

# BILL ZISK RESIDENCE

BY

**ATTEBERRY AND ASSOCIATES  
ROSEVILLE, CALIFORNIA**

**JUNE, 1973**

AN ENVIRONMENTAL IMPACT STATEMENT

FOR

BILL ZISK RESIDENCE

Thomas Street  
Roseville, California  
95678

June 1973

Prepared By

Atteberry and Associates  
1807 Tanglewood Lane  
Roseville, California  
95678

## TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
IDENTIFICATIONS	1
1. Author	1
2. Builder	1
3. Project Funding	1
4. Data Collection	1
DESCRIPTION OF PROJECT AREA	2
1. Location	2
2. Legal Description	2
3. Description of Project Site	2
A. Historical Use	2
B. Current Use	2
C. Future Use	2
D. Physical Description	2
1) Soils	2 & 3
2) Topography	4
E. Biotic Assets	4
1) Vegetation	4
2) Fauna	4
F. Surrounding Area	5
DESCRIPTION OF THE PROJECT	5
1. Streets	5
2. Utilities	6
PURPOSE OF THE PROJECT	6
POSSIBLE IMPACT UPON EXISTING NATURAL SYSTEMS	6
1. Air Quality	6
2. Noise Pollution	6
3. Water Quality	6
A. Groundwater	6
B. Surface Water	6
4. Flooding and Floodplains	6

	<u>Page</u>
5. Drainage Patterns	7
6. Soil and Erosion	7
7. Earthquake Zone	7
8. Fire Hazard	8
9. Vegetation	8
10. Fauna	8
SUMMARY OF IMPACT UPON NATURAL SYSTEMS	8
POSSIBLE IMPACT ON MAN-MADE FACILITIES	8
POSSIBLE IMPACT ON THE SOCIAL ENVIRONMENT	8
1. Open Space and Aesthetics	8
2. Historical and Scenic Aspects	9
3. Economic Base	9
4. Recreational Facilities	9
5. Social Institutions	9
6. Population Density	9
7. Fire and Police	9
RELATIONSHIP OF THE DEVELOPMENT TO THE LONG-TERM PLAN AND GOALS FOR CITY, COUNTY, REGIONAL AND STATE DEVELOPMENT, LAND USE AND CONSERVATION.	10
1. City of Roseville Master Plan	10
2. Placer County General Plan	10
3. Sacramento Regional Area Planning Commission Regional Plan	10
PROJECT CONSTRUCTION	10
1. Site Grading	10
2. Noise	10
3. Blasting	10
UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS	10
1. Short-Range	10
A. Air Pollution	10
B. Noise Pollution	10
C. Soil and Erosion	11
D. Vegetation	11
E. Fauna	11
2. Long-Range	11

	<u>Page</u>
A. Soil and Erosion	11
B. Vegetation	12
ALTERNATIVES TO THE PROPOSED PROJECT	12
1. Impact on Existing Natural Systems	13
A. Air Quality	13
B. Noise Pollution	13
C. Water Quality	13
D. Flooding and Floodplains	13
E. Soil and Erosion	13
F. Vegetation	13
G. Fauna	13
2. Possible Impact on Man-Made Facilities	13
3. Possible Impact on the Social Environment	13
A. Open Space and Aesthetics	13
B. Alternative	13
4. Relationship of the Development to the Long-Range Plan, and Goals for City, County, Regional and State Development, Land Use and Conservation	13
5. Project Construction	14
6. Unavoidable Adverse Environmental Impact	14
ENVIRONMENTAL MONITORING PROGRAMS	14
GROWTH INDUCING IMPACT	14
AREA SIGNIFICANTLY AFFECTED BY THE PROJECT	14
SUMMARY	14 & 15
BIBLIOGRAPHY	16
APPENDIX A	
TENTATIVE PARCEL MAP	
APPENDIX B	
GRADING AND SITE PLAN	
APPENDIX C	
FLOODPLAIN ANALYSIS	

AN ENVIRONMENTAL IMPACT STATEMENT FOR THE  
BILL ZISK RESIDENCE

INTRODUCTION

This environmental impact statement has been prepared in compliance with the requirements of the City of Roseville as set forth in Resolution No. 72-94.

The purpose of this environmental impact statement is to identify, assess and quantify the impact of the development of a single family residential structure adjacent to Dry Creek on the physical, biological and socio-economic aspects of the Roseville community.

IDENTIFICATIONS

1. Author. This environmental impact statement has been prepared under the supervision of W. G. Atteberry, a California registered civil engineer. Mr. Atteberry is a graduate civil engineer with twenty years of experience in planning, public works and municipal engineering, who has, in the past two years, prepared environmental impact statements for local, state and federal government.
2. Builder. The builder is Mr. William Zisk, owner of the subject property, who has resided at this location for approximately seven years.
3. Project Funding. Funding for the project will be by Mr. Zisk through private financing.
4. Data Collection. Data collection has been by the staff of Atteberry and Associates, who have used the most current and reliable sources available. Where developed data has not been available it has been prepared by Atteberry and Associates using standard engineering, planning, or research

methods. Sources of data used are set forth in the bibliography, and are referred to in the appropriate sections of the text of the report.

## DESCRIPTION OF PROJECT AREA

1. Location. The project is located within the City of Roseville at the east end of Thomas Street adjacent to Dry Creek.

2. Legal Description. All that certain real property situate in the City of Roseville, County of Placer, State of California, being a portion of the Southeast quarter of the Southwest quarter of Section 35, Township 11 North, Range 0 East, M.D.B.&M., more particularly described as follows:

Parcel A of that certain parcel map recorded in Book \_\_\_\_\_ of Parcel Maps, at Page \_\_\_\_\_, Official Records of Placer County.

