MINUTE ITEM
This Calendar Item No. 24
was approved as Minute Item
No. 24 by the State Lands
Commission by a vote of 2
to 0 at its 6/30/87
meeting.

CALENDAR ITEM

A 1 | 24 | 06/30/87
S 4 | | W 23950 PRC 7096
Suetta

GENERAL PERMIT-PUBLIC AGENCY USE

APPLICANT: City of Redding
760 Parkview Avenue
Redding, California 96001-3396

AREA, TYPE LAND AND LOCATION:
A 0.031-acre parcel of submerged land in the Sacramento River.

LAND USE: A ten-foot wide pedestrian bridge crossing.

TERMS OF PERMIT::
Initial period: 49 years beginning June 30, 1987.

CONSIDERATION: The public use and benefit; with the State reserving the right at any time to set a monetary rental if the Commission finds such action to be in the State's best interest.

BASIS FOR CONSIDERATION:
Pursuant to 2 Cal. Adm. Code 2003.

APPLICANT STATUS:
Applicant is permittee of upland.

PREREQUISITE CONDITIONS, FEES AND EXPENSES:
Filing fee has been received

STATUTORY AND OTHER REFERENCES:

A. P.R.C.: Div. 6, Parts 1 and 2; Div. 13.

B. Cal. Adm. Code: Title 2, Div. 3; Title 14, Div. 6.

AB 884: N/A.

OTHER PERTINENT INFORMATION:

1. The City of Redding has applied to the Commission for the use and maintenance of a proposed ten-foot wide pedestrian bridge crossing submerged land in the Sacramento River. Such crossing is to be a component of the City's 15 mile Sacramento River Trail System between downtown Redding and Shasta Dam. The City's application remains incomplete due to City's request that the Commission waive the standard $450 processing fee. Inasmuch as the bridge crossing is in the public's best interest, staff recommends that the fee be waived.

2. The annual rental value of the site is estimated to be $100.

3. This activity involves lands identified as possessing significant environmental values pursuant to P.R.C. 6370, et seq. but will not affect those significant lands.

4. A Negative Declaration was prepared and adopted for this project by City of Redding. The State Lands Commission's staff has reviewed such document and believes that it complies with the requirements of the CEQA.

APPROVALS OBTAINED:

United States Army Corps of Engineers, Department of Fish and Game, Regional Water Quality Control Board and State Reclamation Board.

EXHIBITS:
A. Land Description.
B. Location Map.
C. Negative Declaration

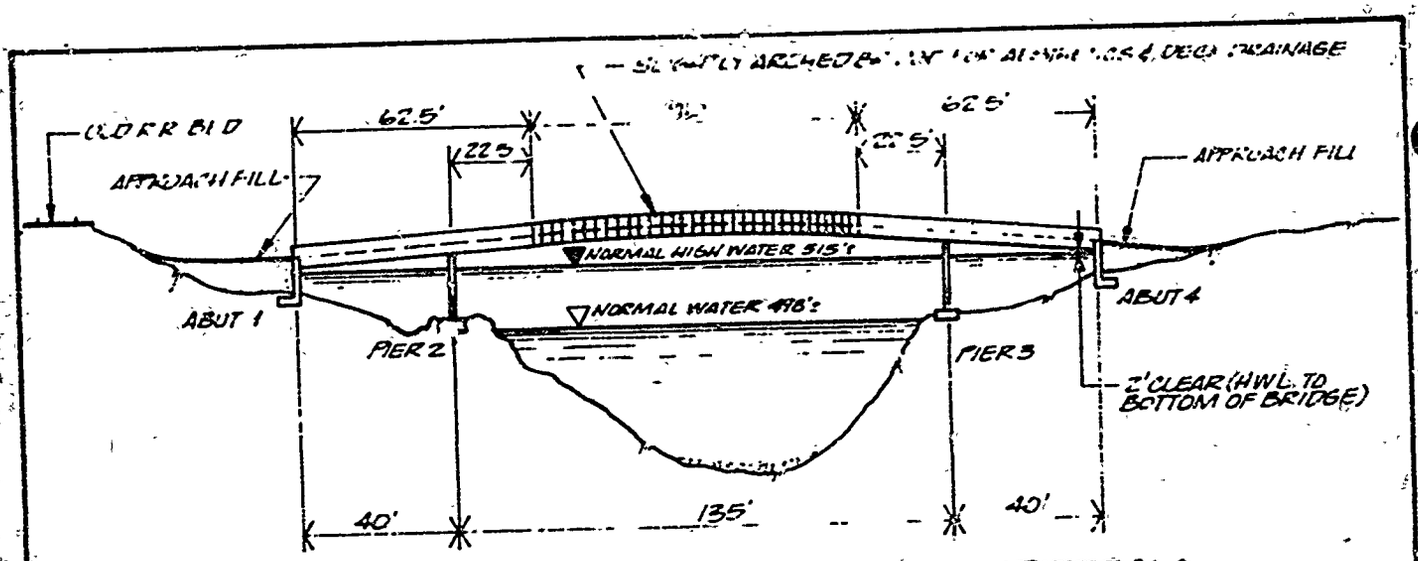
IT IS RECOMMENDED THAT THE COMMISSION:

1. FIND THAT A NEGATIVE DECLARATION WAS PREPARED AND ADOPTED FOR THIS PROJECT BY CITY OF REDDING AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.

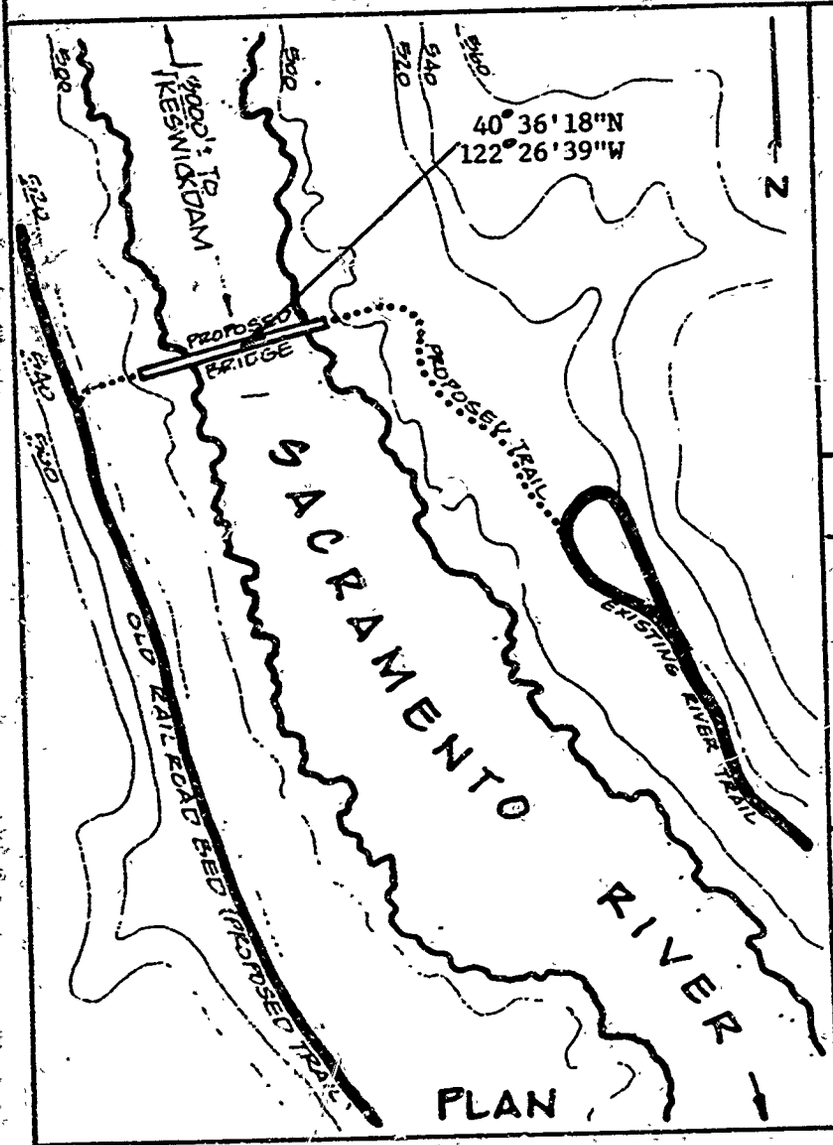
2. DETERMINE THAT THE PROJECT, AS APPROVED, WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT.

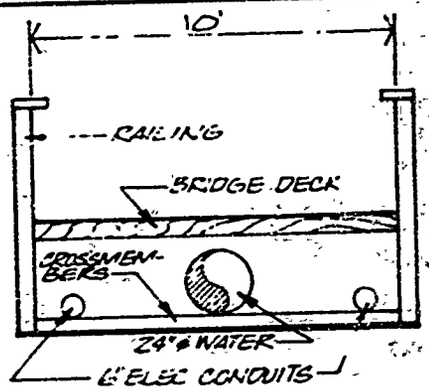
3. AUTHORIZE STAFF TO WAIVE THE STANDARD $450 PROCESSING FEE.

4. AUTHORIZE ISSUANCE TO THE CITY OF REDDING OF A 49-YEAR GENERAL PERMIT-PUBLIC AGENCY USE BEGINNING JUNE 30, 1987; IN CONSIDERATION OF THE PUBLIC USE AND BENEFIT, WITH THE STATE RESERVING THE RIGHT AT ANY TIME TO SET A MONETARY RENTAL IF THE COMMISSION FINDS SUCH ACTION TO BE IN THE STATE'S BEST INTEREST; FOR A TEN-FOOT WIDE PEDESTRIAN BRIDGE ON THE LAND DESCRIBED ON EXHIBIT "A" ATTACHED AND BY REFERENCE MADE A PART HEREOF.

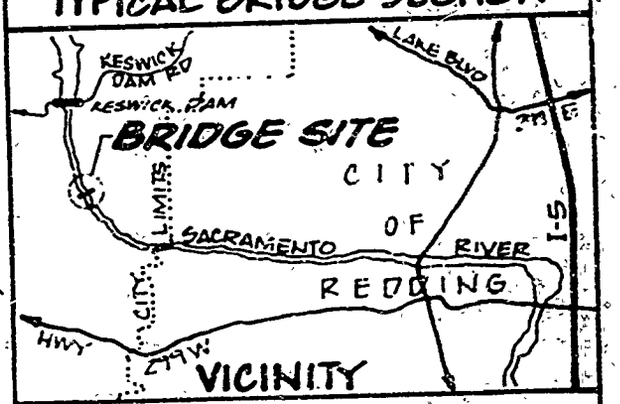


TYPICAL RIVER SECTION - LOOKING UPSTREAM





TYPICAL BRIDGE SECTION



PROPOSED

SACRAMENTO RIVER TRAIL BRIDGE

IN SEC 28 T32N, R5W, MDM, SHASTA COUNTY, CALIF.

