

RIVERSIDE COUNTY  
CALIFORNIA

SAN JACINTO RIVER  
AREA  
DRAINAGE PLAN

SEPT 1987

RIVERSIDE COUNTY  
RIVERSIDE, CALIFORNIA

SAN JACINTO RIVER  
AREA DRAINAGE PLAN

Adopted September 1, 1987  
By the Riverside County Board of Supervisors

Prepared and Adopted pursuant to  
Government Code Section 66483, et seq.  
and  
Section 10.25, Riverside County Ordinance No. 460

## GENERAL STATEMENT

The area addressed by this Plan is the 100 year flood plain for the San Jacinto River between the Ramona Expressway and Railroad Canyon. Specifically, the limits of the flood plain have been established by the information contained in the report entitled, "Flood Plain Information, San Jacinto River, (San Jacinto to Railroad Canyon)", prepared by the United States Army Corps of Engineers, Los Angeles District, dated May 1970. Approximately 10% of the area is within the incorporated limits of the City of Perris.

This Area Drainage Plan for controlling the flood waters of the San Jacinto River, prepared by the Riverside County Flood Control and Water Conservation District, concludes that the improvement of the San Jacinto River is critically needed to allow for the orderly and economical development of the area. The Plan proposes the construction of the facilities shown on the map contained herein as a solution to the major flood plain also shown on the map. The document entitled, "Flood Control Master Plan for the Lower San Jacinto River Basin", dated 1975, as approved by the Riverside County Flood Control and Water Conservation District's Board of Supervisors, including all maps and exhibits attached thereto is adopted in its entirety as part of this San Jacinto River Area Drainage Plan.

## THE SAN JACINTO RIVER AREA DRAINAGE PLAN

The San Jacinto River Area Drainage Plan consists of the improvement of the river channel from the Ramona Expressway to Railroad Canyon; the construction of levees at both the Ramona Expressway and at Highway I-215; and the delineation and management of a "shallow pond" area consisting of about 2119 acres immediately upstream of Highway I-215. Currently during periods of major storms, runoff from over 540 square miles impacts this area. Because of limited channel capacity and the relatively flat terrain, flood waters spread uncontrolled over the project area. During a once in 100 year storm, it is expected that the entire fee area would be flooded. Depths of up to 10 feet of flood waters would impact the developing community leaving roads and highways impassable for days. In order to protect existing development, provide for orderly growth in the future, and avoid interruption of community services, a flood control system is required.

The San Jacinto River Area Drainage Plan presented herein provides an economical method of collecting and conveying the San Jacinto River flows through the study area. The proposed drainage facilities will also provide an outlet for local drainage systems built by developers and others as growth occurs in the area. When completed, the facilities will provide the area with improved drainage and protection for the once in 100 year flood occurring along the San Jacinto River.

Supporting data for all facilities proposed in this study is available at the Riverside County Flood Control and Water Conservation District office.

It should be understood that the facilities proposed by this Plan will not necessarily provide protection from local drainage. Once the proposed facilities are in place, development of the area may still be dependent on providing floodproofing measures needed for protection against local drainage.

#### PURPOSE OF FEES

Initial funding for this Plan will be generated by the creation of an assessment district and the sale of bonds in conjunction therewith. Fees collected through this Plan will be used to reduce any remaining bond indebtedness or to construct proposed facilities to the extent that assessment district funding does not cover this expense.

#### REMAINING FLOOD PLAIN

The Flood Control Master Plan for the Lower San Jacinto River Basin report, referenced previously, proposes the construction of a defined channel for the conveyance of flood waters. However, an economic analysis performed in conjunction with the master plan study concluded that full channelization of 100 year flows was not justified, due to both cost and environmental factors. Therefore, an area of shallow ponding immediately upstream of the I-215 freeway was made part of the Plan. This remaining "shallow pond" area is shown on the enclosed map. It is described as those lands lying at or below the 1415 contour elevation upstream from I-215. This Plan, while not eliminating the flooding problems of this area, does significantly reduce the water level from current conditions so that development of the area (especially the fringe) would be possible by nominal floodproofing.

It should be noted that this "shallow pond" area, by virtue of its volume, acts in conjunction with the other channel improvements proposed in the Plan to reduce peak flow rates; this storage is, therefore, an essential part of the Plan. Careful management of this "shallow pond" area is a necessity and to this end the following land use policies for grading within the shallow ponding area are hereby established and made an integral part of this Area Drainage Plan:

1. Any fill used to provide floodproofing within the "shallow pond" area must be offset by removing a minimum volume elsewhere within the ponding area equaling 130% of the in-place fill volume located below elevation 1415.
2. Areas in the "shallow pond" used in compliance with No. 1 above must be graded in a manner consistent with existing grading ordinances and must be done in a manner that will "grade to drain" to the San Jacinto River.

## FINDINGS

The Board of Supervisors/Perris City Council finds and determines that:

1. The subdivision and development of land within the San Jacinto River Area Drainage Plan requires the construction of the facilities described in the Plan.
2. The required drainage fee is fairly apportioned within the described drainage area, both on the basis of benefits conferred on properties that are proposed for subdivision and on the need for drainage facilities that is created by the proposed subdivision and development of all property within the drainage area.

## DRAINAGE FEES

The estimated total cost of constructing the drainage facilities required by the San Jacinto River Area Drainage Plan is \$14,965,000 as shown in detail in the Engineer's Report for the San Jacinto River Improvement District No. 4-2 on file with the Clerk.

The required drainage fee, as a condition of approval for the filing of a final subdivision map or parcel map, and the time and method of payment are as follows:

### 1. Drainage Fee

The current drainage fee for the entire drainage Plan is \$2,215 per acre. For subdivisions of lots greater than one acre in size, the fee shall be applied on a per lot basis except for commercial, industrial and manufacturing lots.

### 2. Time of Payment, Notice to Owners and Fee Calculations

The Riverside County Board of Supervisors has adopted "Rules and Regulations for Administration of Area Drainage Plans", dated June 10, 1980, last amended July 3, 1984, a document which sets forth numerous administrative policies for implementing this and other area drainage plans within the County.

Section IX of that document sets forth administrative provisions established by the Board to permit alternative times of payment of the drainage fees, defines the required notices to owners, and sets forth the computation methods of calculating drainage fees for each lot. Provisions adopted in that document and its amendments are hereby made a part of this Area Drainage Plan.

ADP12B.MASTER

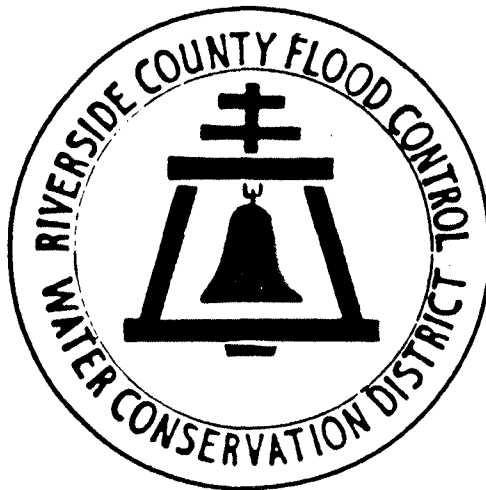
# **SAN JACINTO RIVER AREA DRAINAGE PLAN**

## **AREA DRAINAGE FEE**

|                                  | <b><u>Per Acre Fee</u></b> |
|----------------------------------|----------------------------|
| <b>Entire Drainage Plan Area</b> | <b>\$2,215</b>             |

San Jacinto River  
Improvement District 4-2  
Engineer's Report  
(August 1987)

(AMENDED)  
**SUMMARY**  
  
OF THE  
  
**ENGINEER'S REPORT**  
  
FOR  
  
**SAN JACINTO RIVER IMPROVEMENT DISTRICT 4-2**  
  
**RIVERSIDE COUNTY FLOOD CONTROL  
AND WATER CONSERVATION DISTRICT**  
  
RIVERSIDE COUNTY, CALIFORNIA



Prepared by:  
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Riverside, California  
92506

(AMENDED)  
SUMMARY  
OF THE  
ENGINEER'S REPORT  
TO  
THE BOARD OF SUPERVISORS OF  
RIVERSIDE COUNTY FLOOD CONTROL  
AND WATER CONSERVATION DISTRICT  
  
FOR THE  
SAN JACINTO RIVER  
IMPROVEMENT DISTRICT 4-2

AUGUST 11, 1987

Kenneth L. Edwards

Chief Engineer

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\* Portions of Part III, Part IV and Part V are not contained  
in the Summary of the Engineer's Report.