3. Description of Project Site.

A. Historical Use.<sup>1</sup> This property has been in the ownership of William and Lois Zisk since 1966, during which time it has been used as a single family residence. Prior to acquisition by the Zisk family the property was used for a sand and gravel operation for over forty years.

B. Current Use. The property has been cleared, cleaned and landscaped and is being used for a single family residence.

C. Future Use. The property is currently zoned R-1 and R-1FP<sup>2</sup>, and the City of Roseville Master Plan shows the projected use of the property to be residential medium low density<sup>3</sup>:

D. Physical Description.

1) Soils.<sup>4</sup> Based on the "General Soil Map - Western Placer County, July 1967" prepared by the U.S.D.A. - S.C.S., the soil type is Rc-CG - Ramona-Chualar-Sandy alluvial land association.

The soils of this association occur on nearly level

stream terraces. They are developing in alluvium from predominantly granitic sources. They are very deep, mostly well drained, and with light loamy surface layers. Most areas are adjacent to or near stream channels. The vegetation of uncultivated areas consist of annual grass and forbs, and scattered valley oak; cottonwood and willow trees are common along stream channels.

Ramona soils comprise about 35 percent, the Chualar soils about 20 percent of this association. The remaining 35 percent is composed of inclusions of young soils developing in recent alluvium, other alluvium underlain by hardpans, and strongly sloping phases of Ramona soils on knolls.

The Ramona soils have brown, fine sandy loam, massive surface layers, and reddish-brown, sandy clay loam, blocky subsoils, which are underlain by stratified, softly consolidated, granitic sediments at depths of 38 to 50 inches. The profile is mostly slightly acid throughout. The subsoil permeability is moderately slow.

The Chualar series are well drained soils with dark grayish-brown, sandy loam, granular, slightly acid surface layers, and brown, sandy clay loam, blocky, neutral to mildly alkaline subsoils. The substrata are moderately fine to moderately coarse textured granitic sediments. The permeability of the subsoil is moderately slow.

The Sandy alluvial land occurs mainly along the Bear River; it consists of pale brown, loose, loamy sand surface layers, underlain by variably stratified but dominantly fine sands layered with light gray to pale yellow silts, clays and fines from mining operations. Permeability is variable, depending on the thickness and continuity of the silt and clay lenses.



This association makes up some of the best soils in the area for growing the widest selection of climatically adapted crops. The soils are used for hay crops, (particularly alfalfa), hops, orchard, irrigated and dryland pasture, cereal grain, and some truck crops. Limitation for non-agricultural uses such as septic tank filter fields is moderate because of the moderately slow permeability of the subsoils of the more extensive soils. Some areas are being developed into small ranches for suburban dwellers.

2) Topography. The topography of the site is characteristic of Sacramento Valley Stream Terraces. It is generally flat with gentle slopes to the south and east. The drainage is to Dry Creek which dominated the property for over 1000 feet along the entire southeast portion.

E. Biotic Assets.

1) Vegetation. The vegetation falls into two classifications, natural or native and introduced landscaping.

a) Natural. The natural vegetation consists of valley oak, live oak, cottonwood trees, willows and blackberries. This vegetation is confined primarily to the proximity of Dry Creek.

b) Introduced. Approximately 60% of the site is landscaped with introduced vegetation such as grass-turf, fruit trees, shrubs, etc. This landscaping has been melded with the natural vegetation to provide a maximum aesthetic effect.

2) Fauna. Even though the property is situated adjacent to heavily built-up residential and commercial areas it contains a large amount of wildlife. Dry Creek, an annual stream at this point contains a fair warm water fishery consisting of small mouth bass, yellow perch, catfish, squawfish, carp and frogs, and

provides spawning grounds for an annual salmon run. The creek also contains substantial colonies of indigenous aquatic micro-fauna. The vegetative growth along the creek provides a habitat for pheasant, quail, jackrabbits, raccoon, opossum, snakes, birds both indigenous and migratory, and at times in recent years beaver. Mr. Zisk's work on this property has been to enhance the habitat for these fauna and to provide them protection from human harassment.

F. Surrounding Area. The area surrounding the property is characterized by the two extremes of urban development and the rural atmosphere created by Dry Creek. The property is bounded on the northwest and southeast by single family residential development. Within 1000 feet to the northwest lies a major industrial zone along the S.P.R.R. facilities.

#### DESCRIPTION OF THE PROJECT

The project consists of a portion of a 12.2 acre parcel lying along Dry Creek with access from the southeast end of Thomas Street. The total parcel presently contains two single family residences, one of which the Zisk family currently resides in. The Zisk's propose to divide the property into two parcels, one of which they propose to use for construction of a new home for themselves. The proposed homesite is above the intermediate floodplain<sup>4</sup> (146.00 feet above mean sea level), but below the standard project flood<sup>4</sup> (149.00 feet above mean sea level). This will require sufficient grading and filling to raise the floor level above this elevation.

The construction of the project will require on-site grading, construction of a driveway and parking area, installation of utility services, landscaping, and the erection of a single family residential structure.

1. Streets. Access to the project area is along Thomas Street which is improved with curb and gutter, and paving to its end at the northwest property line. A short section of driveway (approximately 200 feet) will have to be constructed to serve the site.

2. Utilities. All utilities are already available on the site in sizes and capacities to serve the project.

### PURPOSE OF THE PROJECT

The purpose of the project is to provide a home for the Zisk family adjacent to and overlooking Dry Creek in an area of outstanding natural beauty.