CITY OF REDDING
760 PARKVIEW AVE.
REDDING, CA 96001

MARCH 1987
NO SCALE

SHEET 1 OF 1

EXHIBIT "A"
LAND DESCRIPTION

CALENDAR PAGE 150
MINUTE PAGE 2398

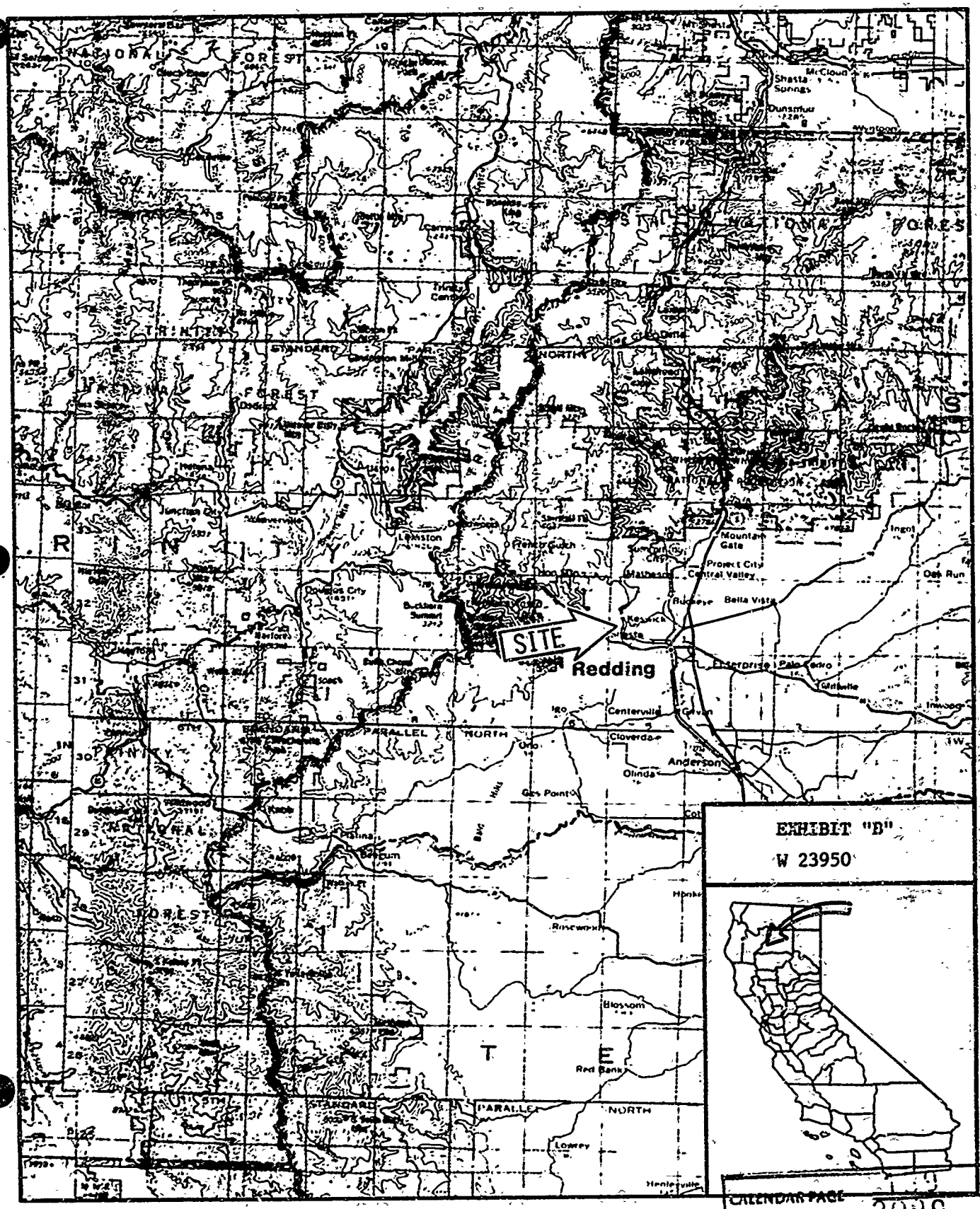

SITE
Redding
Shasta Springs
McCloud
Dunsmuir
Mountain Gate
Project City
Central Valley
Bella Vista
Enterprise
Palo Cedro
Millville
Centerville
Cloverdale
Anderson
Olinda
Gas Point
Rosewood
Blossom
Red Bank
Lowrey
Lewiston
Douglas City
Junction City
Weaverville
Ingot
Oak Run
Igo
Ono
Platina
Bergum
Keswick
Buckeye
Matheson
NORTH
PARALLEL
STANDARD
TRINITY
NATIONAL
FOREST
EXHIBIT "B"
W 23950
CALENDAR PAGE
MINUTE PAGE
2099

EXHIBIT "C"

CITY OF REDDING

NOTICE OF NEGATIVE DECLARATION

The Redding Planning Commission, at their regular meeting of May 12, 1987, found that

Environmental Impact Assessment concerning a proposed ten-foot-wide pedestrian bridge crossing of the Sacramento River approximately 3,000 feet downstream from Keswick Dam

has no substantial impact upon the environment and that an environmental impact report is not necessary. The Planning Commission made its decision on the basis of the following findings:

1. Project is compatible with the Redding General Plan.
2. Project will not significantly alter existing land form.
3. Project is compatible with surrounding land use.
4. Project is compatible with the Code of the City of Redding, California.

The foregoing decision that the proposed project will have no significant effect upon the environment is based on an initial study prepared by the City Planning Department and reviewed at a Planning Commission meeting. If there are substantial changes that alter the character of the proposed project, another environmental impact determination will be necessary.

A copy of the initial study may be obtained at the City of Redding Planning Department, 760 Parkview Avenue, Redding, California 96001.

Phillip R. Perry, Director
Planning and Community Development

CALENDAR PAGE 100
MINUTE PAGE 2100

NOTICE OF DETERMINATION

CITY OF REDDING

TO: XX Ann Reed, Clerk
County of Shasta
P. O. Box 880
Redding, CA 96099

__ Secretary for Resources
1416 Ninth Street
Room 1311
Sacramento, CA 95814

P-050-460-700

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code

PROJECT TITLE: Sacramento River Trail Pedestrian Bridge

STATE CLEARYNGHOUSE NUMBER (If submitted to State Clearinghouse):

CONTACT PERSON: Telephone: 225-4055
Phillip A. Perry, Director of Planning and Community Development

PROJECT LOCATION: One-half mile below Keswick Dam

PROJECT DESCRIPTION: Pedestrian bridge across Sacramento River

This is to advise that the City Council, Lead Agency, has approved the above described project and has made the following determinations regarding the above described project:

1. ___ The project will have a significant effect on the environment.

2. ___ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA

___ Findings were made pursuant to Section 15091 of CEQA.

3. XX A Negative Declaration was prepared for this project pursuant to the provisions of CEQA. A copy of the Negative Declaration may be obtained at the Planning and Community Development Department.

4. ___ Mitigated measures were made a condition of the approval of the project.

5. ___ A Statement of Overriding Considerations was adopted for this project.

6. A copy of the environmental assessment and the record of project approval may be examined in the City Clerk's Office, 760 Parkview Avenue, Redding, California.

This Instrument is a correct copy of the original on file in this office

ATTEST: MAY 20 1987

ETHEL A. NICHOLS
CITY CLERK AND CLERK OF THE CITY COUNCIL OF THE CITY OF REDDING, COUNTY OF SHASTA, STATE OF CALIFORNIA

Date Approved: May 19, 1987

CALENDAR PAGE 101
MINUTE PAGE 2101

Ethel A. Nichols, City Clerk
by Connie Stubmayer, Deputy

c: Planning Dept. C. Stubmayer DEPUTY

760 PARKVIEW AVENUE / REDDING CA 96001-3396

12
4-14-87

CITY OF REDDING

INTER-DEPARTMENT COMMUNICATION

DATE April 7, 1987

TO All Members of the Planning Commission

FRO Director of Planning and Community Development

SUBJECT Environmental Impact Determination for the Sacramento River Trail Pedestrian Bridge.

On October 9, 1984, the Planning Commission unanimously recommended adoption of a negative declaration for the Sacramento River Trail. On December 3, 1984, the City Council adopted a negative declaration, including a mitigation measure that eliminated the use of Keswick Dam to complete the trail loop. Scheduled for consideration is the environmental impact determination for the construction of a pedestrian bridge approximately 3,000 feet downstream of Keswick Dam. Attached for your review is an environmental assessment prepared by staff, a preliminary engineering report prepared by PACE Engineering, and a schematic rendering of the appearance the bridge might take based on the conclusions in the engineering report. Also attached is a summary of the history and future phases of the trail and comments from the State Clearinghouse.

The State Department of Fish and Game, the Water Quality Control Board, and the U. S. Army Corps of Engineers have already issued permits for the project. The State Lands Commission and U. S. Bureau of Reclamation are still reviewing the project for permit approval.

The preliminary engineering report identified a narrow portion of the river canyon, 300± feet upriver from the trail's current end, as a logical crossing point. Please refer to the attached documents for a detailed description of the project and project impacts.

The attached assessment addresses the identified issues: bridge aesthetics, 100-year floodplain and Keswick releases, construction impacts, and project benefits.

In making an environmental determination, the Commission has two choices: (1) it may require an environmental impact report or (2) it may order preparation of a negative declaration. The functions of these documents are generally defined as follows in the State EIR guidelines:

> An environmental impact report is a document whose function is to provide the public and public agencies information about the effect or effects that a proposed project is likely to have on the environment; to list ways in which the significant effects of such project might be minimized; and to indicate alternatives to such project. An environmental impact report is not a General Plan that decides land use on a parcel-by-parcel basis; however, information in an environmental impact report may influence a decision and provide alternative considerations for the decision maker.

CALENDAR PAGE 162
MINUTE PAGE 2102

A negative declaration is a written statement describing the reasons that a proposed project will not have a significant effect on the environment and, therefore, does not require the preparation of an environmental impact report. In this context "environment" means the physical conditions that exist within the area affected by the proposed project, including land, air, water, minerals, flora, fauna, noise, and objects of historic or aesthetic significance.

In making a determination, the Planning Commission should consider the initial study and written or oral comments. Written or oral comments should address whether or not an environmental impact report should be required and if preparation of an environmental impact report is requested. The comments should state what significant effects should be addressed. The Commission should evaluate the comments in light of the specificity of the project, issues already existing, the impact of no project, and existing development in the area. In making the determination, the attached excerpts from the State EIR Guidelines, in addition to the material in the initial study, may be useful.

It is the staff's opinion that the initial study establishes that all potential adverse affects are mitigated to a point where no significant environmental effects would occur as a result of any of the alternatives outlined in this study. The impacts identified would be mitigated to the greatest degree by utilizing Alignment 1 and a low-profile bridge structure that blends into the rocky canyon.

It is the staff's recommendation that the Commission recommend to the City Council the adoption of a negative declaration based on the conclusions in the environmental assessment.

Respectfully submitted,

Phillip A. Perry

Phillip A. Perry, Director
Planning and Community Development

PAP:kc
Attachments
STAF11

CALENDAR PAGE
MINUTE PAGE 2103

ENVIRONMENTAL ASSESSMENT
(NEPA and CEQA Compliance)

1. DESCRIPTION OF THE PROPOSED ACTION

a. Introduction

For the last 20 years, the City of Redding has been aggressively pursuing the development of a continuous linear park system along the banks of the Sacramento River.

