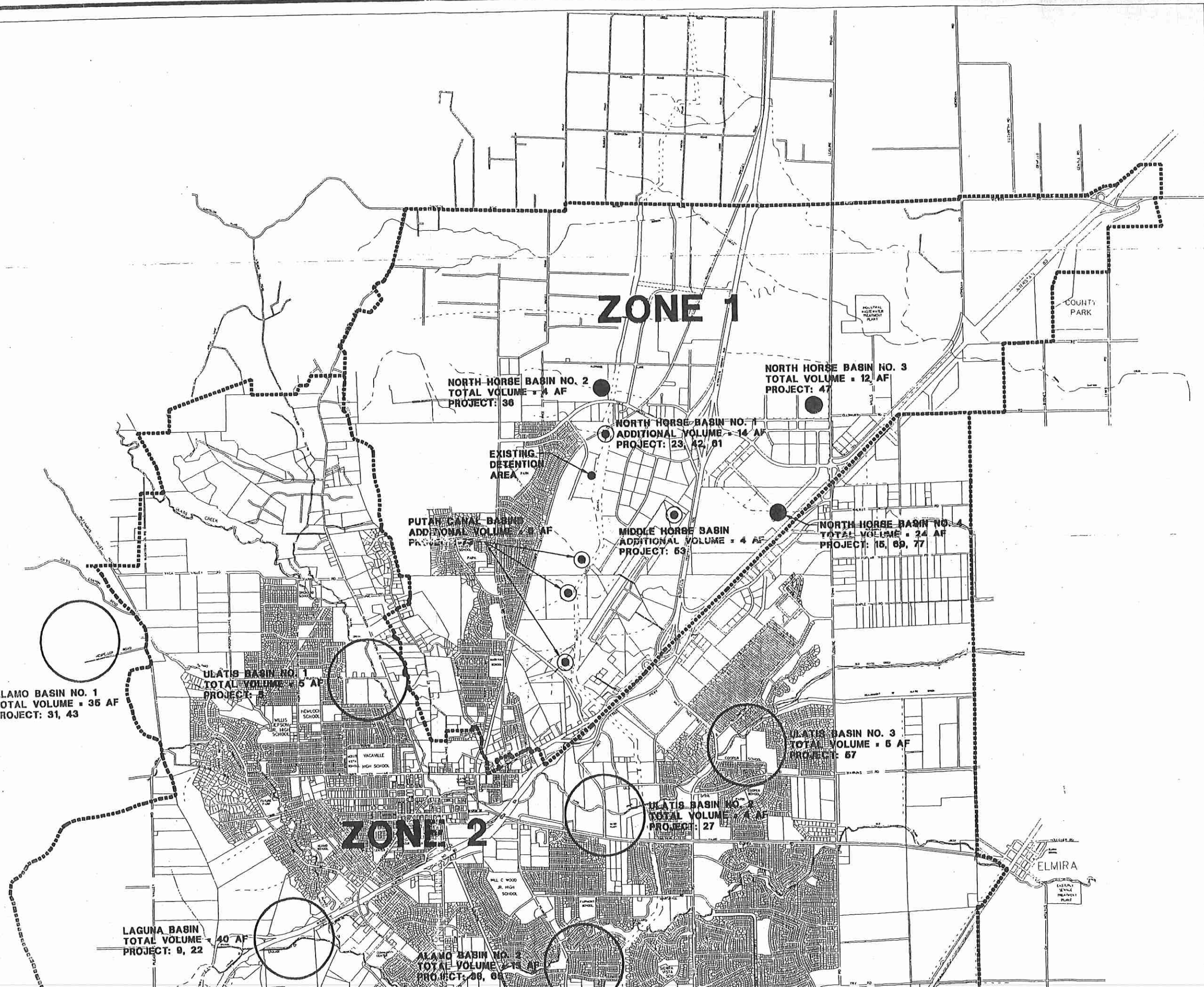
Capital Improvements
(Detention)



LEGEND

- FEE ZONE BOUNDARY
- EXISTING DETENTION AREA WITHIN ZONE 1 TO BE EXPANDED
- EXISTING DETENTION AREA—NO CHANGE
- NEW DETENTION AREA WITHIN ZONE 1
- APPROXIMATE LOCATION OF NEW DETENTION AREAS WITHIN ZONE 2