### POSSIBLE IMPACT UPON EXISTING NATURAL SYSTEMS

The existing natural systems that are evaluated in this report are:

1. Air Quality.

- A. Short-Range. Dust and construction equipment exhaust emissions during construction will be the primary sources of pollutants in a short-range evaluation. These sources are transient and will have no long-range impact.

- B. Long-Range. The project will have no material long-range impact upon the air quality of the City, Region or State.

2. Noise Pollution.

- A. Short-Range. The operation of construction equipment and construction methods will be a short-range source of noise pollution.

- B. Long-Range. The project will not be a long-range source of noise pollution.

3. Water Quality.

- A. Groundwater. The project will have no material effect upon groundwater quality.

- B. Surface Water.

- 1) Short-Range. Erosion during construction and the resultant stream sedimentation will have a detrimental impact on surface water quality.

- 2) Long-Range. The project will have no long-range effect upon the surface quality.

4. Flooding and Floodplains. A portion of the property lies within the intermediate regional floodplain and standard project floodplain of Dry Creek as determined by the United States Corps

of Engineers. Construction within a portion of this area is controlled by the City of Roseville<sup>5</sup>.

A. Short-Range. Provided that construction operations are not allowed to obstruct the floodway channel the short-range effect on flooding and the floodplain will be negligible.

B. Long-Range. The project will have no material long-range impact on flooding or floodplains along Dry Creek. The project is above the elevation of and outside the limits of the intermediate regional flood as established by the U.S. Army Corps of Engineers. The U.S. Army Corps of Engineers recommends that construction be allowed within this area provided that floor elevations are brought above design flood elevations<sup>6</sup>.

Supporting computations of the long-range effect of this project upon flooding and floodways are included in Appendix C - Floodplain Analysis.

5. Drainage Patterns. The grading and development of the project site will not change the existing drainage patterns.

6. Soil and Erosion.

A. Short-Range. Erosion during construction will create and adverse short-term impact.

B. Long-Range. The project will create no adverse long-range impact on the soil through erosion or other effects. One ultimate goal of the project is to landscape or otherwise place vegetative cover on the exposed banks of Dry Creek and reduce sheet and bank erosion.

7. Earthquake Zone. The project is approximately eighty miles from the nearest known and substantiated active fault<sup>7</sup>, however, it is in a Seismic Zone 3 corresponding to an intensity rating of VIII on the Modified Mercalli Intensity Scale of 1931<sup>8</sup>. A recent letter from the California Division of Mines to the Roseville Planning Department purports to have found a minor fault in the Roseville area, however, the exact location and classification of this purported fault has not been substantiated at this time.

8. Fire Hazard. The project will have no material long-range impact or demand upon the Roseville Fire Department.

9. Vegetation.

A. Short-Range. During construction some of the grass-forb cover will be removed from the project site.

B. Long-Range. The long-range impact will be minimized with the installation of landscaping and groundcover.

10. Fauna. The construction of the project will cause a minor displacement and/or relocation of the resident fauna and micro-fauna within the area of the homesite. This displacement will be minimized through the maintenance of landscaping and natural cover on the remaining property.

#### SUMMARY OF IMPACT UPON NATURAL SYSTEMS

The project will have no material impact upon the existing natural systems of air, noise, water, soil, vegetation and wildlife. When the total community is evaluated for future use and priorities the proposed use of the project site presents the least impact of any other.

#### POSSIBLE IMPACT ON MAN-MADE FACILITIES

The project will have no material impact on man-made facilities such as sewers, storm drains, water, electrical, gas, telephone and transportation.

#### POSSIBLE IMPACT ON THE SOCIAL ENVIRONMENT

1. Open Space and Aesthetics. The City of Roseville "Park and Streambed Plan"<sup>9</sup> indicated a greenbelt with hiking and bike trails along Dry Creek at this point. "It is the objective of the greenbelt and streambed program to enhance the urban environment by means of the planned preservation or restoration of the natural vegetation and habitat, facilitate the movement of natural drainage waters, and prevent loss of property from inundation."<sup>9</sup>

This report<sup>9</sup> also states "City aesthetics are not necessarily limited to the enhancement of natural features. The contribution of architecture, streets, and plantings as well as natural features including streams, variations in the topography and distant vistas, all unite into one composite whole which determines the overall community aesthetic interest. The degree of coordination of the impact of each of these features determines the attraction and interest of the resulting environment."

The work performed by the Zisk's on this property in the past and their proposal for completion of the project conforms with this plan<sup>9</sup> and concept, and will complement and enhance the greenbelt and community aesthetics.

2. Historical and Scenic Aspects.

A. Historical Aspects. The project site has no known historical qualities.

B. Scenic Aspects. The project site offers outstanding scenic and outdoor aesthetics through the landscape treatment and the running water of Dry Creek. These scenic aspects will be maintained through the proposed development of the property.

The proposed plan will not destroy any existing historical or scenic qualities and by proper placement of structures and landscape planning will enhance the existing scenic aspects.

3. Economic Base. The project will have a negligible impact on the economic base of the Roseville community.

4. Recreational Facilities. The project will have a negligible impact on the community recreational facilities.

5. Social Institutions. The project will have a negligible impact on the community social institutions.

6. Population Density. The project will have a negligible impact on the population density of the Roseville area.

7. Fire and Police. The project will have a negligible impact on the fire and police departments of the City of Roseville.



RELATIONSHIP OF THE DEVELOPMENT TO THE LONG-TERM PLAN AND GOALS FOR CITY, COUNTY, REGIONAL AND STATE DEVELOPMENT, LAND USE AND CONSERVATION.