AGENCY: RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
PROJECT: IMPROVEMENT DISTRICT 4-2 OF ZONE 4 (SAN JACINTO RIVER)  
TO: BOARD OF SUPERVISORS OF THE RIVERSIDE COUNTY FLOOD CONTROL AND  
WATER CONSERVATION DISTRICT

ENGINEER'S REPORT  
PURSUANT TO THE PROVISIONS  
OF SECTION 25.1 OF THE  
RIVERSIDE COUNTY FLOOD CONTROL AND  
WATER CONSERVATION DISTRICT ACT

WHEREAS, on December 9, 1986, the Board of Supervisors of the Riverside County Flood Control and Water Conservation District, Riverside County, California, (herein referred to as "District") did, pursuant to the provisions of the "Benefit Assessment Act of 1982", being Chapter 6.4 (commencing with Section 54703) of Part 1 of Division 2 of Title 5 of the California Government Code, adopt its Resolution of Intention No. F86-26, for the construction of certain flood control improvements, together with appurtenances and appurtenant work in connection therewith, in a special improvement district designated as "Improvement District No. 4-2 of Zone 4 (San Jacinto River) of the Riverside County Flood Control and Water Conservation District" (hereinafter referred to as the "Improvement District"); and,

WHEREAS, said Resolution of Intention, did direct the Chief Engineer of the District to make and file an "Engineer's Report" containing the following:

- (a) A description of the service proposed to be financed through the revenue derived from the benefit assessments.
- (b) A description of each lot or parcel of property proposed to be subject to the benefit assessments. The assessor's parcel number shall be a sufficient description of the parcel.
- (c) The amount of the proposed assessment for each parcel.
- (d) The basis and schedule of the assessments.
- (e) A description of works and improvements to be constructed.
- (f) Such other matters as the Chief Engineer shall deem appropriate.

NOW THEREFOR, I Kenneth L. Edwards, Chief Engineer of the District submit herewith the Engineer's Report, consisting of the following parts:

Part I: Background and Introduction of the project.

Part II: Description of the work and improvements proposed to be financed and constructed.

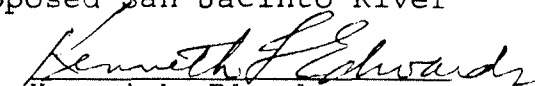
Part III: Project Cost Estimate \*

Part IV: Benefit Assessment, including an assessment roll which contains a description of each lot or parcel and the amount of assessment proposed to be derived thereon. \*\*

Part V: Assessment diagram showing the lines and dimensions of each lot or parcel of land proposed to be assessed, together with the distinctive number assigned to each parcel which corresponds with the distinctive number shown on the assessment roll. \*\*\*

Exhibit A: Copy of Resolution of Intention No. F-86-26.

Exhibit B: Financial Aspects of the Proposed San Jacinto River Improvement District 4-2

  
Kenneth L. Edwards  
Chief Engineer

\* Details of the cost estimates shown in this Summary Report may be found in the complete Engineer's Report.

\*\* The Assessment Roll is not included in this Summary Report.

\*\*\* Only the index sheets have been included herein. The large detail maps, shown outlined on these sheets, are on file at the District office.

**PART I**  
**San Jacinto River Improvement District 4-2**  
**Background and Introduction**

The purpose of this Improvement District is to protect certain lands within the San Jacinto River Basin, now subject to inundation by stormwater runoff generated by a storm with a 100 year return period from such inundation.

The Flood Control Master Plan for the San Jacinto River which detailed several proposed improvements was prepared by Neste, Brudin and Stone under contract to the District in 1974. Approximately 18 months ago, property owners along the reach of the San Jacinto River between the Ramona Expressway and Railroad Canyon approached the District regarding implementing the Master Plan improvements. The cost of these improvements was proposed to be paid for by assessments as permitted by the Municipal Improvement Act of 1913 and the Improvement Bond Act of 1915. It was estimated the cost of the improvements including rights of way, engineering and other miscellaneous expenses would approach 15 million dollars. An application for Assessment District financing of the improvements was submitted to the District by the Perris Valley Property Owners Association in January 1986.

A preliminary improvement district boundary was established and it was determined that fewer than 12 registered voters reside within the boundary. And, therefore, the improvement district could be initiated by a landowner petition which included a representation of 60% of the affected property. The proponents obtained indications of support covering nearly 70% of the property within the affected area and requested the District proceed with this program using authority provided in Section 25.1 of the District Act and Government Code Section 54703 et seq. as provided in Resolution No. F86-26 of the District's Board of Supervisors.

Resolution No. F86-26 declares the Board's intention to form the improvement district and issue bonds pursuant to Section 25.1 to finance the construction of the proposed improvements, together with incidental expenses applicable thereof.

The bonds are proposed to be issued in two series. Series "A" will be of a sufficient amount to pay the expenses incurred in formation of the improvement district, to acquire necessary rights of way, and to prepare the plans and specifications for the proposed construction work. Series "B" will be of a sufficient amount to pay the costs of constructing the improvements, together with incidental expenses which will be incurred in connection with the second bond issue and in connection with the work.

As shown on the Project Cost Estimate contained herein, Series "A" Bonds are proposed to be issued in the amount of \$2,624,000 and Series "B" Bonds in the amount of \$12,341,000 with the aggregate total to be \$14,965,000.

Recent District review of the land area to be included in the proposed improvement district revealed the need to adjust the boundary defined in the initial Engineer's Report.

The first and primary reason for adjustment is due to earlier incorrect water surface elevations used to define the existing 100 year flood

plain limits upstream of Nuevo Road and downstream of Goetz Road. Proper flood plain delineation has now resulted in a boundary expansion in the upstream area to account for more acreage being reclaimed than previously identified. Eight more parcels have been added to the improvement district in this area, and the calculated assessments for a number of other previously included parcels have been increased accordingly. Conversely, although no boundary adjustment has been made, two parcels have been given zero assessments and the calculated assessments lowered for several other parcels in the area downstream of Goetz Road to account for less acreage being reclaimed than earlier determined.

The second reason for boundary adjustment is due to a re-evaluation of the area along the southern boundary between Goetz Road and Highway I-215. Further flood plain analysis of the Romoland Wash, which confluences with the San Jacinto River in this area, has resulted in the determination that those parcels south of Ethanac Road previously included in the improvement district will not receive the full benefit of reclaimed San Jacinto River flood plain acreage since this same land will still remain subject to major flooding from the Romoland Wash after the San Jacinto River improvements are constructed.

The net reclaimed acreage resulting from these corrections is essentially unchanged from the original projection, thus the anticipated rate of assessment per acre remains at approximately \$3,093.00 per acre.