An integral part of the linear river park system is a proposed river trail from the City's 110-acre regional park near the Market Street bridge to Keswick Dam. In the spring of 1982, the City initiated a multiagency committee to evaluate the feasibility of developing a regional river trail system from central Redding to Shasta Dam. The committee was comprised of representatives of the City of Redding, Bureau of Land Management, California Department of Transportation, the U. S. Forest Service, and the Bureau of Reclamation. The City of Redding has since been designated as the lead agency for the development and maintenance of the trail as far as Keswick Dam.

The first three phases of the trail, 2.3 miles, have been constructed along the north and west banks from the beginning of Lake Redding Estates Subdivision to about 3,000 feet downstream of Keswick Dam. The construction of just under three miles of trail along the south and east bank is scheduled for construction in April of 1987.

On December 3, 1984, the City of Redding adopted a negative declaration for the development of the trail system based on an environmental assessment prepared by City staff and distributed through the CEQA and NEPA review process (CA No. 84101608). That document focused on the fact that extension of the trail on the east bank and utilization of Keswick Dam to complete the loop created substantial impacts related to traffic and trail-user safety, vegetation removal, and drainage. The preferred alternative adopted by the City Council as a mitigation measure was development of a separate pedestrian bridge approximately one-half mile below Keswick Dam.

Since then, the City of Redding has had a preliminary engineering study prepared for the bridge that identifies its specific location, bridge type, profile, abutments, and bridge approach. The purpose of this assessment is to focus on the specifics of the bridge and determine if it has a significant effect on the environment, given its relationship to the previously adopted negative declaration. The assessment will also provide documentation of the factual basis for the finding in a negative declaration that a project will not have a significant effect on the environment.

b. Project Description

The project consists of constructing a 10-foot-wide pedestrian bridge across the Sacramento River approximately 3,000 feet below Keswick Dam. A preliminary engineering study evaluated six bridge types. That study narrowed the recommended bridge types to three: ~~wood girder, steel~~ truss, or steel girder.

The recommended location utilizes existing rock outcroppings as the foundation for concrete piers. The bridge will have an overall span of 215 feet and a clear span of 135 feet. The preliminary bridge design utilizes a low-profile wood or steel-arched bridge. The design calls for a 90-foot center span carried by two 62.5-foot end spans supported on abutments and piers and cantilevered 22.5 feet to the center. Plate No. 2 of the attached engineering report depicts the bridge profile. The approaches to the bridge deck may require some fill work on natural benches above the river channel. The concrete piers and abutments will be designed so flood releases are not restricted.

With the bridge, approximately 600 feet of approach-trail construction is necessary to connect the existing trail on both river banks to the bridge deck. Both the bridge deck and trail approach will be above the elevation of the 100-year flood for the Sacramento River.

2. DESCRIPTION OF THE ENVIRONMENT

a. Land Use

The proposed project is located in the upper reaches of the Sacramento River canyon just downstream from Keswick Dam. While visually pleasing, this section of the Sacramento River cannot be considered a completely natural setting. At the northern end of the canyon is Keswick Dam, along with its maintenance facility, electrical substation, and its tall metal transmission towers. The transmission lines are again visible about one mile downstream where they cross the River. At the downtown end of the trail loop are two automobile bridges, one train trestle, and various improvements. As mentioned previously, both sides of the River are marked by an existing abandoned rail or roadbed. Much of the natural vegetation in the canyon was denuded or altered by copper smelters, hard-rock mining, dredging, and the construction of the rail and roadbeds, which took place in the late 1800s and early 1900s. Keswick Dam was completed in the early 1950s. Several subdivisions are visible from the River in the lower stretches of the trail. These homes are separated from the River by public open space. Between Keswick Dam and a point 300 feet downriver from the proposed bridge, there is not any significant amount of vegetation due to the many rock outcrops.

b. Fish and Wildlife

Wildlife of the area encompassed by the trail loop can be considered typical to the upper Sacramento Valley terrace, foothill, and riparian areas. The Department of Fish and Game has reported 14 fur-bearing mammalian species as being observed in the upper Sacramento River riparian habitat. Those species that remain in the area have become tolerant of some human activity and can be expected to remain unless the vegetation that they use for cover and browse is removed. This will depend on the extent and intensity of urban development.

The Sacramento River supports steelhead, trout, and salmon fisheries. The salmon spawn in the River from early September to late July. Mollusks and clams can also be found in the aquatic environments.

CALENDAR PAGE 105
MINUTE PAGE 2105

Table 3 includes the birds observed nesting along the upper Sacramento River. In addition to those nesting in the area, many species are known to visit the study area. The Sacramento Valley is the winter habitat for five to eight million waterfowl. Two endangered species, the bald eagle and the peregrine falcon; one rare species, the yellow-billed cuckoo; and the osprey, which may be endangered; are known to forage along the River. Specific forage locations have not been identified along the River in the study area. Other species known to visit the River riparian areas are the turkey vulture, white-tailed kite, Swainson's hawk, red-tailed hawk, red-shouldered hawk, ring-necked pheasant, great egret, great blue heron, killdeer, band-tailed pigeon, great horned owl, belted kingfisher, common flicker, downy woodpecker, Steller's jay, common bushtit, cedar waxwing, red-winged blackbird, purple finch, and American goldfinch.

Due to the lack of riparian habitat and depth of the water in the immediate vicinity, the fish and wildlife described may not be as evident near the proposed bridge.

c. Vegetation

The area consists primarily of foothill woodland chaparral with major elements of riparian vegetation downstream of the project site. The foothill chaparral community is characterized by species such as manzanita, ceanothus, poison oak, interior live oak, blue oak, digger pine, and common grasses and forbs.

As previously mentioned, the immediate project site is characterized by rock outcroppings and scattered manzanita brush. Construction of the abandoned rail bed along the west bank eliminated any preexisting foothill chaparral in the vicinity of the bridge approach.

d. Soils

The river canyon consists of approximately seven soil classifications. These are listed in Table 1 and include slope and erosion characteristic indications.

e. Geologic and Seismic Hazards

The City of Redding's Seismic Safety Element and Safety Element state that there are no known active faults in the Redding plan area. Potentially, active faults (those with evidence of movement in the past two million years) exist in the eastern one-quarter of the County; but the south-central region, the location of the planning area, has not been studied. According to the Element, no deaths or injuries have resulted from earthquakes in the past 120 years; earthquake damage to buildings has been very minor; and no earthquake with a magnitude greater than 6.5 on the Richter scale has ever been recorded in the Northeastern California region. The preliminary engineering study on this project does recommend that a foundation study be conducted to determine the quantitative strength of the rock foundations for the bridge supports. This is a routine engineering report requirement.

TABLE 1

SOIL CLASSIFICATIONS IN STUDY AREA

Series	Soil	Slope Percent	Erosion*
Auburn III	AnB	0 - 8	Slight - Moderate
Auburn IV	AsD	8 - 30	Moderate - High
Auburn IV	ArD2	8 - 30	Moderate - High
Auburn VI	AtE2	30 - 50	High
Honcut II	He	0 - 2	Zero - Slight
Millshoem IV	MeD	3 - 30	Moderate - High
Newtown IV	NeC	8 - 15	Moderate
Newtown IV	NeD	15 - 30	Moderate - High
Newtown IV	NeE2	30 - 50	High
Red Bluff III	RdB	3 - 8	Slight - Moderate
Red Bluff IV	RdA	0 - 3	Zero - Slight
Red Bluff IV	RdB	3 - 8	Slight - Moderate
Red Bluff III	RcB	3 - 8	Slight - Moderate
Boomer III	BkC	0 - 15	Slight - Moderate
Boomer III	BkD	15 - 30	Moderate - Slight
Boomer V	BoE3	30 - 50	High
Goulding V	GdD	10 - 30	Moderate - High
Goulding VI	GeE2	30 - 50	High
Goulding VI	GeF2	50 - 70	High
Kidd VI	KgF2	10 - 60	Moderate - High
Reiff I	RnA	0 - 3	Zero - Slight
Reiff I	RlA	0 - 3	Zero - Slight
Churn II	CfA	0 - 3	Zero - Slight
Riverwash	RW	-	-
Cobbly	Ch	1 - 5	Moderate
Rock	RxF	-	-
Tailings & Diggings	TaD	-	-

CALENDAR PAGE 107
MINUTE PAGE 2107

TABLE 3
BIRD SPECIES OBSERVED NESTING
ALONG THE UPPER SACRAMENTO RIVER

Species	Climax High Terrace	Sub-Climax High Terrace	Sub-Climax Low Terrace	Willow Low Terrace	Grass High Terrace	Grass Low Terrace
Wood Duck				X		
California Quail	X	X	X		X	
Mourning Dove	X					
Nuttall's Woodpecker	X	X	X	X		
Acorn Woodpecker	X					
Hairy Woodpecker	X	X		X		
Western Kingbird	X	X	X		X	X
Ash-Throated Flycatcher	X	X	X	X		
Western Flycatcher	X	X	X	X		
Tree Swallow	X		X	X		
Purple Martin	X					
Scrub Jay	X	X	X	X	X	X
Plain Titmouse	X	X	X	X	X	
White-Breasted Nuthatch	X					
House Wren	X					
Winter Wren	X			X		
Bewick's Wren	X	X	X	X	X	
Robin						X
Starling	X		X	X		
Warbling Vireo	X	X				
Yellow Warbler		X	X			
Yellow Rumped Warbler	X					
Yellow Throat		X	X			
Yellow-Breasted Chat	X	X	X	X		
Brewer's Blackbird		X	X	X		
Brown-Headed Cowbird	X	X				
Northern Oriole	X		X	X		X
Western Tanager	X					
Black-Headed Grosbeak	X	X	X	X	X	X
Lazuli Bunting		X	X			
House Finch	X	X				
Rufous-Sided Towhee	X	X		X	X	
Brown Towhee	X	X		X	X	
Lark Sparrow				X		X
Song Sparrow			X			

CALENDAR PAGE 108
MINUTE PAGE 2108

f. Mineral Resources

Within the study area, mining activity in the past has included placer and lode gold. The evidence of placer mining can be found in the dredger tailings along the river corridor.

Generally, these mineral deposits have proven uneconomical to mine. It is unknown whether, at sometime in the future, the escalating cost of metals will eventually make the area a potential mining resource. Currently, the Bureau of Land Management, who controls mining permits in the river corridor has removed the area from new mining claims. The City of Redding purchased several of the existing claims to provide for the river-trail extension. Based on discussions with the miners, who are still working claims in the area, it is being done as a hobby.

g. Air Quality

The mountain ranges that surround the Redding area on three sides limit air flow, while infrequent winds and frequent temperature inversions result in poor ventilation. This combination of topography, inversion, and light winds result in air being trapped, both horizontally and vertically, in the valley during much of the year. Consequently, the potential for air pollution is high.

Since 1970, the California Air Resources Board, in cooperation with the Shasta County Air Pollution Control District, has been monitoring air pollutants in the Redding area. Several pollutants have been monitored, but only two, ozone and suspended particulates, are significant in the Redding area.