1. City of Roseville Master Plan.<sup>3</sup> The City of Roseville Master Plan shows the project area to be residential medium low density which corresponds with the present R-1 zoning.
2. Placer County General Plan.<sup>10</sup> The Placer County General Plan shows the project area to be a combination of low density residential, and greenbelt - open space which corresponds with the proposed development.
3. Sacramento Regional Area Planning Commission Regional Plan.<sup>11</sup> The Sacramento Regional Area Planning Commission Regional Plan shows the project site to be planned for residential development (1.0 to 10.0 dwelling units per acre) and open space which corresponds with the proposed development.

PROJECT CONSTRUCTION

1. Site Grading. Site grading will be required and will be a potential source of air pollution and erosion problems.
2. Noise. Operation of construction equipment and construction methods will be a potential source of noise pollution.
3. Blasting. No blasting is anticipated to accomplish site excavation.

The construction phase will be a potential source of short-range adverse impact which can be fully mitigated through proper control measures.

UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS

1. Short-Range.
  - A. Air Pollution. Air pollution during construction can be partially controlled through proper control measures but cannot be reduced entirely.
  - B. Noise Pollution. Noise pollution from construction

equipment and methods can be relegated to specific hours of the day but cannot be entirely mitigated. However, the project site is sufficiently removed from adjacent residential areas that noise should not be a problem.

C. Soil and Erosion. Erosion during construction can be minimized by proper timing and controls but cannot be entirely mitigated.

D. Vegetation. The loss of ground cover during grading and the resultant adverse impact cannot be avoided.

E. Fauna. The displacement and eventual loss or re-location of insect life and other microfauna during construction cannot be avoided.

2. Long-Range. The project will have no material unavoidable long-range adverse environmental effects.

#### MITIGATION MEASURES

1. Short-Range.

A. Dust Control. Air pollution during project construction will be reduced by the use of water to insure adequate dust control.

B. Erosion Control. Erosion problems will be minimized during construction by proper design, adequate drainage measures, and good construction practices.

C. Noise Control. The project is somewhat removed from existing residential areas, however, to minimize noise pollution, construction will be limited to the hours of 7 A.M. to 9 P.M.

D. Surface Water. Pollution of surface water will be minimized by scheduling construction to the period specified by the California Department of Fish and Game, proper design, and proper construction methods.

2. Long-Range.

A. Soil and Erosion. All areas will be either landscaped, provided with ground cover, or allowed to remain in its



natural state to reduce and control erosion and protect the soil.

B. Vegetation. All vegetation removed during construction will be replaced as stated in "A" above.

The unavoidable adverse environmental effects are limited primarily to the construction period while proper mitigation measures can and will be taken to ensure the long-range success of the project. These mitigation measures will resolve current erosion and drainage problems, will improve wildlife habitat, and provide better open space and scenic vistas.

### ALTERNATIVES TO THE PROPOSED PROJECT

Some of the alternatives available to the owner are to leave the property in its present condition, develop it to standard residential density or turn it into a public open space.

The latter is not feasible at this time as the Roseville electorate recently voted down a bond issue to purchase such lands for public use. The second alternative though feasible is not presently acceptable to the owner. Therefore, the first alternative of maintaining the status quo will be the only alternative analyzed in this report.

When the Zisk family first acquired this property it had been used for a sand and gravel production operation. This operation had left several pits on the property which had been used as a depository for garbage, refuse and other junk. One of these pits which has been cleaned and partially filled, and which is proposed for final filling under this project, was partially filled with junk and water. This pit provided a breeding place for mosquitos and rats, and in general was a public health hazard.

Dry Creek was overgrown with brush and was choked with junk and debris which has been removed and buried.

In 1967 the Zisks embarked on a masterplan to improve this property and make it their permanent residence. 1973 finds them well along on this plan so that the status quo is actually a state of partial improvement.

1. Impact on Existing Natural Systems. The project has not been in a "natural state" for over seventy-five years, therefore, the existing natural systems are the result of many years of deterioration and a few years of concerted effort to undue what man had done.

A. Air Quality. This alternative would not adversely affect the present air quality.

B. Noise Pollution. This alternative would not add to the existing noise pollution.

C. Water Quality. As the long range plan is in a state of partial completion the maintenance of the status quo would leave certain areas susceptible to erosion and would therefore have an adverse impact on surface water quality.

D. Flooding and Floodplains. This alternative would not affect the present flooding or floodplain.

E. Soil and Erosion. Present erosion problems would continue under this alternative as no mitigation measures are proposed.

F. Vegetation. This alternative would have an adverse impact on the existing vegetation as it would leave it exposed to damage from erosion.

G. Fauna. This alternative would have an adverse impact on existing habitat by sheet and bank erosion.

2. Possible Impact on Man-Made Facilities. This alternative would have no impact on existing man-made facilities.

3. Possible Impact on the Social Environment.

A. Open Space and Aesthetics. This alternative would preserve the present open space and aesthetics.

B. This alternative will have no impact on the remaining aspects of the social environment.

4. Relationship of the Development to the Long-Range Plan, and Goals for City, County, Regional and State Development, Land Use and Conservation. The continuation of the property in its present state does not conform with the City of

Roseville Master Plan<sup>3</sup>, the Placer County General Plan<sup>10</sup>, or the Sacramento Regional Area Planning Commission Regional Plan<sup>11</sup>.

5. Project Construction. This alternative does not require any construction, therefore, presents no impact.
6. Unavoidable Adverse Environmental Impact. This alternative has no unavoidable adverse environmental impact.

#### ENVIRONMENTAL MONITORING PROGRAMS

1. Short-Range. Water quality, erosion and noise pollution will be problems during the construction period, however, existing monitoring and control agencies (City Building Inspector, California Regional Water Quality Control Board, California Department of Fish and Game, ect.) will inspect and monitor the project.
2. Long-Range. On a long-range basis the operation of the protect will be inspected and monitored by such existing agencies as the City Fire Department, City Building Inspector, California Regional Water Quality Control Board, California Department of Fish and Game, etc.