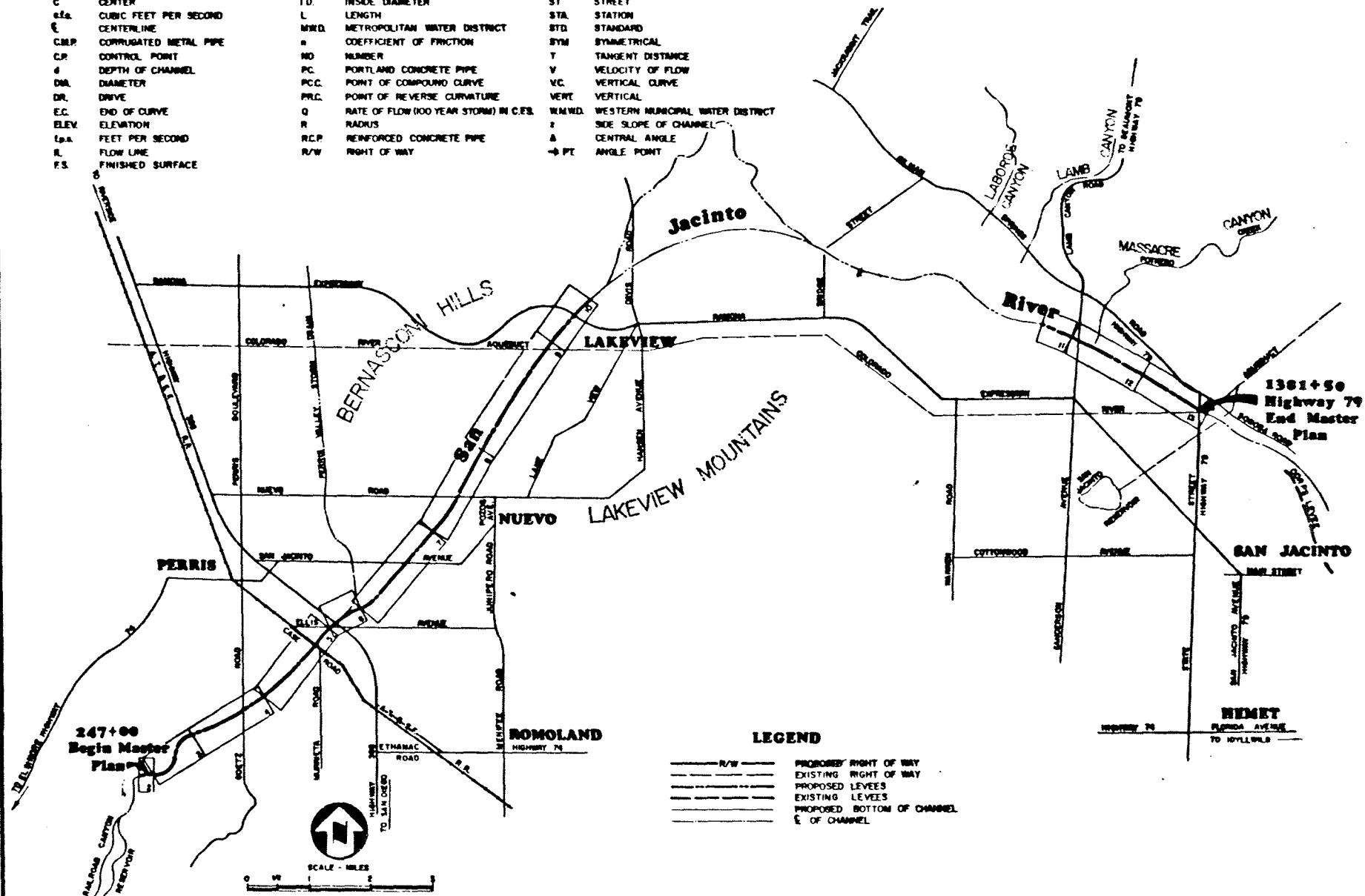
PART II  
DESCRIPTION OF WORK  
SAN JACINTO RIVER IMPROVEMENT DISTRICT 4-2

The work and improvements proposed include the construction and installation of all works necessary to implement the Master Drainage Plan for the San Jacinto River between the Ramona Expressway and Railroad Canyon, together with the acquisition of rights of way as necessary for said work. The work includes channel excavation, construction of embankments, levees, channel walls and riprap, reinforced concrete box culverts, a new bridge at AT & SF Railroad, relocation and reconstruction of utilities, reconstruction of roadways, appurtenances and appurtenant work in connection therewith.

Plate 1 following, being a copy of the index map from the "Master Plan, San Jacinto River Basin", as prepared by Neste, Brudin & Stone in 1974, shows the general location of the proposed improvement while Plate 2 from the same source shows typical cross sections for the channel.

The Project Cost Estimate contained herein includes a breakdown of costs showing improvements required in the several reaches of the channel.

|        |                                  |
|--------|----------------------------------|
| S      | SLOPE                            |
| S.D.   | STORM DRAIN                      |
| SMT    | SHEET                            |
| ST     | STREET                           |
| STA    | STATION                          |
| STD    | STANDARD                         |
| SYM    | SYMMETRICAL                      |
| T      | TANGENT DISTANCE                 |
| V      | VELOCITY OF FLOW                 |
| VC     | VERTICAL CURVE                   |
| VERT   | VERTICAL                         |
| W.W.D. | WESTERN MUNICIPAL WATER DISTRICT |
| X      | SIDE SLOPE OF CHANNEL            |
| Z      | CENTRAL ANGLE                    |
| → PT   | ANGLE POINT                      |



# San Jacinto River

## Railroad Canyon To Highway 79

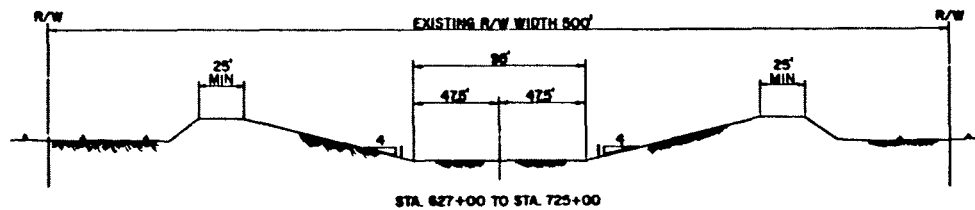
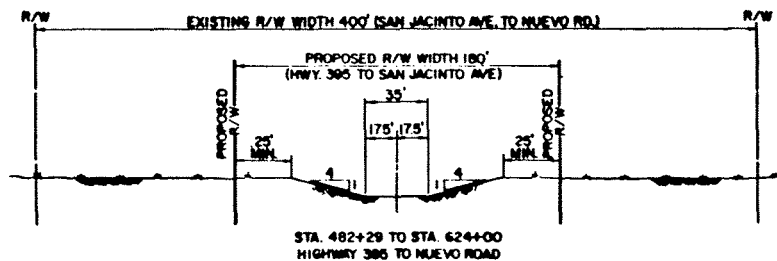
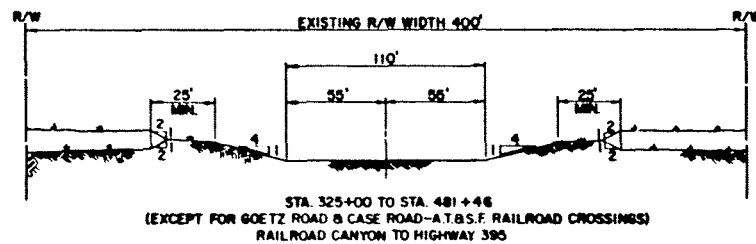
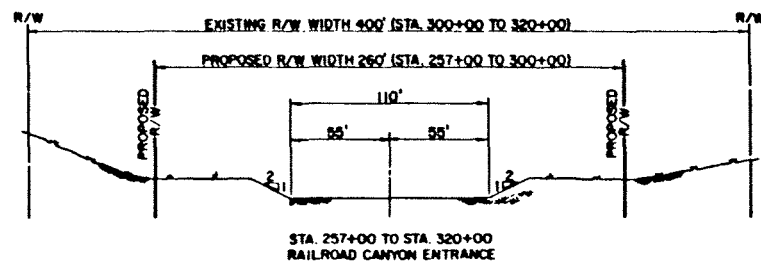
**Prepared For:**  
**Riverside County Flood Control**  
**& Water Conservation District**

**Prepared By:**  
**Neste, Brudin & Stone Inc.**  
**Civil Engineers**



## Index Map

Date 12/74      Sht. 1 of 21



# San Jacinto River

## Railroad Canyon To Highway 79

Prepared For:  
Riverside County Flood Control  
& Water Conservation District

Prepared By:  
Neste, Brudin & Stone Inc.  
Civil Engineers



SCALE  
0 20' 40' 80'

Channel Sections

Date 12/74 Sht. 19 of 21

# SAN JACINTO RIVER IMPROVEMENT DISTRICT 4-2

## PROJECT COST ESTIMATE

| CONSTRUCTION: |                                                                                        | <u>BOND SALE "A"</u> | <u>BOND SALE "B"</u> |
|---------------|----------------------------------------------------------------------------------------|----------------------|----------------------|
| Contract:     | Reach I                                                                                |                      | \$2,783,500          |
|               | Reach II                                                                               |                      | 779,200              |
|               | Reach III                                                                              |                      | <u>2,875,700</u>     |
|               | Subtotal                                                                               |                      | 6,438,400            |
|               | 10% Administration<br>and Contingencies                                                |                      | <u>643,800</u>       |
|               | Subtotal                                                                               |                      | 7,082,200            |
|               | 18% Inflation (April 1987<br>Cost Base Projected to<br>December 1988)                  |                      | <u>1,274,800</u>     |
|               | Subtotal                                                                               |                      | 8,357,000            |
|               | Construction Inspection                                                                |                      | 120,000              |
|               | Construction Staking                                                                   |                      | <u>66,000</u>        |
|               | TOTAL                                                                                  |                      | \$ 8,543,000         |
| RIGHT OF WAY: |                                                                                        |                      |                      |
| Acquisition:  | Reach I                                                                                | \$ 338,500           |                      |
|               | Reach II                                                                               | 504,500              |                      |
|               | Reach III                                                                              | <u>160,000</u>       |                      |
|               | Subtotal                                                                               | 1,003,000            |                      |
|               | 15% Appraisal, Administration,<br>Legal and Contingencies                              | <u>150,500</u>       |                      |
|               | TOTAL                                                                                  | \$1,153,500          |                      |
| ENGINEERING:  |                                                                                        |                      |                      |
|               | Design (Consultant)                                                                    | \$ 240,000           |                      |
|               | Design Survey                                                                          | 145,000              |                      |
|               | Right of Way Engineering                                                               | 45,000               |                      |
|               | Right of Way Survey                                                                    | 60,000               |                      |
|               | Design and Hydrology Review,<br>Preparation of Specifications and<br>Contract Document | <u>75,000</u>        |                      |
|               | TOTAL                                                                                  | \$ 565,000           |                      |

San Jacinto River Improvement District 4-2  
Project Cost Estimate (Contd.)