Ozone is formed when organic gases and oxides of nitrogen react with each other in the presence of sunlight. Most organic gases are emitted by motor vehicles while oxides of nitrogen result from motor vehicles and industrial processes. Particulates matter is emitted from several different sources in the County, it is primarily composed of fugitive dust from travel on unpaved roads and construction.

h. Water Quality

Drainage of the study area is by unnamed tributaries of the Sacramento River. At the present time, water quality in the River is considered excellent. There are no specific water-quality issues in these water sheds. Any water-quality degradation of these areas will have some cumulative impact on the Sacramento River. Drainage improvements relative to the trail have included water-velocity attenuation methods.

i. Historic/Archaeological Resources

There is one registered historical structure within the study area. The Diestelhorst Bridge, across the Sacramento River, is in the National Register of Historic Places. The bridge was built in 1915 and still serves as a two-lane crossing of the Sacramento Bridge. It will also serve as a connection between the proposed river trail on both sides of the River.

Historically, the upper Sacramento River canyon was the site of several copper-smelting and hydraulic gold-mining operations. There is also two known ferry crossings in this stretch of the River. One is approximately 200 feet upriver from the proposed bridge crossing. Several of the iron rings and cable connections used for the ferry are still intact.

In 1985, a historical survey of old mining camps was prepared for the City of Redding. The mining camps are located just downriver from the project site on the west bank of the River.

Phases 1 and 2 of the Sacramento River Trail were constructed in the vicinity of known archaeological sites identified in Environmental Impact Report EIR-1-77. These sites were dedicated to the City of Redding for preservation at the time a large subdivision was recorded. These are no other known sites in the vicinity of the proposed project.

j. Traffic/Access

The Sacramento River Trail is served by three major points of access: Keswick Dam Road, Benton/Riverview Drive, and Quartz Hill Road.

Keswick Dam Road crosses over Keswick Dam and currently serves approximately 1,300 vehicles per day. Keswick Dam is operated by the U. S. Bureau of Reclamation, which is proposing to construct an expanded visitor parking area adjacent to the west side of the dam. The parking area is intended to serve fishermen, hikers, and other users of the proposed project.

Benton/Riverside Drive and Quartz Hill Road currently serve as access to the City's regional parks (Lake Redding and Caldwell Parks) just downstream from the proposed project. Ultimately, the trail will connect into the City's regional parks and associated parking lots. The trail project also includes the construction of a parking lot on the south side of the River near the Diestelhorst Bridge. Current traffic counts on Benton/Riverside Drive is approximately 2,200 vehicles per day. Quartz Hill Road, a four-lane major thoroughfare, is experiencing approximately 5,000 vehicles per day.

Keswick Dam Road, Benton Drive, and Riverview Drive are all two-lane roads with a carrying capacity of 8,000 vehicles per day. Quartz Hill Road has a rated capacity of 22,000 vehicle trips per day.

An existing dirt road provides limited access from Keswick Dam Road to the west bank of the River in the vicinity of the proposed bridge. Concrete barriers have and will prohibit vehicle access to the trail and bridge. At the request of the Bureau of Reclamation, this access was maintained and a turnaround area provided for vehicle access.

k. Fire Protection

The City of Redding Fire Department has responsibility for structural and wildlife suppression within the City and also provides rescue and emergency services. Redding fire stations serving the area are located on Oasis Road east of the River and the downtown Redding station.

These stations are 2.5 and 1.0 miles, respectively, from trail entrances. It is anticipated that these stations can continue to serve the area currently in the City and additional areas that may annex.

Fire protection outside of City jurisdiction is the responsibility of the California Department of Forestry/Shasta County Fire Department, which has fire-fighting equipment at stations in the vicinity of the trail.

3. ALTERNATIVES

The environmental assessment prepared in 1984 for the entire Sacramento River Trail system identified six alternative trail routes. These alternative routes are attached. The conclusion of the previous assessment was that Alternative 6 created some unavoidable adverse impacts in the area of traffic safety, drainage, and aesthetics. As a result, the project was revised to eliminate Alternative 6. A negative declaration was adopted for Alternatives 1 to 5 with Alternative 1 being preferred, subject to the availability of funding. Alternatives 1, 2, and 3 include the construction of a pedestrian bridge. As the alternative of no project (i.e., Alternatives 4, 5, and 6 of the previous assessment) has already been reviewed, the alternatives in this report will focus on specific bridge alignments, construction type, and bridge profiles.

a. Bridge Alignments

Alignments 1 and 2 - The preliminary engineering report identified two alternative alignments in close proximity to each other. They are essentially the same alignments on slightly different angles to the west bank. While Alignment 2 provides a slightly shorter clear span, Alignment 1 provides for less complicated pier and abutment footings. Alignment 1 would be less costly overall and provide better structural integrity. It would also require less pier construction in the 100-year floodplain.

Alignment 3 - Is located 500 feet upstream of Alignments 1 and 2 and approximates the historically significant Waugh's Ferry crossing. This location would increase the clear-span requirements to 150 feet. The total bridge length would stay approximately the same. Overall costs would increase as a result of the additional 500 feet of trail along the west bank. The additional clear span may implicate a different bridge type affecting appearance and overall cost. Given the rocky terrain, the additional 500 feet would increase costs by approximately $20,000 to $25,000. This alignment would not be visible from any homes in the river canyon.

Alignment 4 - Is the site of the terminus of the existing trail along the west bank. The clear span is approximately 280 feet with a total span of approximately 400 feet. This alternative would eliminate the need for additional trail on the west bank. Construction costs for bridge construction is on a per lineal foot basis. This location is the least desirable as it is the most expensive, increasing costs by $150,000± without increasing the length of the trail. It is also more visible to several homes with a view of the river canyon.

It was the recommendation of the consulting engineer that Alignment 1 would be utilized based on overall cost, bridge profile, and trail alignment relative to the bridge approaches.

b. Construction Type and Bridge Profile

Six different bridge alternatives have been evaluated for use to connect both sides of the River:

(1) Precast prestressed concrete girders
(2) Steel cable suspension bridge
(3) Wood truss
(4) Wood girder
(5) Steel truss
(6) Steel girder

All six were evaluated in terms of initial cost, usable life, maintenance, durability, and visual profile or aesthetics. The consulting engineer recommended that the first three be eliminated due to the high cost. The last three are competitive as to cost. They are also comparative in visual profile. Plate No. 2 illustrates a typical profile that can be obtained utilizing either wood girder, steel truss, or steel girder construction.

Glulam wood girder bridges are the least expensive and perhaps the most aesthetically pleasing of the three. Unfortunately, with Redding's hot dry summers and wet winters, wood will have higher maintenance costs and a shorter life span. Its remote location also would subject a wood structure to possible irreparable damage due to fire or vandalism.

Both the steel girder and steel truss are comparable in initial cost durability, maintenance, and aesthetics. While slightly more expensive than glulam wood girders, they would out perform wood over a long time span. From a visual aesthetics basis, a steel girder design would provide a bridge profile most similar to the wood glulam. From a distance, the difference between the three would be difficult to distinguish, especially if painted to blend into the rocky canyon.

c. Potential Impacts and Mitigation Measures

The previous environmental assessment prepared in 1984 adequately addressed the following impacts related to the overall trail system:

Aesthetics of the trail on the river corridor;
Grading and soil erosion;
Wildlife habitat;
Land use;
Transportation/circulation; and
Wildland fire protection.

(1) Aesthetics of the bridge on the river corridor

The construction of the bridge will alter the visual impacts of the river corridor as it now exists. While it is an unavoidable impact, in staff's opinion, it is not a significant one. This opinion is based on its proposed location, the low profile design and the existence of other man-made facilities in the vicinity.

172
MINUTE PAGE 2:12

As previously mentioned, this section of the Sacramento River is visually pleasing but cannot be considered a completely natural setting. The preferred bridge location (Alignment 1) is between Keswick Dam and high-voltage transmission lines that cross the River near Salt Creek. The bridge is in closest proximity to the Dam. The most prominent views of the structure will be from the nearby sections of the abandoned rail bed and the road surface of Keswick Dam. The bridge will not be visible to users of the trail until approximately one-eighth mile downstream on the west bank and one-half mile downstream on the east bank. The bridge will not be visible from private property in the canyon with the exception of three of four lots in the Sunset West Subdivision. These lots are over one mile downriver. Views of the river canyon from these lots are already impacted by high-voltage transmission lines and towers at much closer proximity.

The attached Plate No. 2 illustrates how the low-profile bridge design conforms with the banks of the river canyon. The height of the bridge deck above the River varies with the releases out of Keswick Dam. Releases vary drastically between 4,000 cfs and 79,000 cfs. A study of historical releases over a 24-year period indicate that average flows vary between 7,500 and 15,000 cfs.

Based on the average releases, the height of the bridge deck above the river level is estimated to vary between 25 and 30 feet.

The visual impacts identified can be mitigated to an acceptable level by maintaining a low-profile bridge compatible with the elevation of natural and man-made banks of the River and utilizing materials and colors compatible with the rock outcroppings and woodland chaparral characteristic of the area. Also, upstream and downstream views of the bridge at the preferred alignment will be partially or completely blocked by vegetation, the bends in the River, or the high, narrow canyon walls.

(2) <u>One-Hundred Year Floodplain and Keswick Releases</u>

The bridge will be constructed a minimum of two feet above the 100-year floodplain of the Sacramento River, which is elevation 515, as illustrated on Plate No. 2. The two center piers are constructed on rock outcroppings at the edge of the river bank at elevation 496±. The abutments at each end of the bridge are at elevation 510. This encroachment into the floodplain does not constitute a substantial impact based on the following:

- The channel is well defined and bordered by rock outcroppings, the flood releases are well controlled, and there is little vegetation or debris that could be washed against the abutments and impede flood releases.

- The piers are narrow and designed to minimize obstruction of flood flows.

CALENDAR PAGE 173
MINUTE PAGE 2113

- Based on a 24-year history of releases out of Keswick, the 79,000 flood release has occurred less than .005 percent of the time. Also, that high of a release rarely lasts more than 24 hours at a time.

- The abutments, while technically in the 100-year floodplain, are areas of backwash and not flood flow. The existing rock outcroppings already act as holding ponds for flood waters.

- According to the Bureau of Reclamation, the structure would not impede the higher releases enough to impact production of hydroelectricity or flood-control measures utilized.

(3) Construction Impacts

(a) Grading and Soil Erosion. Project effects on vegetation and wildlife during construction will be limited to areas disturbed (grading and filling) for the east and west approaches to the bridge. There will be a minor amount of increased runoff and erosion associated with construction of the project. These impacts will be minimal as the approaches, bridge abutments, and bridge piers will be constructed in natural outcroppings with little disturbance to existing soil in the area. The west bank will incur more soil disturbance than the east bank. Mitigation measures will include replanting the slopes in the area of fill. A minor drainage crossing on the east bank will include water velocity attenuation devices as part of the necessary culvert construction.

(b) Hydrology. There will be no construction impacts on the discharge regime of the Sacramento River. Refer to previous section on 100-year floodplain for more detail.

(c) Recreation. During the six-month construction period, the upper reaches of the existing trail may be blocked off to provide working space and physical separation between the project site and trail users. The dirt access road to the east bank of the River will also be blocked off to recreation users to allow safe access for construction equipment. These areas will be adequately signed to notify recreation users entering the area.

(d) Noise. Heavy-equipment operation will generate loud on-site noises of up to about 95 decibels at 50 feet. The nearest residences are approximately 2,200 feet from the construction site and will not have line of site. At that distance, it is anticipated that construction noises will be noticeable from outside the residences. They will probably not be noticeable from inside the residences. Construction activity will be limited to the hours of 7 a.m. to 7 p.m.