#### GROWTH INDUCING IMPACT

The project will have no growth inducing impact on the City of Roseville.

#### AREA SIGNIFICANTLY AFFECTED BY THE PROJECT

The area signigicantly affected by the project is limited primarily to the project site itself and the immediately adjoining properties.

#### SUMMARY

The proposed project is the culmination of a seven year program undertaken by the Zisk family in 1967 to clean up and improve a piece of creek side property that had been exploited for many years and allowed to deteriorate into an eyesore and community

health problem.

It is in compliance with existing zoning and has no long-range unavoidable adverse impact.

The work accomplished to date by the Zisk family indicates the quality of their goals and the ultimate benefit to the community in improved health conditions and scenic qualities.

## BIBLIOGRAGHY

1. Information provided by Mr. William Zisk.
2. City of Roseville Ordinance no. 802.
3. City of Roseville Master Plan.
4. Information provided by the United States Army Corps of Engineers.
5. City of Roseville Floodplan Ordinance No. 1158.
6. "Guidelines for Reducing Flood Damages", U.S. Army Corps of Engineers.
7. "Earthquake Country-How, Why and Where Earthquakes Strike in California," Robert Lacopi, Lane Book Company, 1964.
8. "Uniform Building Code-1973 Edition," International Conference of Building Officials.
9. "Park and Streambed Plan," City of Roseville, 1967.
10. Placer County General Plan.
11. Sacramento Regional Area Planning Commission Master Plan, 1970.

APPENDIX A

TENTATIVE PARCEL MAP

MACIEL DIVISION  
BK E OF P5 PG 37

BK H51, PG 97

CORNER IN MIDDLE OF CREEK

163.36  
N 89°13'51"E

474.96  
N 89°13'51"E

DRY CREEK

PARCEL A

PARCEL B

100.00

BK 430, PG 319

IRON PIN  
MANHOLE

NORTH

203.90

NORTH

PROPOSED ACCESS  
AND UTILITY EASEMENT

228

30

33.38

THOMAS STREET  
ALOOLA STREET

N 52°41'E

SAWTELL  
BK C OF

699.56

SEWER LINE

IRON PIN

300.00

IRON PIN

SECTION 35  
SOUTH 1/4 CORNER OF SECTION 35

NORTH

311.98

TOWNSHIP LINE

HEET



MONUMENTS SET  
BY GILLETT-HARRIS  
ON AN UN-RECORDED  
SURVEY IN 1961

SAWTELL ADDITION  
BK C OF MAPS PG 37

699.56  
ER LINE

MUNSTER &  
HERRING  
SUBDIVISION

EXISTING FENCE LINE

TENTATIVE PARCEL MAP  
BILL ZISK PROPERTY

PREPARED BY:  
ATTEBERRY & ASSOCIATES  
1807 TANGLEWOOD  
ROSEVILLE, CALIFORNIA

IRON PIN

IRON PIN

5.37°19'E  
135.10

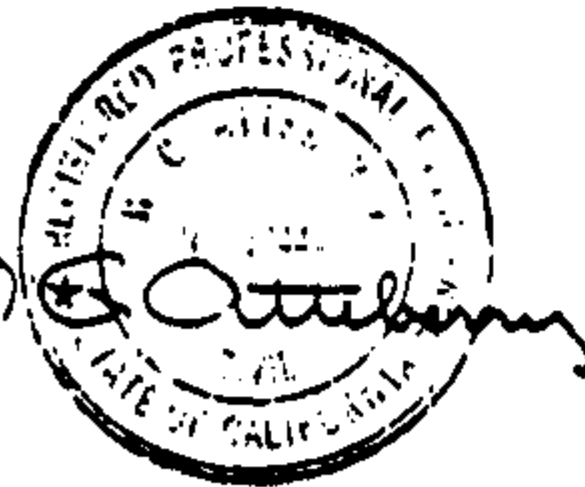
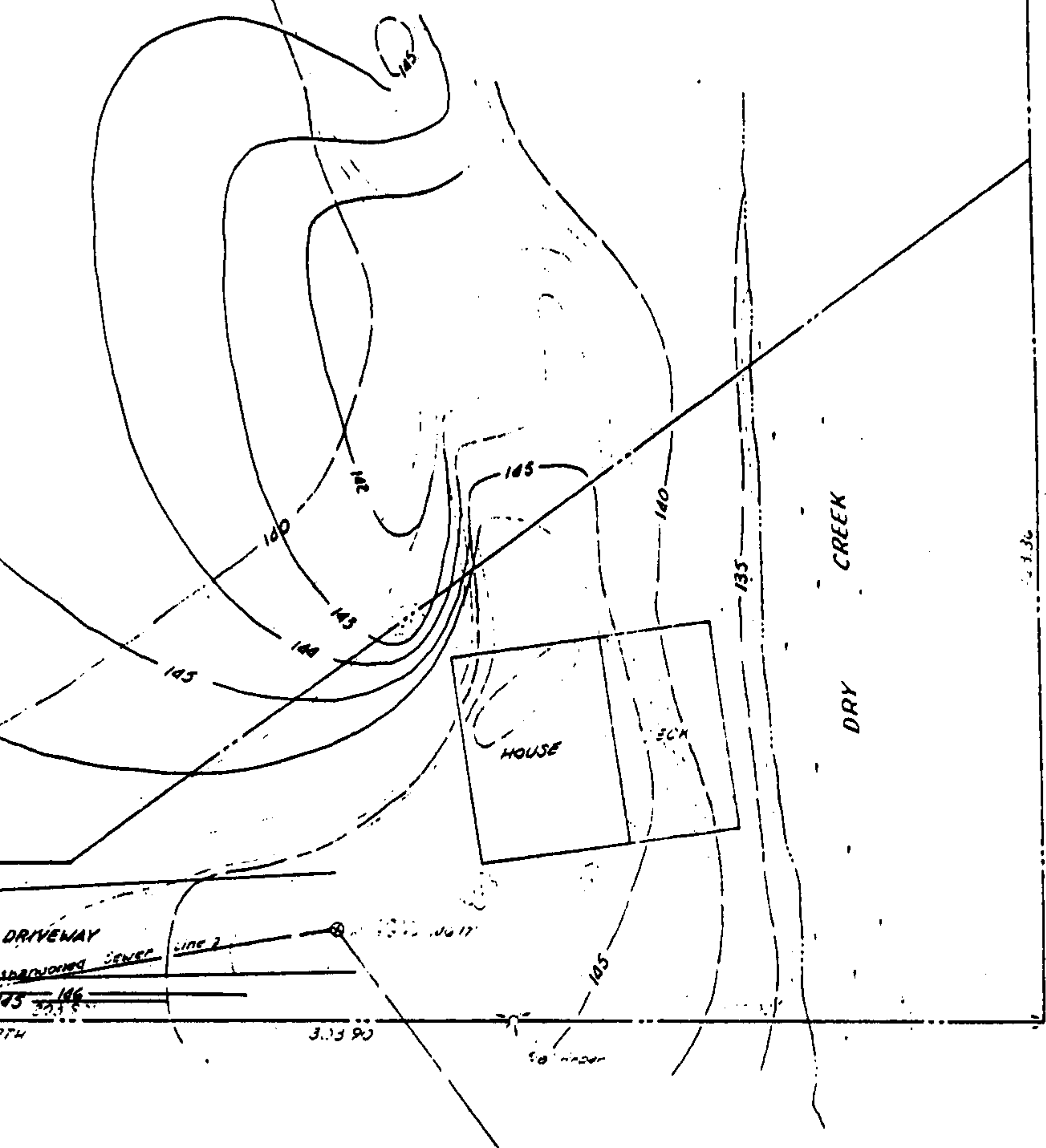
EXISTING FENCE  
LINE