|                                                              | <u>BOND SALE "A"</u>    | <u>BOND SALE "B"</u>       |
|--------------------------------------------------------------|-------------------------|----------------------------|
| <b>CONSULTANTS:</b>                                          |                         |                            |
| Bond Counsel:                                                |                         |                            |
| Preliminary Services                                         | \$ 5,000                | ---                        |
| Base Maximum                                                 | 18,100                  | 48,400                     |
| Misc. Expenses                                               | <u>2,000</u>            | <u>2,000</u>               |
| Subtotal                                                     | 25,100                  | 50,400                     |
| Financial:                                                   |                         |                            |
| Base Maximum                                                 | 30,000                  | 40,000                     |
| Misc. Expenses                                               | <u>2,500</u>            | <u>2,500</u>               |
| Subtotal                                                     | 32,500                  | 42,500                     |
| Assessment Engineer:                                         |                         |                            |
| Preliminary Services                                         | 17,000                  | ---                        |
| Base Maximum                                                 | 30,000                  | 14,400                     |
| Outside Services                                             | <u>1,000</u>            | <u>---</u>                 |
| Subtotal                                                     | <u>48,000</u>           | <u>14,400</u>              |
| <b>TOTAL</b>                                                 | <b>\$ 105,600</b>       | <b>\$ 107,300</b>          |
| <b>INCIDENTAL EXPENSES:</b>                                  |                         |                            |
| District Administration                                      | \$ 12,500               | 12,500                     |
| Appraisal (Marshall and Stevens)                             | 19,500                  | ---                        |
| Bond Printing, Servicing<br>and Registration                 | 7,000                   | 10,000                     |
| Printing/Publication, Notices<br>and Advertising             | 2,000                   | 2,000                      |
| Perris Valley Property Owners<br>Association Application Fee | 2,500                   | ---                        |
| Incidental Contingencies                                     | <u>8,400</u>            | <u>5,200</u>               |
| <b>TOTAL</b>                                                 | <b>\$ 51,900</b>        | <b>\$ 29,700</b>           |
| <b>SUBTOTAL</b>                                              | <b><u>1,876,000</u></b> | <b><u>8,680,000</u></b>    |
| <b>BOND DISCOUNT</b>                                         | <b>92,000</b>           | <b>436,000</b>             |
| <b>RESERVE FUND</b>                                          | <b>262,000</b>          | <b>1,234,000</b>           |
| <b>CONTINGENCIES</b>                                         | <b>115,000</b>          | <b>500,000</b>             |
| <b>CAPITALIZED INTEREST:</b>                                 | <b><u>279,000</u></b>   | <b><u>1,491,000</u></b>    |
| <b>TOTAL</b>                                                 | <b>\$2,624,000</b>      | <b>\$12,341,000</b>        |
| <b>GRAND TOTAL</b>                                           |                         | <b><u>\$14,965,000</u></b> |

PART IV  
San Jacinto River Improvement District 4-2

Benefit Assessment

Authority

The levying of a benefit assessment for flood control improvements is authorized by Chapter 6.1 (commencing with Section 54701), Division 2, Title 5, California Government Code (the "Benefit Assessment Act of 1982"). This chapter was added to the statutes by Assembly Bill 620 (Frazee), and was signed by Governor Brown on July 9, 1982.

As authorized by the Benefit Assessment Act of 1982, it is proposed to levy a benefit assessment on each parcel of real property within the assessment boundary, except that an assessment shall not be imposed on a Federal, State or Local Government or public utility agency. The Act permits benefit assessments to be imposed provided that the amount of the assessment imposed on any parcel of property shall be related to the benefit to the parcel which will be derived.

Computation Method

The improvements proposed will benefit lands within the improvement district by withdrawing said lands from the area currently subject to inundation by stormwater runoff generated by storms with a 100 year return period. This will allow the removal of certain development restrictions on said lands, thereby enhancing their value and thus providing direct and specific benefits to such lands.

The benefit assessment proposed to be imposed on each parcel of land is related in direct proportion to the relationship that the area of each parcel protected from inundation from a 100 year frequency storm bears to the total area so protected.

The existing 100 year flood plain water surface elevations were obtained from the United States Army Corps of Engineers' report entitled "Flood Plain Information, San Jacinto River (San Jacinto to Railroad Canyon), Riverside County", dated 1970. The area upstream of Highway I-215 which will remain subject to inundation during the 100 year frequency storm was determined in the Master Plan to be bounded by the 1415.0 elevation contour. District aerial topography maps were used to delineate both the existing 100 year flood plain and the area bounded by the 1415.0 contour, thereby determining the total area which will be protected from inundation.

Parcel areas were determined from Assessor's records. Where parcels lie wholly between the existing 100 year flood plain and the 1415.0 contours, the entire area of the parcel is deemed to receive benefit. Where parcels are crossed by one of these delineations, only that portion of the parcel lying between the existing 100 year flood plain and the 1415.0 contour is deemed to receive benefit.

The proportional amount of assessment proposed to be imposed on each parcel was determined by dividing the benefiting area of each parcel by the total benefiting area and then multiplying the dividend by the proposed amount of the bond issue for each bond services.

Following is an assessment roll which designates each parcel of land within the assessment district by a distinctive assessment number which corresponds with said number as shown on the Assessment Diagram, describes each parcel by its Assessor's Parcel Number, indicates the name and address of each assessee as shown on the latest adopted equalized assessment roll of the County, the Assessor's appraised value of land and improvements for each bond series and the total thereof.

# PROPOSED BOUNDARIES. IMPROVEMENT DISTRICT 4-2 OF ZONE 4

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

| NO. | BEARING         | DIST.     | NO. | BEARING          | DIST.    |
|-----|-----------------|-----------|-----|------------------|----------|
| 1   | S 89° 50' 40" W | 1319.75'  | 126 | N 0° 36' 28" E   | 1982.81' |
| 2   | S 0° 58' 21" W  | 2145.22'  | 127 | N 89° 52' 57" E  | 528.73'  |
| 3   | S 89° 51' 3" W  | 1319.80'  | 128 | N 0° 06' 35" E   | 6640.86' |
| 4   | N 0° 08' 35" E  | 664.14'   | 129 | S 89° 31' 30" E  | 1171.37' |
| 5   | S 81° 56' 16" W | 1991.56'  | 130 | N 0° 35' 57" E   | 430.38'  |
| 6   | S 88° 04' 40" W | 663.35'   | 131 | S 89° 31' 30" E  | 236.23'  |
| 7   | S 0° 42' 33" W  | 1479.87'  | 132 | N 0° 35' 57" E   | 230.50'  |
| 8   | S 89° 52' 21" W | 529.1'    | 133 | S 89° 31' 30" E  | 29' ±    |
| 9   | N 0° 42' 33" E  | 1410.94'  | 134 | N 0° 36' 00" E   | 330.40'  |
| 10  | S 84° 12' W     | 1955.00'  | 135 | N 112° 38' 01" E | 50'      |
| 11  | N 30° 38' W     | 460'      | 136 | N 21° 31' 17" E  | 303.08'  |
| 12  | N 89° 50' 33" E | 215' ±    | 137 | S 89° 31' 30" E  | 424.50'  |
| 13  | N 0° 09' 21" W  | 660'      | 138 | N 0° 36' 00" E   | 60'      |
| 14  | N 89° 50' 33" E | 1286' ±   | 139 | S 89° 31' 30" E  | 85'      |
| 15  | S 0° 09' 21" E  | 1100'     | 140 | N 0° 36' E       | 544.84'  |
| 16  | S 84° 12' W     | 435'      | 141 | N 89° 38' W      | 600'     |
| 17  | N 0° 09' 21" W  | 1145'     | 142 | N 0° 36' E       | 716.84'  |
| 18  | S 89° 45' 38" W | 684.86'   | 143 | S 89° 38' E      | 630'     |
| 19  | N 89° 38' 48" W | 663.30'   | 144 | N 31° 43' E      | 2397.72' |
| 20  | S 0° 38' 25" W  | 301.24'   | 145 | S 65° 00' E      | 998.87'  |
| 21  | N 89° 38' 48" W | 663.35'   | 146 | N 31° 19' E      | 808.58'  |
| 22  | S 0° 38' 34" W  | 495'      | 147 | N 68° 00' W      | 1395.09' |
| 23  | S 89° 38' 48" E | 663.34'   | 148 | N 31° 43" W      | 335'     |
| 24  | S 0° 38' 25" W  | 660'      | 149 | S 65° 00' E      | 358.82'  |
| 25  | N 89° 38' 48" W | 663.31'   | 150 | N 31° 43" E      | 25'      |
| 26  | S 0° 38' 34" W  | 1110.41'  | 151 | N 24° 30" E      | 2615'    |
| 27  | S 0° 20' 18" E  | 1365.00'  | 152 | N 64° 58' 18" W  | 330'     |
| 28  | S 89° 30' 21" W | 244'      | 153 | SEE CURVE DATA   | 668.05'  |
| 29  | S 0° 20' 18" E  | 25'       | 154 | N 58° 30' E      | 1320.56' |
| 30  | S 89° 30' 21" W | 174'      | 155 | SEE CURVE DATA   | 673.16'  |
| 31  | N 0° 20' 18" W  | 95'       | 156 | N 26° 11' E      | 2531.04' |
| 32  | S 89° 30' 21" W | 11'       | 157 | N 26° 40' 50" E  | 2637.14' |
| 33  | N 0° 20' 18" W  | 320'      | 158 | S 65° 21' E      | 739.8'   |
| 34  | N 89° 30' 21" E | 11'       | 159 | N 31° 31' E      | 665.4'   |
| 35  | N 0° 20' 18" W  | 318.96'   | 160 | N 38° 17' E      | 1352.43' |
| 36  | S 89° 30' 04" W | 931.48'   | 161 | SEE CURVE DATA   | 680' ±   |
| 37  | S 0° 28' 22" E  | 1819.89'  | 162 | WESTERLY         | 2090' ±  |
| 38  | N 89° 30' 10" E | 595.55'   | 163 | NORTHERLY        | 65' ±    |
| 39  | S 0° 19' 02" E  | 299.98'   | 164 | WESTERLY         | 170' ±   |
| 40  | S 0° 28' 22" E  | 345.47'   | 165 | SOUTHWESTERLY    | 64.99' ± |
| 41  | S 89° 30' 22" W | 646.74'   | 166 | WESTERLY         | 150' ±   |
| 42  | S 0° 26' 59" E  | 192.92'   | 167 | SEE CURVE DATA   | 400' ±   |
| 43  | N 89° 33' E     | 322.04'   | 168 | NORTHERLY        | 550' ±   |
| 44  | S 0° 26' 59" E  | 507'      | 169 | SEE CURVE DATA   | 400' ±   |
| 45  | N 89° 36' E     | 308' ±    | 170 | SOUTHWESTERLY    | 1180' ±  |
| 186 | WESTERLY        | 490' ±    | 171 | SEE CURVE DATA   | 520' ±   |
| 187 | NORTHERLY       | 430' ±    | 172 | WESTERLY         | 90' ±    |
| 188 | WESTERLY        | 50'       | 173 | S 83° 25' 43" W  | 2045' ±  |
| 189 | SOUTHERLY       | 430' ±    | 174 | SEE CURVE DATA   | 453.79'  |
| 190 | WESTERLY        | 2100' ±   |     |                  |          |
| 191 | NORTHERLY       | 1286.04'  |     |                  |          |
| 192 | WESTERLY        | 1420' ±   |     |                  |          |
| 193 | NORTHWESTERLY   | 450'      |     |                  |          |
| 194 | SEE CURVE DATA  | 372'      |     |                  |          |
| 195 | NORTHERLY       | 498.62' ± |     |                  |          |
| 196 | EASTERLY        | 1730' ±   |     |                  |          |
| 197 | NORTHERLY       | 660'      |     |                  |          |
| 198 | WESTERLY        | 1320' ±   |     |                  |          |
| 199 | NORTHERLY       | 770'      |     |                  |          |
| 200 | S 84° 12' W     | 435'      |     |                  |          |
| 201 | SOUTHERLY       | 1390'     |     |                  |          |
| 202 | S 89° 51' 40" W | 885'      |     |                  |          |
| 203 | S 0° 02' 45" E  | 2580'     |     |                  |          |
| 204 | S 89° 36' W     | 696.88'   |     |                  |          |