If blasting is required to provide a suitable pier foundation in the rock outcroppings, residences in the area will be notified in advance of the nature and frequency and signs posted to prepare trail users to expect blasting noise. This activity will be of short duration.

(e) Visual. The activity of construction crews and equipment near the construction site will be evident to trail users and people driving or walking across Keswick Dam. This change in visual quality will initially be objectional to most trail users.

However, most people will eventually accept the temporary change as necessary to complete the trail loop. There will also be an interest in observing the construction activity. The visual impact will be the highest during use of large cranes on both sides of the River to lift into place the three separate bridge spans. This activity is also likely to generate the most interest in observation and to varying extents may override adverse reactions to the temporary change in character of the area.

(f) Dust. Construction equipment will access the east bank of the River utilizing an existing dirt road creating a potential dust problem. The mitigation measures proposed include utilizing a dust palliative. Only one house at the road's intersection with Keswick Dam Road will be impacted. Mitigation measures at this location will include more frequent application of a dust palliative or refurbishing the existing gravel on the road at that location.

(4) <u>User Benefit and No Project Impacts</u>

Since the City first began construction in 1983, public use and community support has been widespread. In addition to local, State, and Federal agencies, several special-interest groups have supported the development of the trail. A few of the many news articles on the trail are attached, illustrating the trail's popularity.

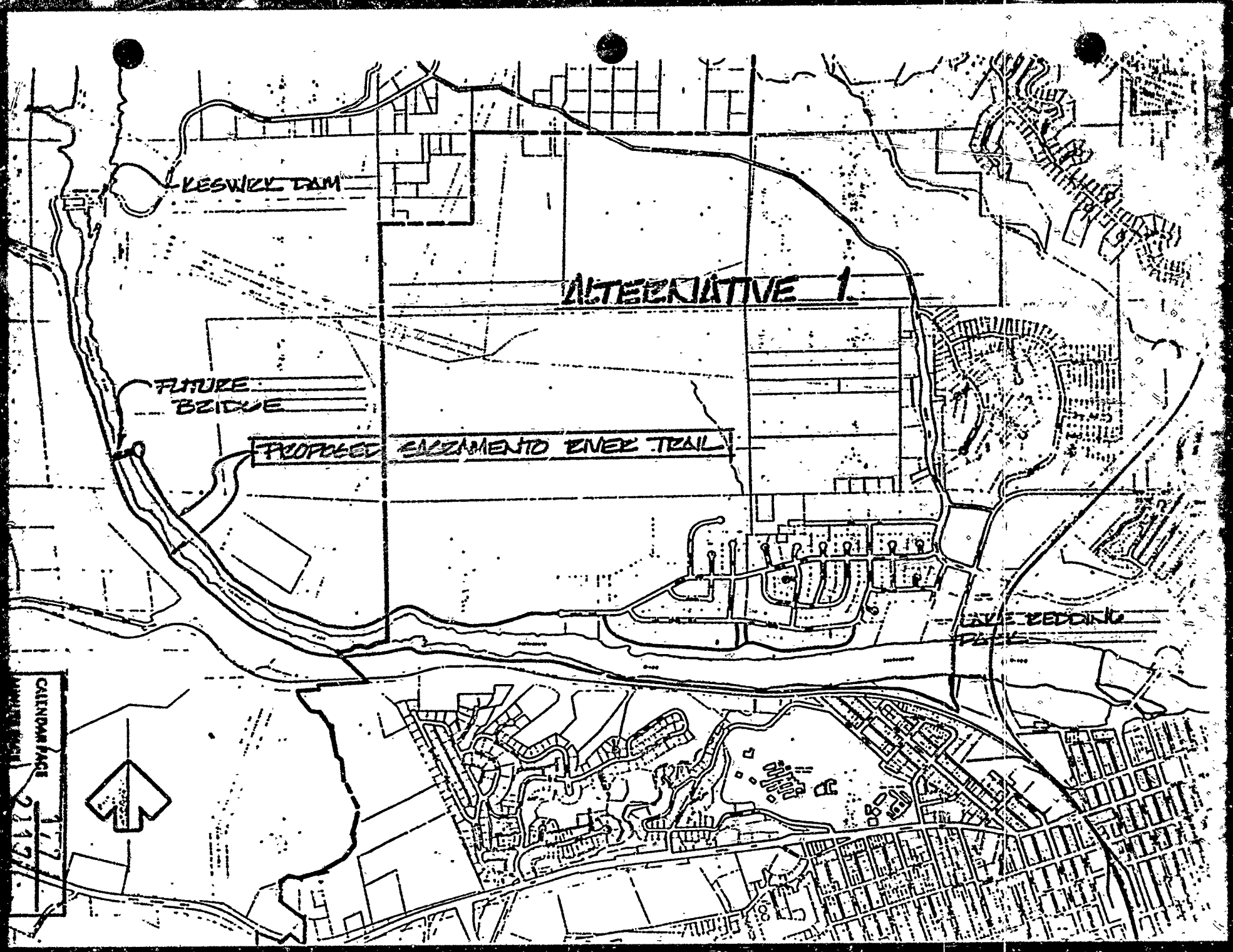
Without the river crossing, finishing the trail loop, the full benefit of the trail will not be obtained. Creating a looped system will encourage one-way use of the trail, thereby reducing congestion and increasing benefit of the recreation experience. Each bank of River provides a unique perspective of the wide range of habitat, wildlife, places of historic value, and vistas available in the river canyon. To maximize the public use of this great natural resource requires that the trail be a looped system utilizing both sides of the River.

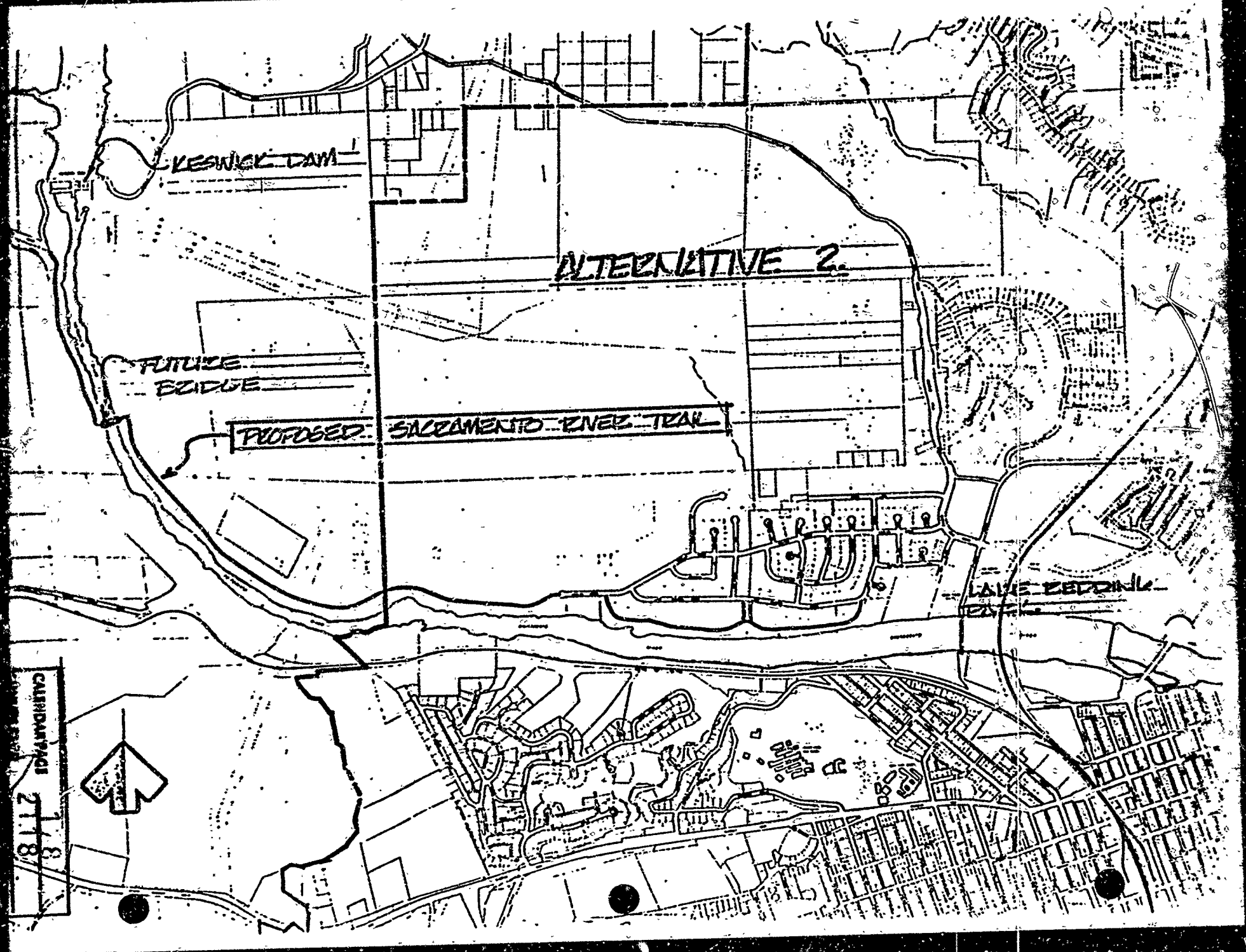
4. INITIAL STUDY CONCLUSION

It is the staff's opinion that the initial study establishes that all potential adverse affects are mitigated to a point where no significant environmental effects would occur as a result of any of the alternatives outlined in this study.

The impacts identified would be mitigated to the greatest degree by utilizing Alignment 1 and a low-profile bridge structure that blends into the rocky canyon.