SOUTHERLY LINE OF ENWOOD  
SUBDIVISION BK C OF MAPS PG 35



**APPENDIX B**

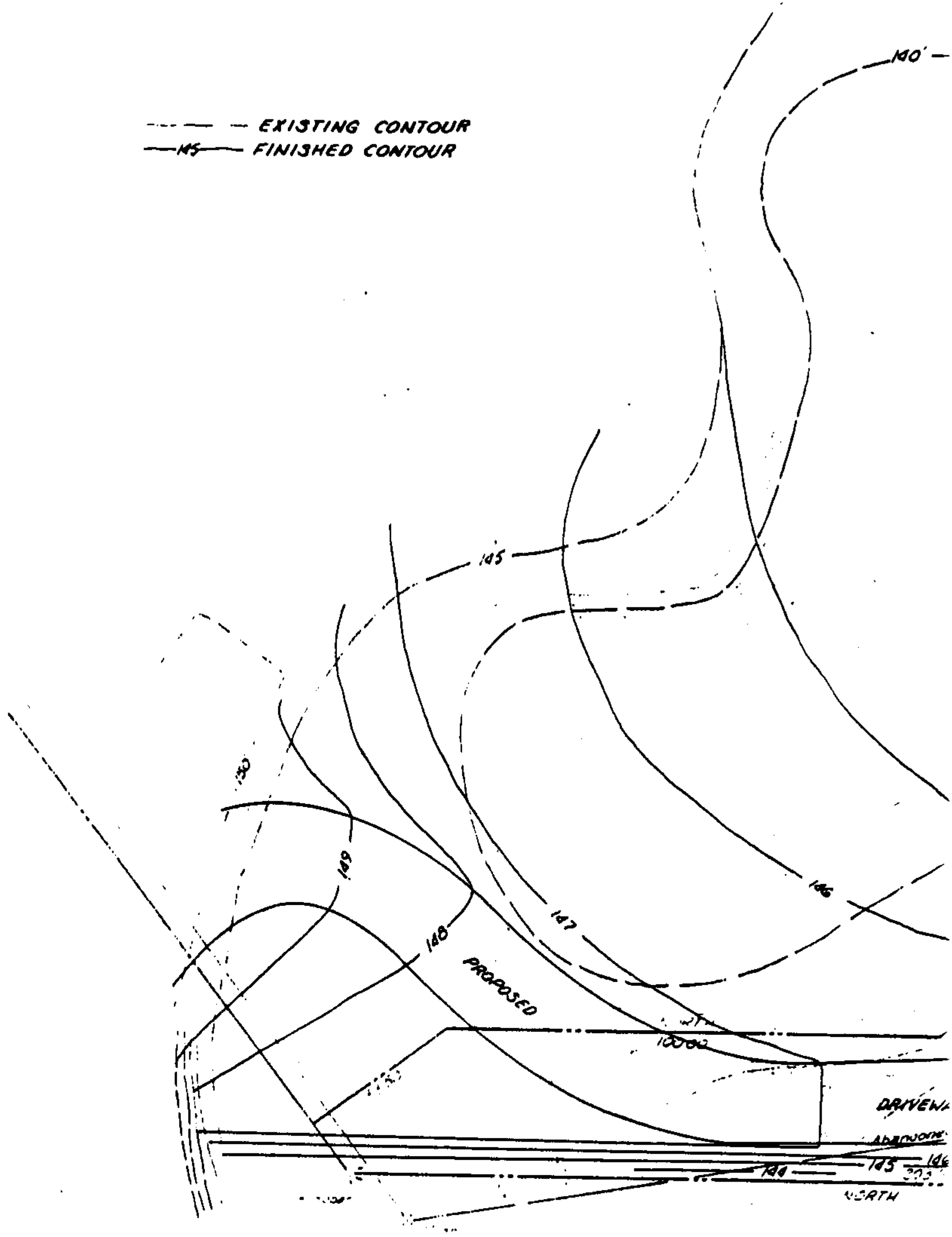
**GRADING AND SITE PLAN**



**SITE & GRADING PLAN**  
**BILL ZISK RESIDENCE**

ATTEBERRY & ASSOCIATES  
 ROSEVILLE, CALIFORNIA  
 JUNE, 1973

- - - - - EXISTING CONTOUR  
 - - - - - 145 FINISHED CONTOUR



ALL CONTOURS SHOWN ARE BASED ON  
 CITY OF ROSEVILLE DATUM - RAILROAD  
 ELEVATION IN THE INTERSECTION OF  
 VERNON STREET AND VERNON STREET  
 ELEVATION 32.00

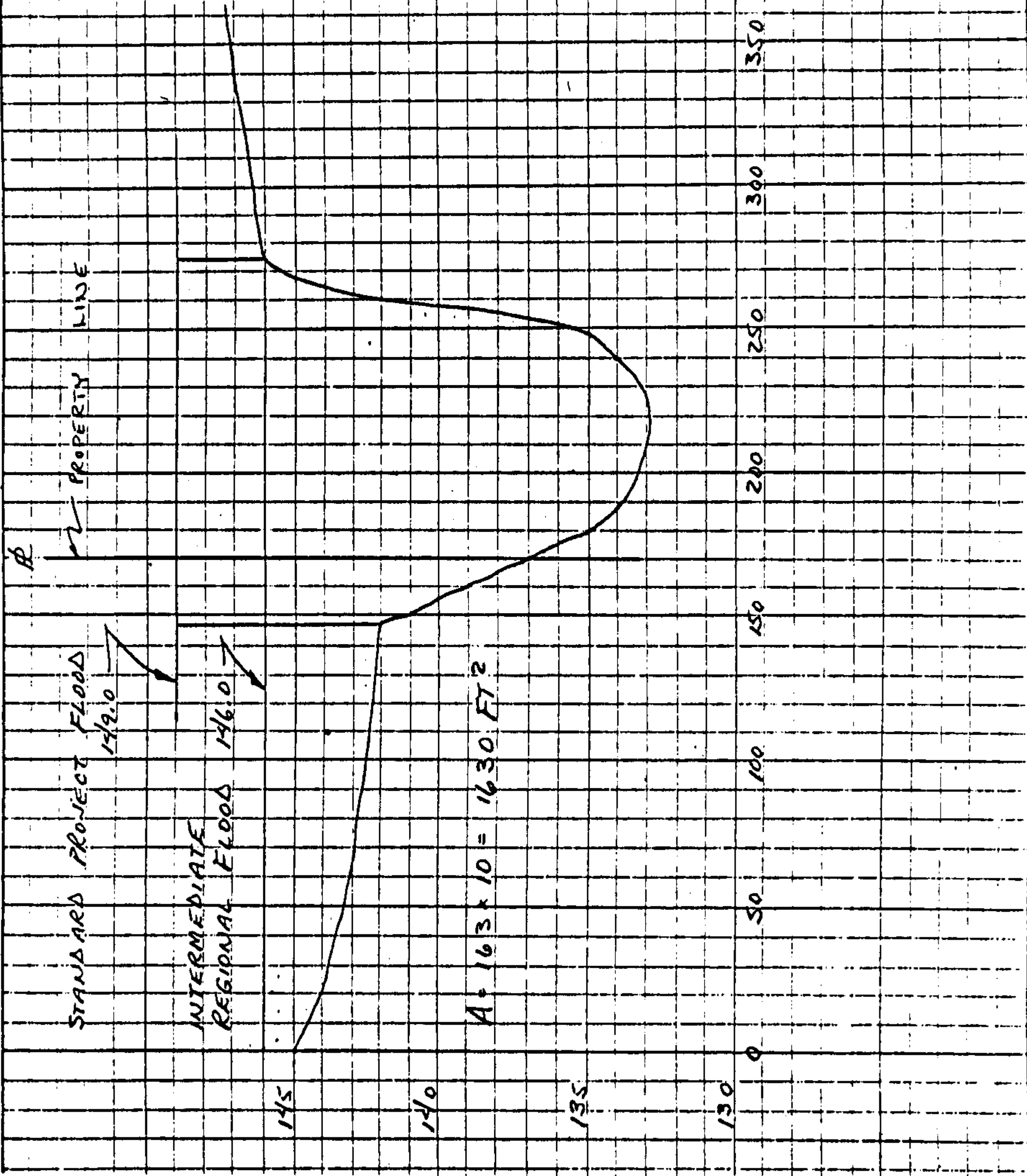
W.A.

APPENDIX C

FLOODPLAIN ANALYSIS

ATTEBERRY AND ASSOCIATES  
1807 TANGLEWOOD LANE  
ROSEVILLE, CALIFORNIA  
PHONE ~ 782-3725

CHANNEL OBSTRUCTION CALCULATIONS



ATTEBERRY AND ASSOCIATES

1807 TANGLEWOOD LANE

ROSEVILLE, CALIFORNIA

PHONE ~ 782-3725

CHANNEL OBSTRUCTION CALCULATIONS

THE FOLLOWING CRITERIA WILL BE USED AS THE PARAMETERS FOR THIS ANALYSIS:

1. THE PURPOSE OF THE ANALYSIS IS TO DETERMINE THE EFFECT OF THE PROPOSED PROJECT UPON THE DRY CREEK FLOOD CHANNEL. THEREFORE, THE ANALYSIS WILL ONLY BE CARRIED TO THE POINT OF DETERMINING THE DEGREE OF THIS EFFECT.