| NO. | BEARING         | DIST.    |
|-----|-----------------|----------|
| 175 | S 45° 38' 15" E | 483.44'  |
| 176 | S 0° 38' 36" E  | 1113.31' |
| 177 | S 0° 22' 06" E  | 1239.61' |
| 178 | S 89° 58' W     | 1321.2'  |
| 179 | S 0° 01' W      | 3651.70' |
| 180 | S 89° 58' W     | 1320'    |
| 181 | SOUTHERLY       | 1690' ±  |
| 182 | WESTERLY        | 1320' ±  |
| 183 | SOUTHERLY       | 3323' ±  |
| 184 | WESTERLY        | 1337.16' |
| 185 | SOUTHERLY       | 1971.34' |
| 234 | N 0° 06' 01" E  | 1320.44' |
| 235 | N 89° 53' 12" E | 1320.31' |
| 236 | N 0° 36' E      | 2193.36' |
| 237 | S 89° 53' W     | 721.18'  |
| 238 | S 31° 21' W     | 150'     |
| 239 | SOUTHERLY       | 80' ±    |
| 240 | S 31° 21' W     | 1000' ±  |
| 241 | S 64° 29' W     | 375' ±   |
| 242 | S 21° 10' W     | 425' ±   |
| 243 | S 47° 31' W     | 310' ±   |
| 244 | WESTERLY        | 100' ±   |
| 245 | NORTHWESTERLY   | 100' ±   |
| 246 | WESTERLY        | 300' ±   |
| 247 | WESTERLY        | 145' ±   |
| 248 | NORTHWESTERLY   | 400' ±   |
| 249 | SOUTHWESTERLY   | 180' ±   |
| 250 | SOUTHWESTERLY   | 270' ±   |
| 251 | SOUTHWESTERLY   | 285' ±   |
| 252 | SOUTHWESTERLY   | 420' ±   |
| 253 | SOUTHWESTERLY   | 100' ±   |
| 254 | N 0° 55' 21" E  | 445' ±   |
| 255 | SOUTHWESTERLY   | 1425' ±  |
| 256 | S 89° 43' 25" W | 2651.5'  |
| 257 | SOUTHERLY       | 2640' ±  |

| CURVE DATA |         |          |         |
|------------|---------|----------|---------|
| NO.        | ANGLE   | RAD.     | LENGTH  |
| 194        |         |          | 372'    |
| 195        | 33° 57' | 1220.42' | 668.05' |
| 196        | 32° 13' | 1220.42' | 673.16' |
| 161        |         |          | 680' ±  |
| 167        |         |          | 400' ±  |
| 169        |         |          | 400' ±  |
| 171        |         |          | 520' ±  |
| 174        |         |          | 453.79' |

## RECORDERS CERTIFICATE

FILED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 1987, AT THE  
HOUR OF \_\_\_\_\_ O'CLOCK \_\_\_\_\_ M. IN BOOK \_\_\_\_\_  
PAGE \_\_\_\_\_ OF MAPS OF ASSESSMENT AND  
IMPROVEMENT DISTRICTS IN THE OFFICE OF  
THE COUNTY RECORDER IN THE COUNTY OF  
RIVERSIDE, STATE OF CALIFORNIA.

\_\_\_\_\_  
WILLIAM E. CONERLY  
COUNTY RECORDER OF THE COUNTY OF RIVERSIDE  
DEPUTY

CLERK OF THE BOARD OF SUPERVISORS CERTIFICATE.  
FILED IN THE OFFICE OF THE CLERK OF THE BOARD  
OF SUPERVISORS OF THE RIVERSIDE COUNTY FLOOD  
CONTROL AND WATER CONSERVATION DISTRICT OF  
RIVERSIDE COUNTY, CALIFORNIA, THIS \_\_\_\_\_ DAY  
OF \_\_\_\_\_, 1987