CALENDAR PAGE 1.6
MINUTE PAGE 2116


LESWICK DAM
ALTERNATIVE 1
FUTURE BRIDGE
PROPOSED SACRAMENTO RIVER TRAIL
LAKE REDDING PARK
CALENDAR PAGE 2117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FUTURE BRIDGE
PROPOSED SACRAMENTO RIVER TRAIL
LAKE REDDING PARK
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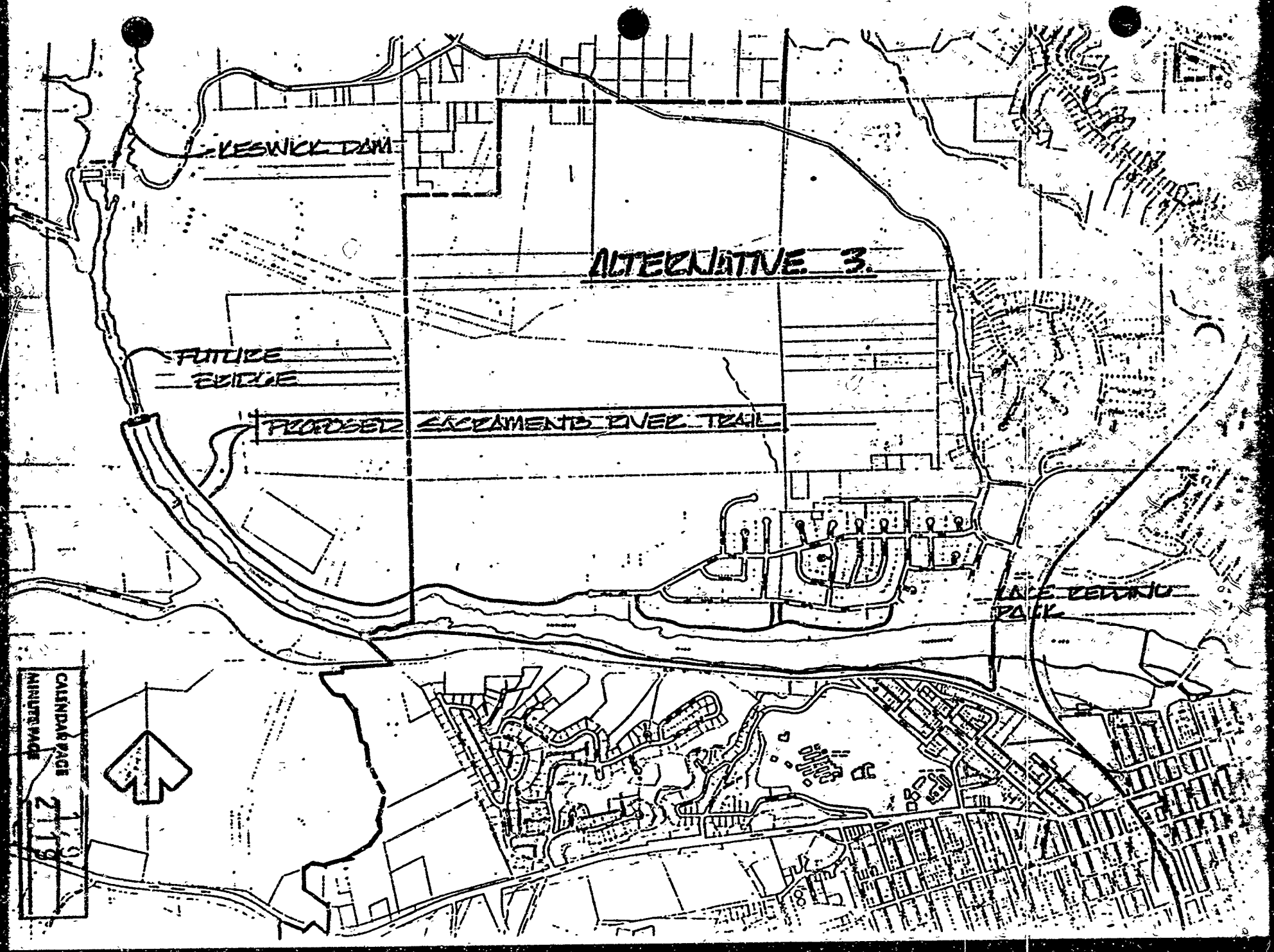
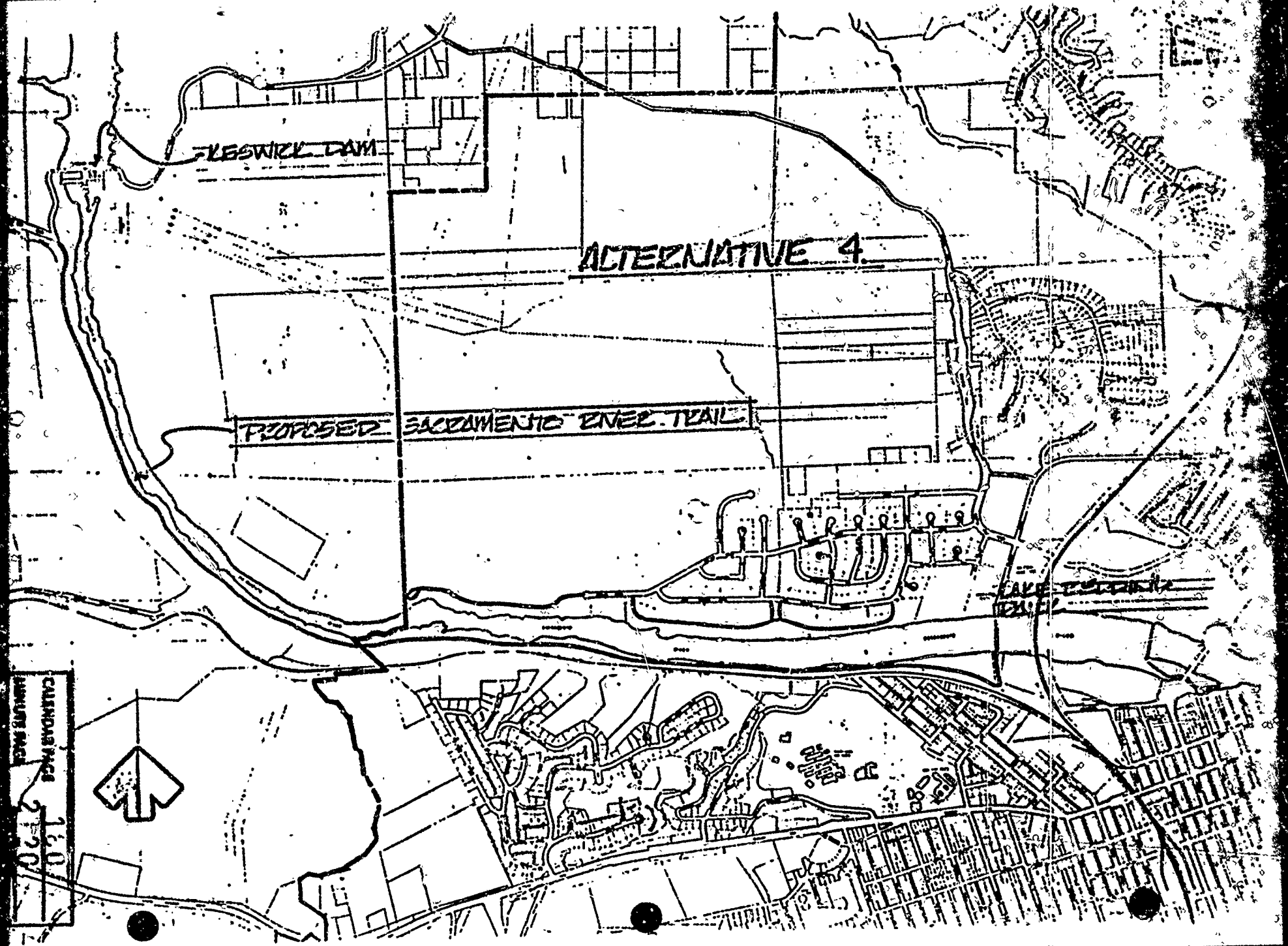


CALENDAR PAGE 119
MINUTE PAGE 2119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ALTERNATIVE 4
PROPOSED SACRAMENTO RIVER TRAIL
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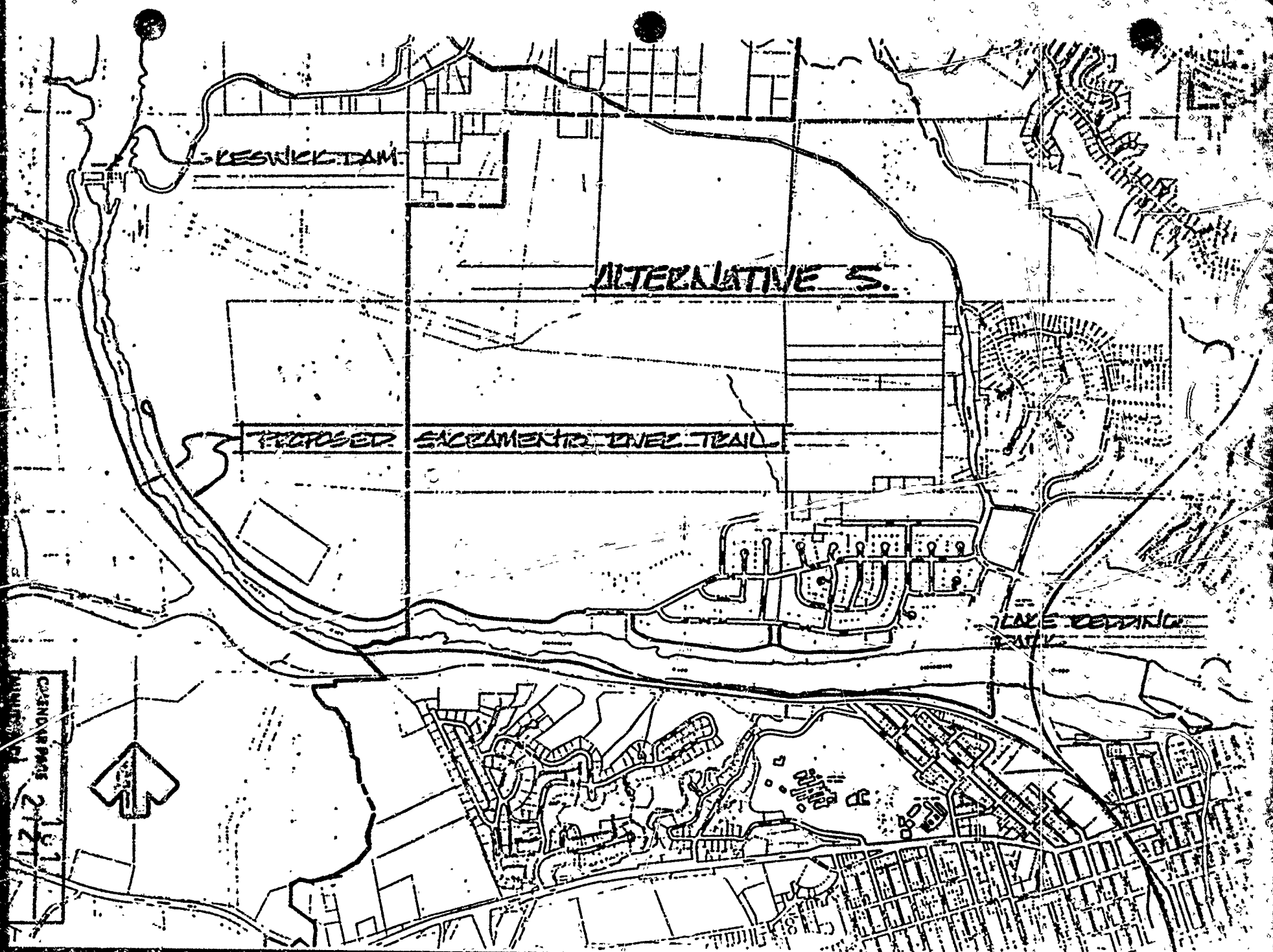
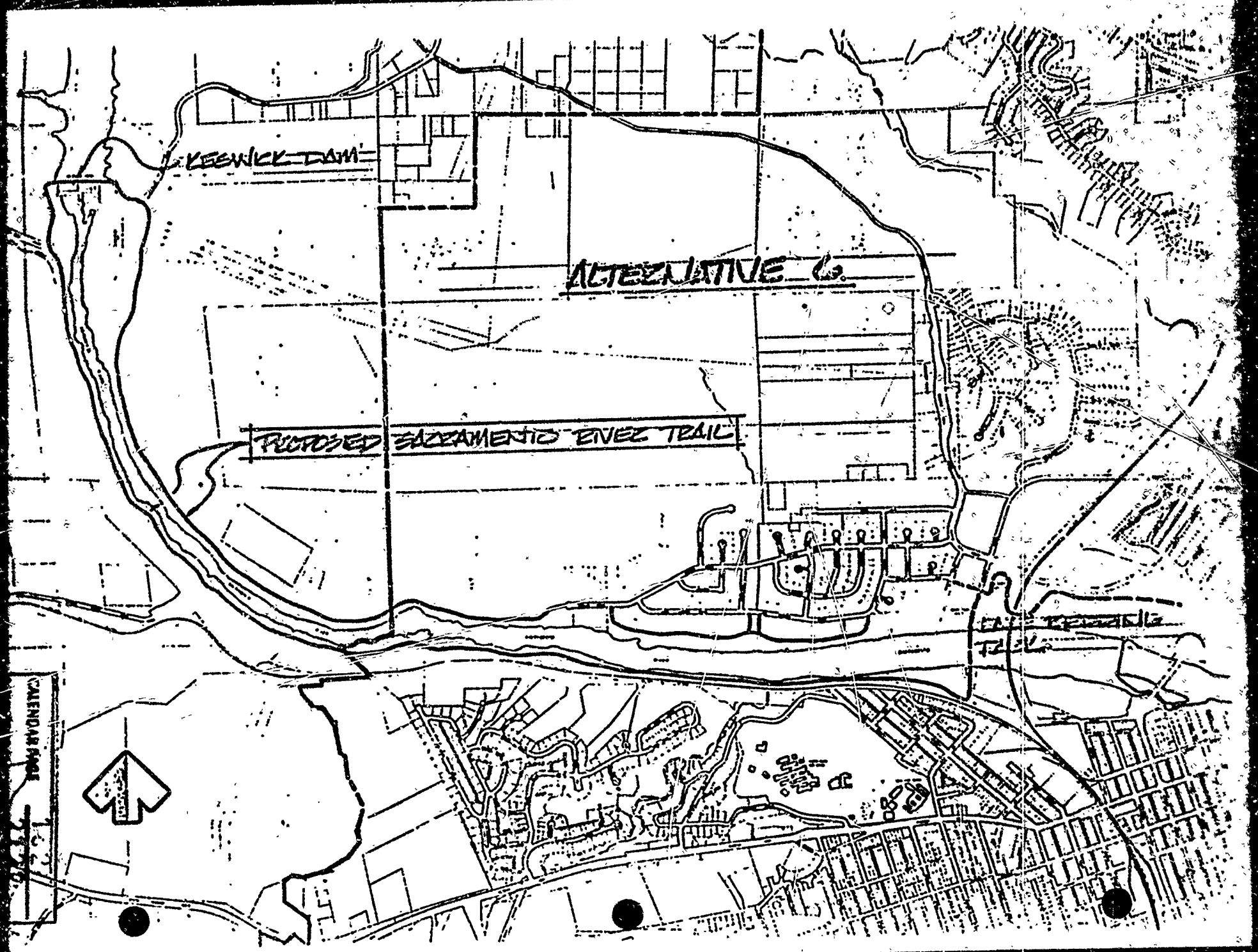