2. THE RESIDENCE ACROSS THE CREEK FROM THE PROJECT SITE HAS A FINISHED FLOOR ELEVATION OF 146.5 FEET ABOVE MEAN SEA LEVEL AND THE U.S. CORP. OF ENGINEERS HAS ESTABLISHED 146.0 FEET AS THE ELEVATION OF THE INTERMEDIATE REGIONAL FLOOD. THEREFORE, ONLY THE CHANNEL SECTION BELOW EL. 146.0 WILL BE USED IN THIS ANALYSIS.

3. MANNING'S EQUATION FOR OPEN CHANNEL FLOW  $Q = (1.49/n) R^{2/3} S^{1/2} A$  WILL BE USED TO DETERMINE EFFECT OF THE PROJECT ON CHANNEL FLOW.

4. MANNING'S COEFFICIENT OF ROUGHNESS "n" IS THE EMPIRICAL VALUE MOST SINGULARLY AFFECTED BY THE PROJECT.

5. OTHER VALUES WITHIN MANNING'S EQUATION WHICH WILL BE ANALYZED ARE:

a) R = HYDRAULIC RADIUS

b) S = HYDRAULIC SLOPE

c) A = CHANNEL X-SECTIONAL AREA

ATTEBERRY AND ASSOCIATES

1807 TANGLEWOOD LANE

ROSEVILLE, CALIFORNIA

PHONE ~ 782-3725

CHANNEL OBSTRUCTION CALCULATIONSANALYSIS PROCEDURE:

1. CHANGES IN MANNING'S COEFFICIENT OF ROUGHNESS "n" CAUSES AN INVERSE PROPORTIONALLY EQUIVALENT CHANGE IN CHANNEL FLOW "Q". AT THE TIME MR. ZISK COMMENCED WORK ON THIS PROJECT IN 1966 THE CHANNEL "n-VALUE" WAS ESTIMATED TO VARY FROM 0.110 TO 0.150\*. THE CHANNEL HAS A CURRENT ESTIMATED "n-VALUE" RANGING FROM 0.040 TO 0.080\*. THIS INDICATES THAT MR. ZISK'S WORK HAS CAUSED AN APPROXIMATELY 200% INCREASE IN CHANNEL CAPACITY OR CHANNEL FLOW "Q".

2. THE CROSS-SECTIONAL AREA BELOW THE 146.0 ELEVATION = 1630 FT<sup>2</sup>

THE COMPLETION OF THE PROJECT CONTEMPLATES THE CONSTRUCTION OF A TIMBER DECK AT THE 149.0 ELEVATION WITH ONE ROW OF PIERS EXTENDING BELOW THE 146.0 LEVEL. THIS WOULD REDUCE THE X-SECTIONAL AREA BY LESS THAN 5 FT<sup>2</sup> OR A PERCENTAGE REDUCTION OF  $5/1630 = 0.31\%$

3. THE HYDRAULIC RADIUS "R" IS A FUNCTION OF THE CHANNEL X-SECTION  $R = A/L$ . THE REDUCTION IN CHANNEL X-SECTION PRODUCES A COMPARABLE CHANGE IN THE HYDRAULIC RADIUS.

4. IT IS ASSUMED THAT ANY CHANGES IN THE HYDRAULIC GRADIENT "S" WOULD BE MINOR AND LIKE THE CHANGES IN X-SECTION WOULD PRODUCE NEGLIGIBLE RESULTS.

\* THESE FIGURES WERE ESTIMATED FROM CHANNEL CHARACTERISTICS AND PROCEDURES CONTAINED IN "OPEN CHANNEL HYDRAULICS - VEN TE CHOW - MCGRAW HILL BOOK CO., INC. - 1959."

PROJECT NO. 7306r PAGE 6

PROJECT NAME BILL ZISK PARCEL MAP

DATE 6-16-73 BY W.G. ATTEBERRY

ATTEBERRY AND ASSOCIATES

1807 TANGLEWOOD LANE

ROSEVILLE, CALIFORNIA

PHONE ~ 782-3725

CHANNEL OBSTRUCTION CALCULATIONS

ANALYSIS CONCLUSIONS:

1. THE WORK PERFORMED BY MR. ZISK ON CLEANING AND STRAIGHTENING THE CHANNEL HAS CHANGED THE CHANNEL'S COEFFICIENT OF ROUGHNESS AND HAS CONSEQUENTLY INCREASED THE CHANNEL'S FLOOD CARRYING CAPACITY APPROXIMATELY 200%.
2. WITH THE EXCEPTION OF DECK PIERS, THE ADDITIONAL WORK PROPOSED BY MR. ZISK IS OUTSIDE OF THE INTERMEDIATE REGIONAL FLOOD LIMITS.
3. THE INTRUSION OF THE DECK PIERS INTO THE INTERMEDIATE REGIONAL FLOOD CHANNEL REDUCES THE CHANNEL'S FLOOD CARRYING CAPACITY BY APPROXIMATELY  $\frac{1}{3}$  TO  $\frac{1}{2}$  OF ONE PERCENT WHICH IS LESS THAN THE RELIABILITY OF THE BASIC DATA AND THE EMPIRICAL FORMULAS USED BY THE ENGINEER AND/OR THE U.S. CORPS OF ENGINEERS.