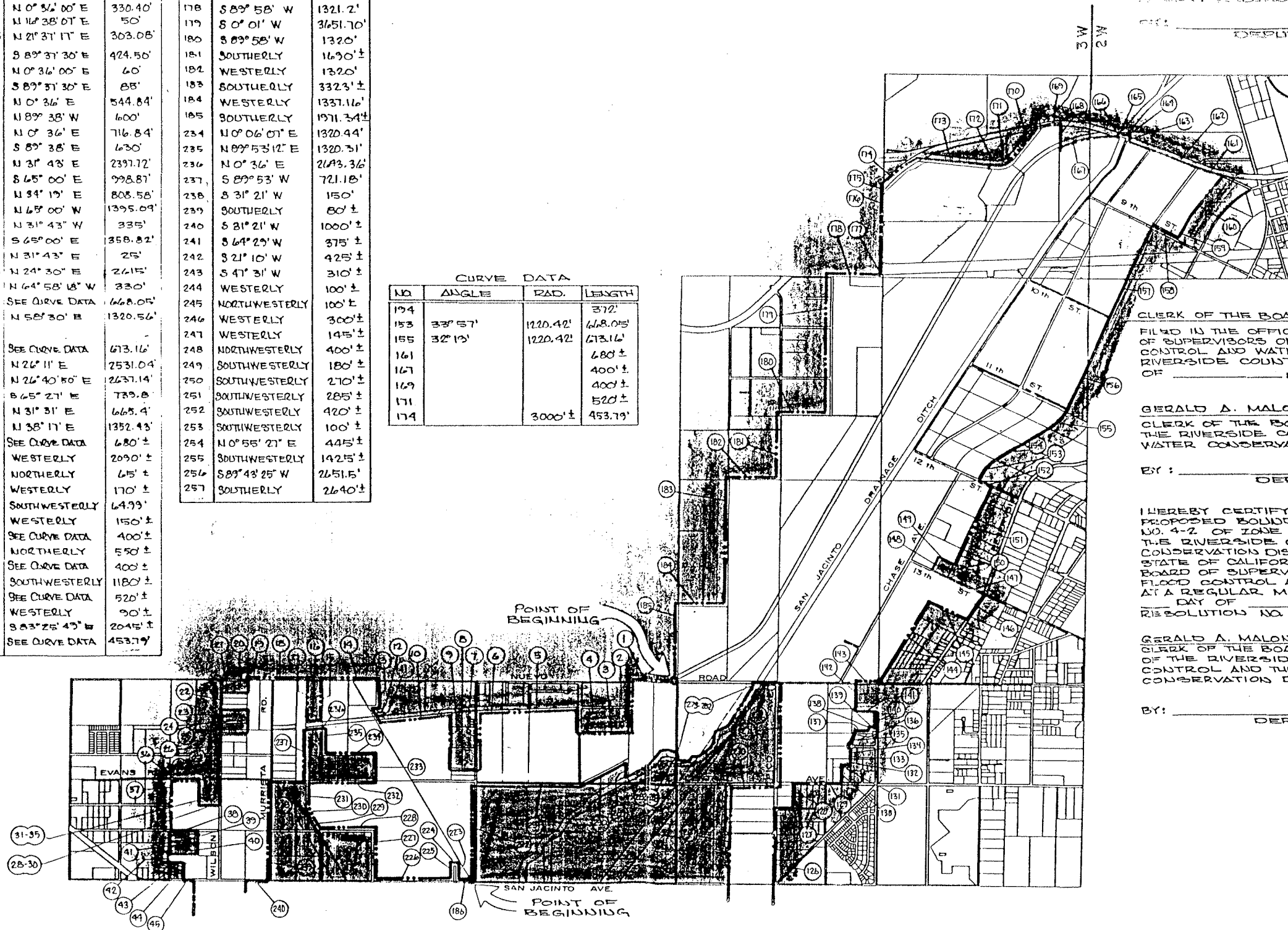
GERALD A. MALONEY  
CLERK OF THE BOARD OF SUPERVISORS OF  
THE RIVERSIDE COUNTY FLOOD CONTROL AND  
WATER CONSERVATION DISTRICT.

BY: \_\_\_\_\_  
DEPUTY

I HEREBY CERTIFY THAT THE WITHIN MAP SHOWING  
PROPOSED BOUNDARIES OF IMPROVEMENT DISTRICT  
NO. 4-2 OF ZONE FOUR (SAN JACINTO RIVER) OF  
THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER  
CONSERVATION DISTRICT, COUNTY OF RIVERSIDE,  
STATE OF CALIFORNIA, WAS APPROVED BY THE  
BOARD OF SUPERVISORS OF THE RIVERSIDE COUNTY  
FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
AT A REGULAR MEETING THEREOF HELD ON THE  
\_\_\_\_ DAY OF \_\_\_\_\_, 1987, BY  
RESOLUTION NO. F87-

GERALD A. MALONEY  
CLERK OF THE BOARD OF SUPERVISORS  
OF THE RIVERSIDE COUNTY FLOOD  
CONTROL AND THE WATER  
CONSERVATION DISTRICT