KESWICK DAM
ALTERNATIVE 5.
PROPOSED SACRAMENTO RIVER TRAIL
LAKE REDDING PARK


KESWICK DAM
ALTERNATIVE 6
PROPOSED SACRAMENTO RIVER TRAIL
CALENDAR PAGE

PACE ENGINEERING
Professional Associated Consulting Engineers Incorporated

October 28, 1986

19.77

City of Redding
Planning Department
760 Parkview Avenue
Redding, CA 96001

Attention: Terry Hanson

Gentlemen:

Subject: Sacramento River Trail Bridge

We have completed our preliminary engineering study for the pedestrian bridge across the Sacramento River below Keswick Dam. The primary purpose of the bridge is to link the existing trail on the east side of the river with a future trail on the west. The added function of carrying a 24-inch water main plus two 6-inch electrical conduits was also considered.

LOCATION

About 3,000 feet below Keswick Dam the river narrows to its shortest width. This point is 300 feet upstream from the present terminus of the trail on the east side. Alternate No. 1 crosses at a slight skew to the river compared with the crossing site of Alternate No. 2. Alternate No. 1 appears more favorable because of the better rock outcropping on the west side. A plan view of the proposed crossing is shown on Plate No. 1 of the Appendix. An elevation of the bridge at the Alternate No. 1 location is shown on Plate No. 2 in the Appendix. The height of the bottom of the bridge is shown to be 2 feet above the level of 79,000 cfs. This clearance is presumed sufficient since there is a small debris load and a well controlled flood level.

BRIDGE CRITERIA

A width of 10 feet was selected by the Planning Staff. The loading criteria considered was the bridge dead load plus an 85 pound per square foot pedestrian live load, an accepted standard for a bridge of this size. In addition, a line load of 250 plf was used for the 24-inch waterline. The two 6-inch

CALENDAR PAGE 1.23
MINUTE PAGE 2.23

electrical conduits were not considered to have a significant loading contribution. The above loading criteria would permit an occasional passenger vehicle or pickup truck to cross safely also. A typical bridge section is illustrated on Plate No. 2 of the Appendix.

BRIDGE TYPES

In our study of bridge alternatives we considered six types. They were as follows:

- Precast prestressed concrete girders
- Steel cable suspension bridge
- Wood truss
- Wood girder
- Steel truss
- Steel girder

After a preliminary cost study the first three were eliminated because of their higher costs. The last three were competitive with respect to cost, and are discussed in the following paragraphs in greater detail. A cost summary is given on Plate No. 3 of the Appendix. Brochures on the wood girder and steel truss alternatives are included at the end of the Appendix.

WOOD GIRDER

A wood girder bridge of this size would consist of Glulam girders, wood rails, and a wood or lightweight concrete deck. Western Wood Structures, Inc., in Beaverton, Oregon, designs, manufactures and constructs several types of wood bridges including wood girder bridges of this size. All wood is pressure treated to reduce decay. Wood bridges look very good, are lightweight, and have a lower initial cost than the other alternatives. However, because of the local weather conditions; hot, dry summers and cool, wet winters, we believe wood would have higher maintenance costs and a shorter lifespan than the other alternatives. Due to the remote location of the bridge, there is a very slight but real possibility that the bridge could be set afire. A brush fire burning up the canyon, a campfire under or on the bridge, or an arsonist could cause irreparable damage to a wood bridge. Also being wood it is subject to vandalism by wood carvers. This type of destructive activity would be virtually impossible to prohibit in the remote setting.

STEEL TRUSS

Several companies manufacture steel truss bridges. We contacted Continental Bridge Company of Alexandria, Minnesota which has an

office in Alamo, California (Bay Area). They design and fabricate the bridge at their facility and truck it in sections to the site. The top of the steel truss is above the deck and acts as the guardrail. The deck could be made of wood or concrete. Concrete is the preferred choice as it is permanent and not subject to fire damage or defacing to the extent wood materials are. The bridge could be constructed of Cor-Ten Steel at approximately the same price as a painted steel bridge and eliminate the maintenance cost of painting. Cor-Ten Steel forms a hard coating of rust on its surface as it weathers which resists further corrosion. Its major advantage is that it has a long life without maintenance. The major disadvantage is that with our relatively non-corrosive environment it takes a few years for the coating to form. In the meantime the appearance is ugly and the rust comes off on hands and clothing that brush against it. Cor-Ten is more expensive than regular steel but is competitive for certain companies to use because they buy in large quantities.

STEEL GIRDER

The third alternative is a painted steel girder bridge. It could be fabricated and installed by local contractors. The steel girder could be used for the side and rail as well as being the major structural component of the bridge. A wood or concrete deck could be used, but again, concrete is the preferred choice.

PROJECT ADMINISTRATION

Because of the number of viable options, we recommend bidding the project on a design/construct basis. The Contractor would be responsible for the design within the design and construction parameters set forth in the invitation to bid. The parameters would include: type of deck, height of rail, maximum opening size in side of rail, length and width of bridge, design loads, time schedule, painting, etc. The bidders should be provided with a foundation report with the bid package and specifications.

FURTHER CONSIDERATIONS

Additional approvals need to be acquired from all the State, Federal and Local agencies and citizen groups with concern over the river environs. These involvements are probably more concerned with a bridge per se than a specific bridge type. They would also be concerned with the bridge approaches and the effects they would have on impeding the flood release flows. Two additional engineering studies are recommended. First is a hydraulic study to analyze the above flood flow effects. The second study is a foundation study to determine the suitability

MINUTE PAGE 2125

and quantitative strength of the rock foundations for the support of the bridge. Also, the City needs to determine if the bridge should be designed for the 24-inch waterline, and, if so, what provisions will be made during construction to accommodate the future waterline installation. Finally, the City needs to evaluate the need for safety rails, or fencing, to restrain people from jumping or falling off the bridge. Some bridges do provide restraint measures, others do not.

We appreciate the opportunity to have an input on the Sacramento River Trail bridge. We would be pleased to assist you in preparing the bid documents and specifications. Please call if you have any questions.