NOTES



ZONE 1

ZONE 2

NORTH HORSE BASIN NO. 2
TOTAL VOLUME = 4 AF
PROJECT: 36

NORTH HORSE BASIN NO. 3
TOTAL VOLUME = 12 AF
PROJECT: 47

NORTH HORSE BASIN NO. 1
ADDITIONAL VOLUME = 14 AF
PROJECT: 23, 42, 81

EXISTING
DETENTION
AREA

PUTAH CANAL BASINS
ADDITIONAL VOLUME = 8 AF
PROJECT: 72

MIDDLE HORSE BASIN
ADDITIONAL VOLUME = 4 AF
PROJECT: 53

NORTH HORSE BASIN NO. 4
TOTAL VOLUME = 24 AF
PROJECT: 15, 69, 77

ALAMO BASIN NO. 1
TOTAL VOLUME = 36 AF
PROJECT: 31, 43

ULATIS BASIN NO. 1
TOTAL VOLUME = 5 AF
PROJECT: 5

ULATIS BASIN NO. 3
TOTAL VOLUME = 8 AF
PROJECT: 67

ULATIS BASIN NO. 2
TOTAL VOLUME = 4 AF
PROJECT: 27

LAGUNA BASIN
TOTAL VOLUME = 40 AF
PROJECT: 9, 22

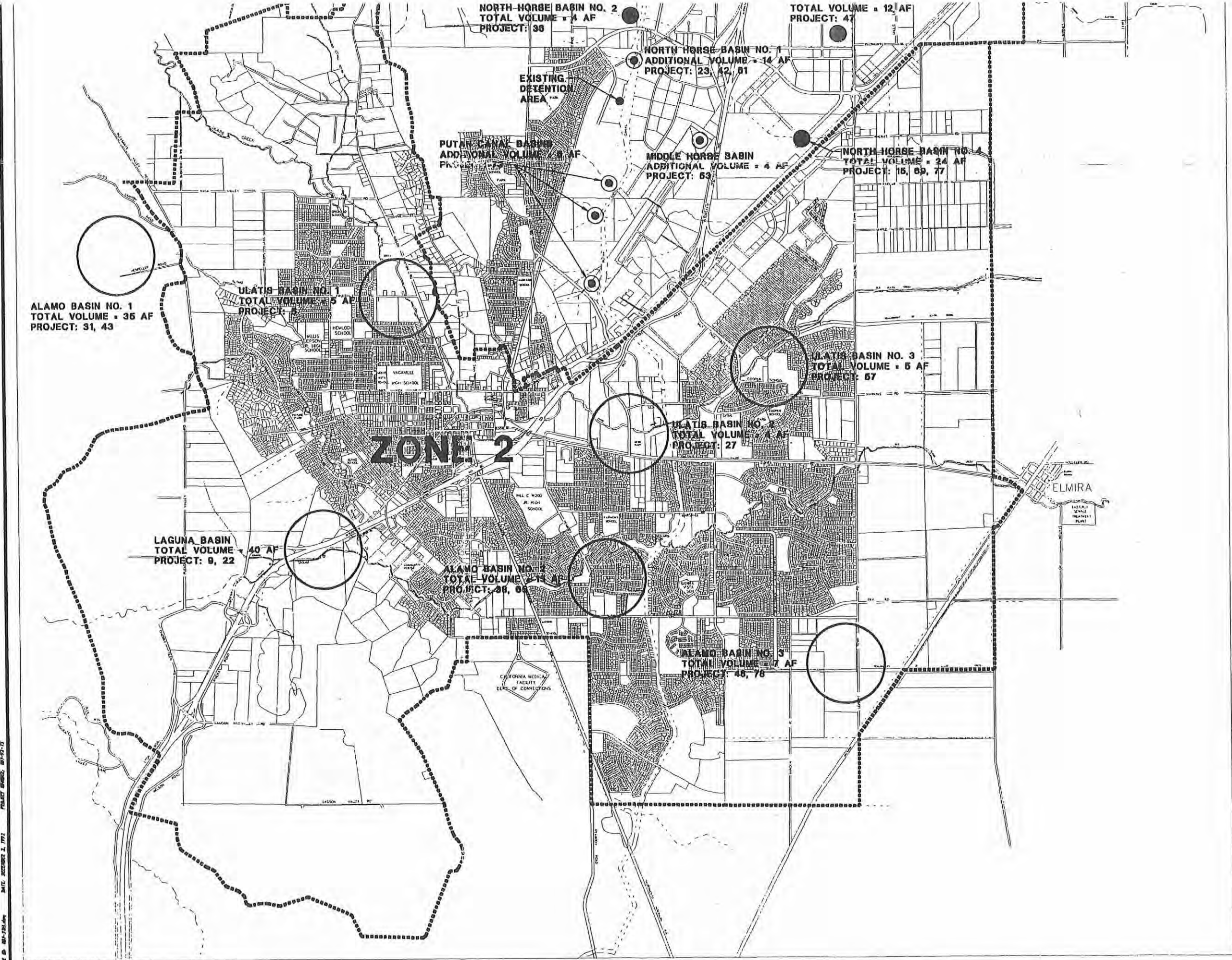
ALAMO BASIN NO. 2
TOTAL VOLUME = 13 AF
PROJECT: 86, 88

ELMIRA

LEGEND

- FEE ZONE
- EXISTING WITHIN ZONE
- EXISTING NO CHANGE
- NEW DETENTION WITHIN ZONE
- APPROXIMATE NEW DETENTION WITHIN ZONE

NOTES



DATE: AUGUST 1, 1972
 PROJECT NUMBER: 8170-11