BY: \_\_\_\_\_  
DEPUTY



SEE SHEET 2

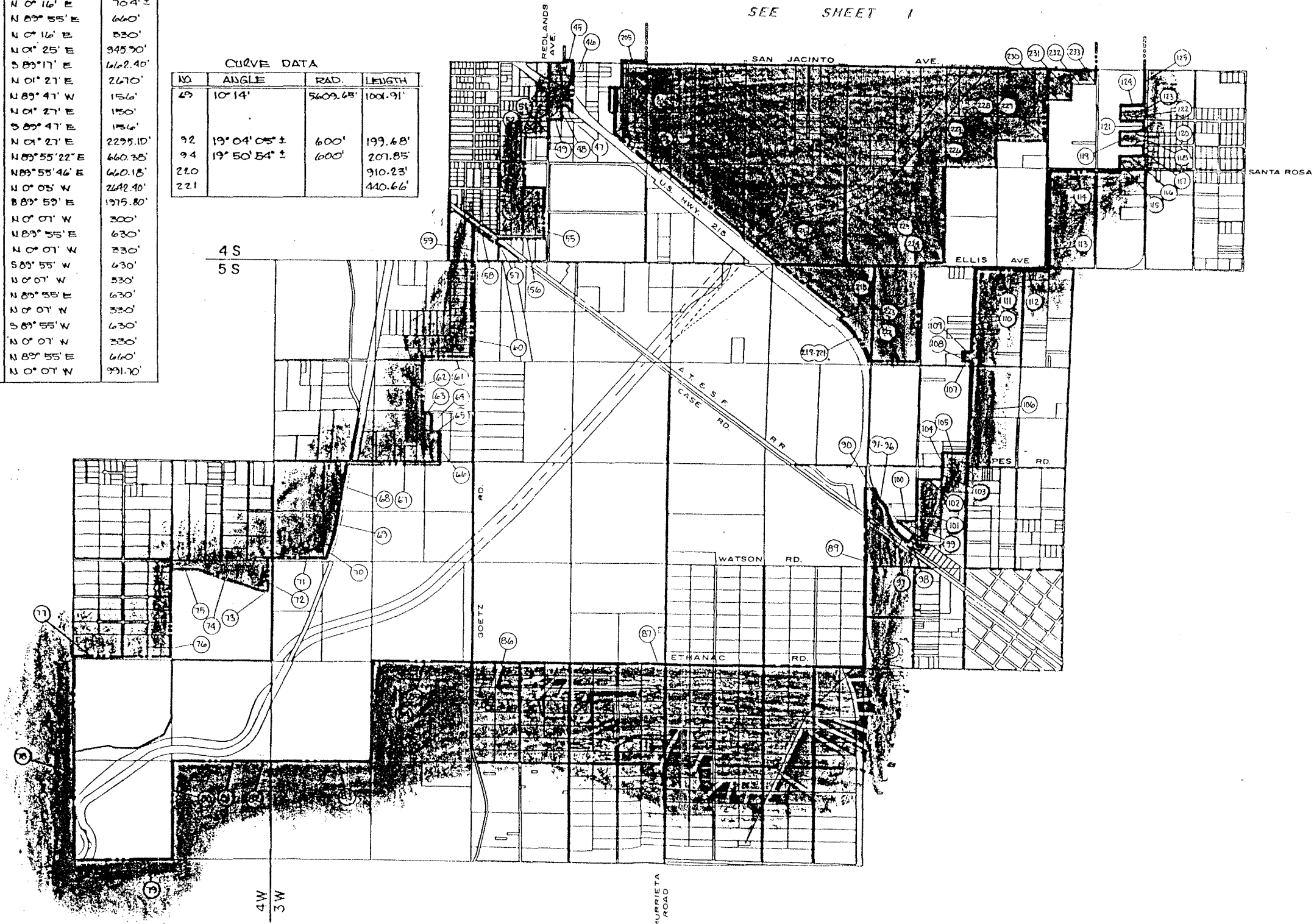
# PROPOSED BOUNDARIES, IMPROVEMENT DISTRICT 4-2 OF ZONE 4

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

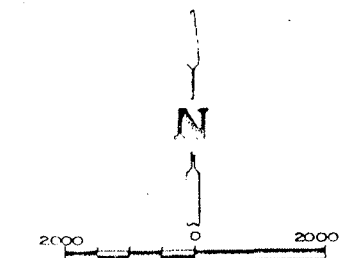
| NO. | BEARING         | DIST.     |
|-----|-----------------|-----------|
| 45  | N 89° 36' E     | 308.2'    |
| 46  | S 0° 25' W      | 210'      |
| 47  | N 45° 25' W     | 210'      |
| 48  | S 89° 36' W     | 183'      |
| 49  | S 0° 25' E      | 207'      |
| 50  | S 89° 36' W     | 330'      |
| 51  | S 0° 25' E      | 1182.50'  |
| 52  | WESTERLY        | 643.15'   |
| 53  | SOUTHERLY       | 674.10'   |
| 54  | EASTERLY        | 662'      |
| 55  | SOUTHERLY       | 1304.50'  |
| 56  | WESTERLY        | 1295.89'  |
| 57  | SOUTHERLY       | 176 ±     |
| 58  | N 54° 05' 21" W | 702.60 ±  |
| 59  | S 0° 10' 30" E  | 739.92'   |
| 60  | S 0° 05' W      | 2609.97'  |
| 61  | S 89° 41' 01" W | 3925.11'  |
| 62  | S 0° 39' 42" W  | 1954 ±    |
| 63  | N 89° 48' 47" E | 233.96'   |
| 64  | S 0° 15' 18" W  | 495.47'   |
| 65  | N 89° 48' 47" E | 120 ±     |
| 66  | SOUTHERLY       | 800 ±     |
| 67  | S 89° 46' 42" W | 2274.50 ± |
| 68  | S 7° 25' 59" W  | 1531.20'  |
| 69  | SEE CURVE DATA  | 1001.31'  |
| 70  | S 19° 35' 59" W | 121.43'   |
| 71  | S 89° 43' 36" W | 1412.85'  |
| 72  | S 0° 02' 30" W  | 868.60'   |
| 73  | N 81° 06' W     | 379'      |
| 74  | N 72° 35' W     | 1482.60'  |
| 75  | N 89° 55' W     | 700 ±     |
| 76  | S 0° 02' 30" W  | 2320 ±    |
| 77  | N 89° 26' 20" W | 2645.87'  |
| 78  | S 0° 11' 27" E  | 5280 ±    |
| 79  | S 89° 25' 00" E | 2640'     |
| 80  | N 0° 11' 27" W  | 2640'     |
| 81  | S 89° 25' 53" E | 2640'     |
| 82  | N 0° 01' 30" E  | 2350'     |
| 83  | S 89° 55' 24" E | 2640'     |
| 84  | N 0° 01' 30" E  | 2640'     |
| 85  | N 89° 36' 30" E | 2686.57'  |
| 86  | S 89° 36' E     | 5280 ±    |
| 87  | S 0° 00' 24" E  | 5280 ±    |
| 88  | N 0° 20' E      | 2678.25'  |
| 89  | N 0° 16' E      | 1972.33 ± |
| 90  | N 89° 55' E     | 230 ±     |
| 91  | SOUTHEASTERLY   | 350 ±     |
| 92  | SEE CURVE DATA  | 199.68'   |
| 93  | SOUTHEASTERLY   | 378.77 ±  |
| 94  | SEE CURVE DATA  | 207.85'   |
| 95  | SOUTHEASTERLY   | 396.14'   |
| 96  | SOUTHWESTERLY   | 15 ±      |
| 97  | S 54° 05' E     | 150 ±     |
| 98  | N 32° 55' E     | 336.41'   |
| 99  | NORTHWESTERLY   | 470 ±     |
| 100 | EASTERLY        | 380 ±     |

| NO. | BEARING         | DIST.    |
|-----|-----------------|----------|
| 101 | N 0° 16' E      | 704 ±    |
| 102 | N 89° 55' E     | 660'     |
| 103 | N 0° 16' E      | 530'     |
| 104 | N 0° 25' E      | 345.90'  |
| 105 | S 89° 17' E     | 1662.40' |
| 106 | N 01° 27' E     | 2670'    |
| 107 | N 89° 41' W     | 156'     |
| 108 | N 01° 27' E     | 150'     |
| 109 | S 89° 47' E     | 156'     |
| 110 | N 01° 27' E     | 2295.10' |
| 111 | N 89° 55' 22" E | 660.38'  |
| 112 | N 89° 55' 46" E | 660.18'  |
| 113 | N 0° 05' W      | 2642.90' |
| 114 | S 89° 59' E     | 1975.80' |
| 115 | N 0° 07' W      | 300'     |
| 116 | N 89° 55' E     | 630'     |
| 117 | N 0° 07' W      | 330'     |
| 118 | S 89° 55' W     | 430'     |
| 119 | N 0° 07' W      | 530'     |
| 120 | N 89° 55' E     | 630'     |
| 121 | N 0° 07' W      | 330'     |
| 122 | S 89° 55' W     | 630'     |
| 123 | N 0° 07' W      | 330'     |
| 124 | N 89° 55' E     | 660'     |
| 125 | N 0° 07' W      | 991.70'  |

| CURVE DATA |               |          |          |
|------------|---------------|----------|----------|
| NO.        | ANGLE         | RAD.     | LENGTH   |
| 49         | 10° 14'       | 5609.65' | 1001.91' |
| 92         | 19° 04' 05" ± | 600'     | 199.68'  |
| 94         | 19° 50' 54" ± | 600'     | 207.85'  |
| 220        |               |          | 910.23'  |
| 221        |               |          | 440.66'  |



| NO. | BEARING        | DIST.    |
|-----|----------------|----------|
| 205 | S 89° 36' W    | 696.08'  |
| 206 | S 0° 31' E     | 660'     |
| 207 | S 89° 36' W    | 132'     |
| 208 | S 0° 31' E     | 660'     |
| 209 | S 89° 36' W    | 660'     |
| 210 | N 0° 31' W     | 660'     |
| 211 | S 89° 36' W    | 660'     |
| 212 | S 0° 31' E     | 660'     |
| 213 | N 89° 36' E    | 660'     |
| 214 | S 0° 31' E     | 615 ±    |
| 215 | S 51° 18' E    | 1169.07' |
| 216 | N 38° 42' E    | 78 ±     |
| 217 | S 51° 18' E    | 6128.33' |
| 218 | S 38° 42' W    | 88'      |
| 219 | S 51° 18' E    | 146.09'  |
| 220 | SEE CURVE DATA | 910.23'  |
| 221 | SEE CURVE DATA | 440.66'  |
| 222 | S 89° 41' E    | 1399.22' |
| 223 | N 01° 22' E    | 2617'    |
| 224 | N 89° 53' E    | 650 ±    |
| 225 | NORTHERLY      | 2643.56' |
| 226 | EASTERLY       | 1332.82' |
| 227 | NORTHERLY      | 660 ±    |
| 228 | EASTERLY       | 1337.4'  |
| 229 | N 0° 02' W     | 960 ±    |
| 230 | N 89° 55' E    | 623.50'  |
| 231 | N 0° 07' W     | 330'     |
| 232 | N 89° 55' E    | 660'     |
| 233 | N 0° 07' W     | 1704.2'  |



Board of Supervisors

Riverside County Flood  
Control and Water Conserva-  
tion District

RESOLUTION NO. F86-26

RESOLUTION DECLARING INTENTION TO AUTHORIZE THE  
LEVY OF AND ORDERING PREPARATION OF REPORT WITH  
RESPECT TO BENEFIT ASSESSMENTS WITHIN PROPOSED  
IMPROVEMENT DISTRICT NO. 4-2 OF ZONE FOUR (SAN  
JACINTO RIVER) OF THE RIVERSIDE COUNTY FLOOD  
CONTROL AND WATER CONSERVATION DISTRICT, AND  
DETERMINING NEED TO PROCEED WITH A CERTAIN  
FLOOD CONTROL PROJECT AND TO ISSUE BONDS  
THEREFOR IN AN AMOUNT NOT TO EXCEED \$15,000,000

WHEREAS, the Board of Supervisors ("the Board of Super-  
visors") of the Riverside County Flood Control and Water Conserva-  
tion District (the "District"), County of Riverside, California  
wishes to undertake a project for the control of flood and storm  
waters within proposed Improvement District No. 4-2 of Zone Four  
(San Jacinto River) of the District (the "Improvement District")  
by financing the construction of certain flood control  
improvements and the acquisition of necessary land, easements and  
rights-of-way, together with appurtenances and appurtenant work in  
connection therewith and incidental costs and expenses, through  
the levy of benefit assessments within the Improvement District  
pursuant to the provisions of Section 25.1 of the Riverside County  
Flood Control and Water Conservation District Act (the "Act") and  
Chapter 6.4 (Commencing with Section 54703) of Part 1 of Divi-  
sion 2 of Title 5 of the California Government Code, commonly  
known as the "Benefit Assessment Act of 1982," with bonds to be  
issued to fund and finance said improvements pursuant to the  
provisions of the Act; and

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BEST, BE. & KRIEGER  
400 MISSION SQUARE  
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RIVERSIDE, CALIFORNIA 92502

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RIVERSIDE, CALIFORNIA 92502

1 WHEREAS, the Board of Supervisors therefore proposes to  
2 submit to the eligible voters within the jurisdiction of the  
3 Improvement District the question of levying benefit assessments  
4 under the provisions of the Benefit Assessment Act of 1982 to  
5 finance the design, construction, acquisition and installation of  
6 certain flood control improvements and storm drains on behalf of  
7 the lots or parcels of property proposed to be subject to the  
8 assessments, and the acquisition of certain land, easements and  
9 rights-of-way necessary therefor, together with appurtenances and  
10 appurtenant work and incidental costs and expenses in connection  
11 therewith, all for the benefit of lands within the exterior  
12 boundaries of the Improvement District, all within the exterior  
13 boundaries of the District;

14 BE IT RESOLVED, DETERMINED AND ORDERED by the Board of  
15 Supervisors of the Riverside County Flood Control and Water  
16 Conservation District, County of Riverside, California, in regular  
17 session assembled on the 9th day of December, 1986, as follows:

18 Section 1. Improvements. The public interest,  
19 convenience, and necessity require, and it is the intention of the  
20 Board of Supervisors of the Riverside County Flood Control and  
21 Water Conservation District, County of Riverside, State of  
22 California, pursuant to the provisions of Section 25.1 of the Act  
23 and the Benefit Assessment Act of 1982 to order the design, con-  
24 struction, acquisition and installation of certain flood control  
25 works and improvements referred to as the "improvements" for the  
26 benefit of the properties within the Improvement District.

27 Section 2. Description of Improvement District. The  
28 improvements will be of direct benefit to properties within the

Improvement District which are hereby declared to be the properties benefited by the improvements and to be assessed to pay the costs and expenses thereof, and shall be all that part of the District having the exterior boundaries as shown on a map of the Improvement District entitled "Proposed Boundaries of Improvement District No. 4-2 of Zone Four (San Jacinto River) of the Riverside County Flood Control and Water Conservation District, County of Riverside, California," which map is on file in the office of the Clerk of the Board of Supervisors. Reference is hereby made to said map for a full and complete description of the Improvement District, and said map shall govern for all details as to the extent of the Improvement District.

Section 3. Engineer's Report. The proposed improvements are hereby referred to Kenneth L. Edwards, Chief Engineer of the District, and the Chief Engineer is hereby directed to make and file with the Clerk of the Board of Supervisors a report (the "Engineer's Report") in writing containing the following:

- (a) A description of the service proposed to be financed through the revenue derived from the benefit assessments.
- (b) A description of each lot or parcel of property proposed to be subject to the benefit assessments. The assessor's parcel number shall be a sufficient description of the parcel.
- (c) The amount of the proposed assessment for each parcel.
- (d) The basis and schedule of the assessments.
- (e) A description of works and improvements to be constructed.

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(f) Such other matters as the Chief Engineer shall deem appropriate.

Section 4. Bonds. It is hereby determined and declared that bonds in a principal amount not to exceed \$15,000,000 shall be issued in accordance with Section 19 et seq. of the Act to finance the cost of the design and the construction, acquisition and installation of the improvements and the incidental expenses thereof. Such bonds shall be issued in denominations of \$5,000 or integral multiples thereof, and bear interest at a rate or rates which shall not exceed 12 percent per annum, or such other rate as shall be the maximum legal allowable rate of interest on such bonds, to represent and be secured by the benefit assessments to be levied on the benefitting lots and parcels of property within the Improvement District which shall be made to pay the principal and interest on such bonds and the District's administrative costs in determining, levying and collecting such assessments.

Section 5. Planning and Design Costs. Prior to completion of the planning and design of the improvements to be financed with the proceeds of such bonds and the preparation of the detailed plans and specifications therefor, when the District will be able to award contracts for the construction of the improvements, the Board of Supervisors intends and shall be authorized as provided in Section 54710.5 of the California Government Code to annually levy benefit assessments on the property in the Improvement District, commencing with the 1987-88 fiscal year, as set forth in said report, to pay the cost of such planning and design and the preparation of the

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1 detailed plans and specifications for the improvements, and to  
2 construct all or a portion of the improvements with the proceeds  
3 of such benefit assessments to be annually levied on the land  
4 within the Improvement District without issuing and selling such  
5 bonds.

6  
7 Roll call resulted as follows:

8 Ayes: Dunlap, Cenicerros, Larson, Younglove and Abraham

9 Noes: None

10 Absent: None

11  
12  
13  
14  
15 The foregoing is certified to be a true copy of a  
resolution duly adopted by said Board of Super-  
visors on the date this \_\_\_\_\_

16 GERALD A. KIRKLAND, Clerk of said Board

17 By Nancy Davis, Deputy

*John Vande Pol and Associates*  
*Municipal Financing Consulting*

RECEIVED  
MAY 04 1967

FINANCIAL ASPECTS OF THE PROPOSED  
SAN JACINTO RIVER IMPROVEMENT DISTRICT 4-2

RIVERSIDE COUNTY FLOOD CONTROL  
AND WATER CONSERVATION DISTRICT

ESTIMATED TOTAL FINANCING REQUIREMENTS:

Riverside County Flood Control and Water Conservation District has prepared general engineering plans and cost estimates for the current program which indicate a need for approximately \$2,350,000 from the proceeds of the first sale of bonds for rights-of-way acquisition plus expenses incurred for professional services covering the first phase of the program, primarily preparation of engineering plans for construction of the channel and appurtenant facilities. The corresponding estimated costs for the second (construction) phase of the program are \$10,875,000.

Financing expenses will likely need to be added to the totals for each phase of the program: both issues will probably require inclusion of capitalized interest to cover the cost of payments prior to receipt of the annual assessment installments, and the second sale may have other expenses such as would be incurred if the first series of bonds were refunded concurrent with the second sale of bonds.

Since the precise dates of sale of each series and the market interest rates prevailing at those times (for both the costs and reinvestment earnings) are now unknown,<sup>1</sup> these requirements can be only generally estimated. Inclusion of approximately eighteen months of capitalized interest at a rate of eight percent<sup>2</sup> would increase the corresponding totals above to approximately \$2,630,000 and \$12,370,000, for a total net program financing and capital cost assessment requirement of \$15,000,000.

If the Series A Bonds are refunded concurrent with the sale of Series B as indicated above, the total financing would equal the sum of Series A plus the Series A (refunding bonds) plus Series B Bonds. Since the first Series A Bonds would then be defeased, the net total would remain about the same (except for the added costs of the refinancing as previously noted).

<sup>1</sup> While the intended sale date of Series A is not far distant, precise timing is a bit more uncertain than is usually the case due to the District's intention to proceed with a validation suit prior to the sale of the Series A Bonds.

<sup>2</sup> Sale of the bonds at an eight percent rate is not assumed; rather, the figure represents a conservative net cost allowance for interest after deduction of some earnings during the project implementation periods, and as a hedge against any other unknowns.

Any amounts collected during the thirty-day period which the District intends to hold to permit landowners in the proposed improvement district to pay all or part of their assessments in cash would, of course, reduce any and all of the program cost figures cited above.

#### ESTIMATED ANNUAL PROGRAM COSTS:

District engineers indicate that there are approximately 6,725 gross acres within the proposed project area boundaries, of which 5,400 will be reclaimed from future inundation. Approximately 4,730 acres of the reclaimed total are in private ownership and constitute the total on which the program costs will be spread.

If total program costs reach the \$15,000,000 level cited above, the average total program cost per acre of privately owned reclaimed land would be about \$3,170. Conservative allowances have been included for inflation, a bond reserve fund, discount and credit enhancement costs (if available), capitalized interest, etc., to assure the District's ability to implement the program. If total program costs should be \$14,500,000, a not implausible prospect, the average cost per acre would decline to \$3,065. Alternately, costs would decline by approximately \$21.15 per acre for each incremental savings of \$100,000 attainable.

These data indicate that, in terms of the program's impact on the annual assessment costs to each property owner, less impact is likely to be realized from potential (favorable or adverse) changes in program development costs than from potential interest rate fluctuations and changes in financing terms and conditions that may occur over the life of this program, as reflected in the table below:

Estimated Annual Costs  
Per \$1,000 of Total Project Assessments

| <u>Amortization</u><br><u>Term-Years</u> | <u>Interest Rate Range</u> |           |            |
|------------------------------------------|----------------------------|-----------|------------|
|                                          | <u>8.5%</u>                | <u>9%</u> | <u>10%</u> |
| 10                                       | \$152.41                   | \$155.82  | \$162.75   |
| 15                                       | 120.42                     | 124.06    | 131.47     |
| 20                                       | 105.67                     | 109.55    | 117.46     |

Presently the entire program is scheduled for completion on as tight a time frame as considered possible, with the second sale of bonds occurring in December, 1988 and construction completion occurring by the end of 1989.

Many important factors have to be taken into consideration in formulating a general program implementation strategy. These range from the practical aspects of its administrative and legal proceedings requirements in the beginning period of the program to the construction scheduling factors which, in this case especially, include weather considerations during the last phases. Since most drainage and flood control programs are formulated for the protection of areas previously developed, economic factors tend to play a se-

condary or lower role in program timing considerations. For a project of this type which is being undertaken to enable land development to occur, the relative importance of national, regional and local economic trends and considerations becomes far more important, particularly as they boil down to coordination with pending land sales and development plans. In addition, bond sales for raw land development are particularly sensitive as to both the term of maturity and interest rates to prevailing bond market conditions. It is possible that whatever additional flexibility might be injected into the timing schedule for sale of the Series B Bonds might result in substantial savings that would be important to the economic success of this particular type of program.

Interest rate projections, especially of the short-term variety, are notoriously hazardous to make. Fortunately, the range in their fluctuations usually falls within a one-half percent range, or less, which is unlikely to have a serious impact on a program, even though quite noticeable as shown in the above table. However, trend changes of an intermediate term character, such as is now underway, occur far less frequently, but carry a potential for a range of 1.5 percent or more. Such trend changes are often forecastable from both technical and fundamental bases, as was the current one since early February. Important economic trend conflicts of increasing complexity of the sort now underway seem likely to become more common in the future than has been the pattern in recent years, with the markets seemingly subject to sudden major changes. The table shows that any ability to modify program timing for the sale of Series B Bonds might produce some very beneficial effects for the current improvement district owners as well as the future developers and owners.