Very truly yours,

Larry E. Boisclaire

Larry E. Boisclaire
Principal Engineer

L1-6/JCE/LEB/kbu

CALENDAR PAGE 116
MINUTE PAGE 2126

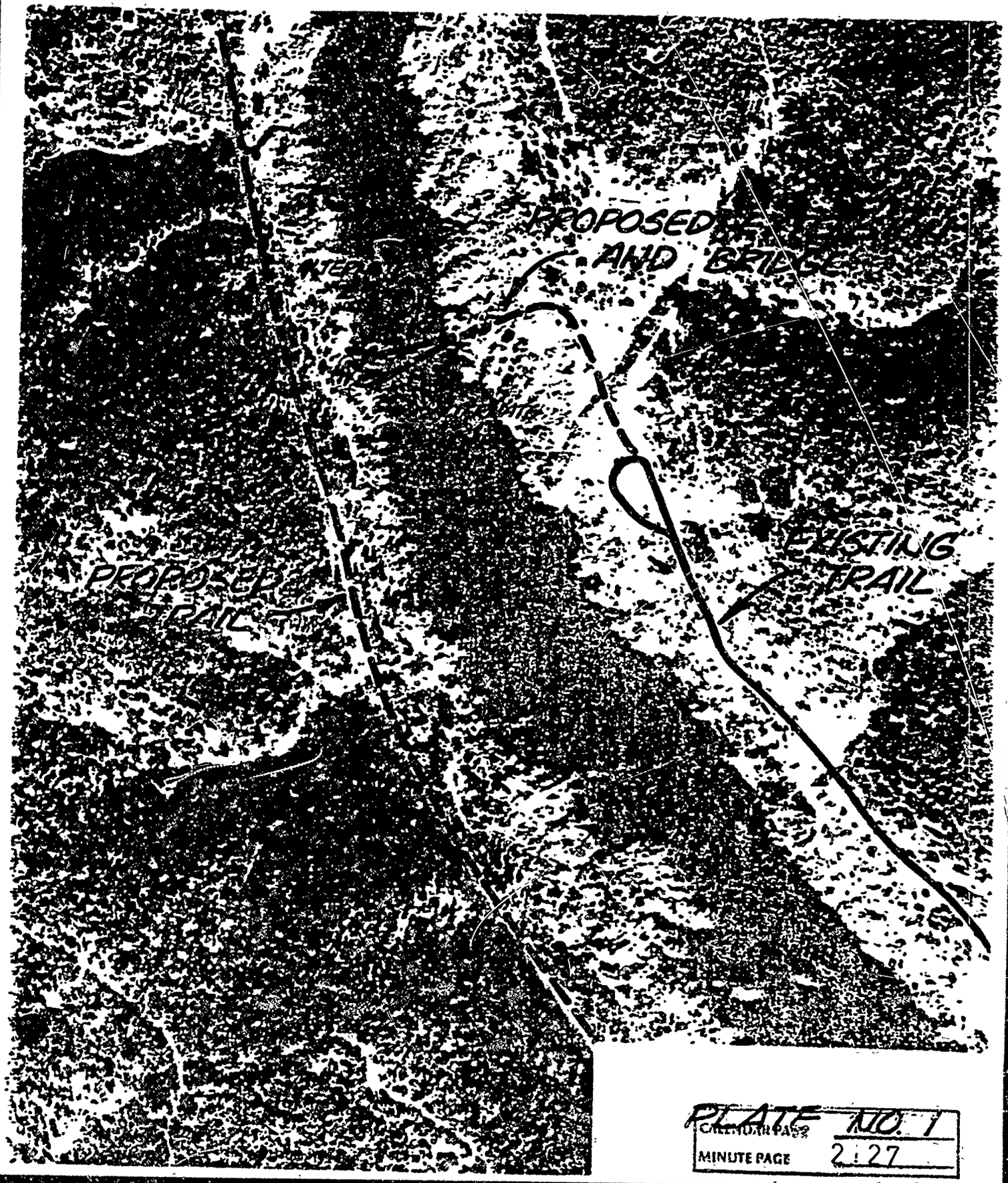
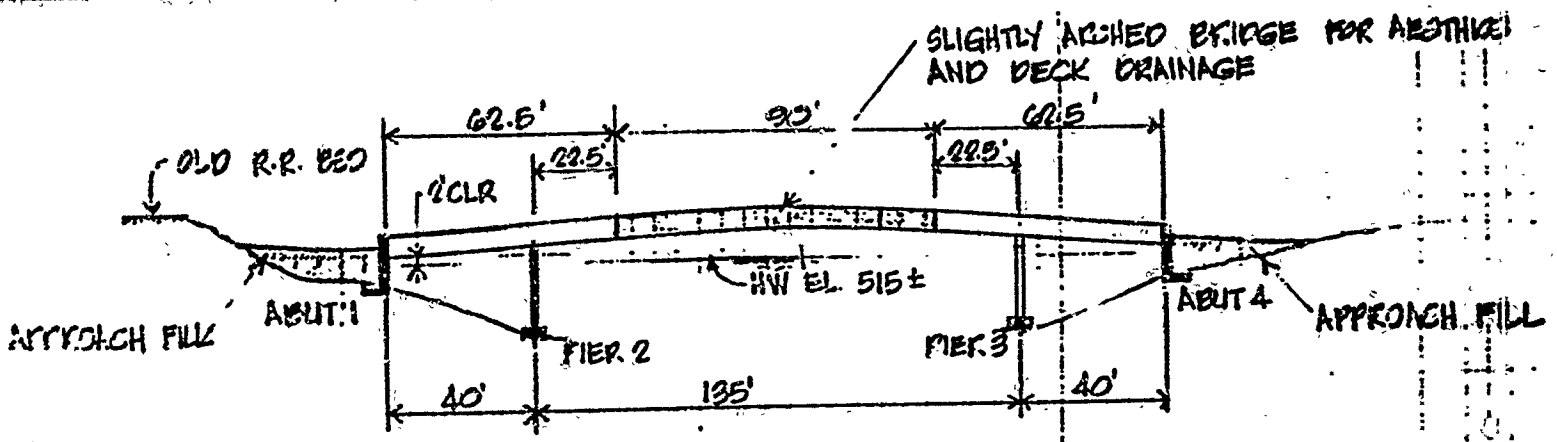


PLATE NO. 1

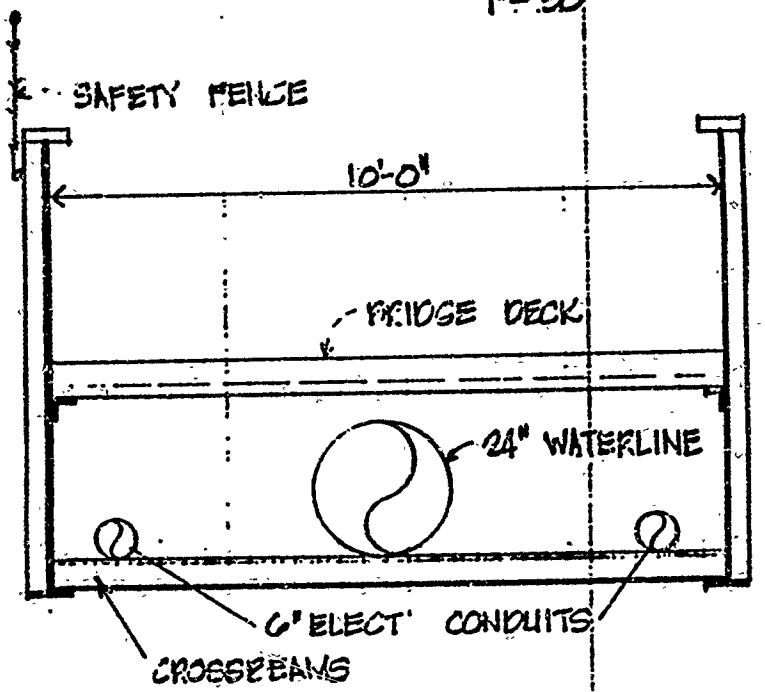
CALENDAR PAGE

MINUTE PAGE 2:27



SOUTH ELEVATION

1" = 50'



TYPICAL SECTION

3/8" = 1'-0"

PLATE No. 2

CALENDAR PAGE 1
MINUTE PAGE 2128

COST COMPARISON FOR 3 ALTERNATIVES

BRIDGE TYPE	STEEL GIRDER	STEEL TRUSS	WOOD GIRDER
Girder Material	49,000	60,000	52,000
Girder Inst.	25,000	25,000	25,000
Wood Deck	8,000	8,000	8,000
Conc. or Grating	24,000	24,000	24,000
Painting	11,000	--	--
Footing	22,000	22,000	22,000
Pier 2 & 3 Towers	18,000	18,000	18,000
Foundation Eng.	6,000	6,000	6,000
Hydraulic Eng.	3,000	3,000	3,000
Bridge Eng.	8,000	--	--
Specs & Admin by C.O.R.	--	--	--
—	149,000	142,000	134,000
With Conc. Deck	165,000	158,000	150,000

NOTE: The incremental cost for providing sufficient carrying capacity and attachment provisions for the 24-inch waterline is estimated at $10,000. This cost is included in the above estimate.

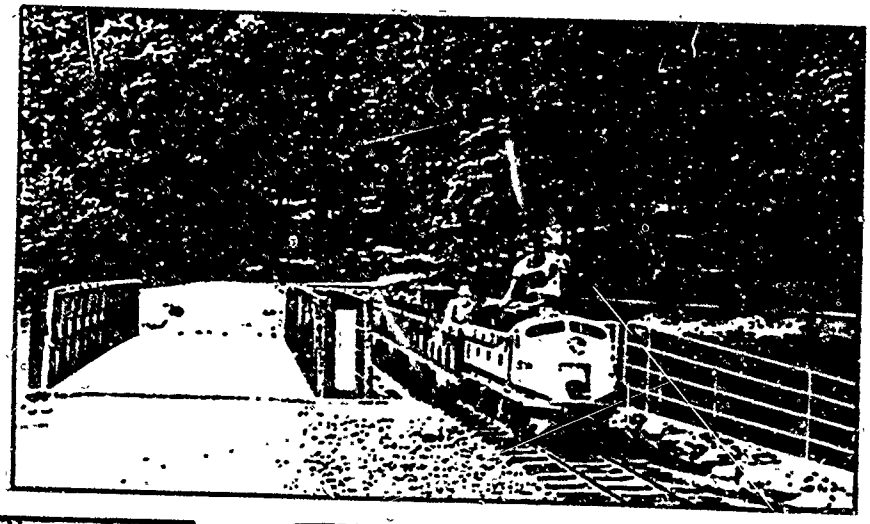
CALENDAR PAGE 169
MINUTE PAGE 2129

CONTINENTAL CUSTOM BRIDG :OMPANY

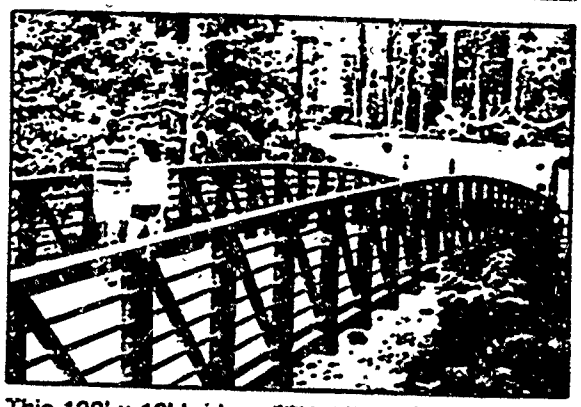
Recreational Bridges

Elevated walkway and observation gazebo provides visitors with a view of Siberian Tigers at The Minnesota Zoological Gardens.

These two painted bridges with a unique application, are located in Fairfax County, Virginia.



This 202-foot long span across the Red River joins the 18-holes of the Boise de Sioux Golf Course located in the states of both Minnescta and North Dakota.



This 100' x 10' bridge with life-safety rails every s[illegible] Busch Gardens in Williamsburg, Virginia.

MINUTE PAGE 2130

Bridge Specifications

(☐ Check Items Required)

GENERAL

These specifications are for a fully engineered clear span bridge of steel construction and shall be regarded as minimum standards for design and construction. Bridge (or bridges) shall be designed and manufactured by Continental Custom Bridge Company, Route 5, Box 178, Alexandria, Minnesota 56308 - Inside Minnesota 1-800-572-7002; Outside Minnesota 1-800-328-2047.

SPAN AND WIDTH

1. Clear span length (straight line dimension) shall be _____ ft. _____ inches.
2. Bridge inside deck width shall be _____ ft. _____ inches.

ENGINEERING

1. Uniform Live Load Selection:
   - ☐ 1.1 Bridges up to 50 feet in length shall be designed for a minimum uniform live load of 100 pounds per square foot. This loading will satisfy all light and high density crowd requirements.
   - 1.2 Bridges over 50 feet in length shall be designed for either one of the following:
     - a. For light recreation usage (golf courses, parks, bicycle crossing, hiking trails, equestrian crossings, etc.) bridges shall be designed for a minimum live load of 60 pounds per square foot.
     - b. For high density crowd loads (building exits, school crossings, highway crossings, festival observations) bridges shall be designed for 100 pounds per square foot.
2. Vehicle Load Selection:
   - 2.1 Bridges with an inside width less than 6'-0" shall be designed for a 5,000 pound vehicle.
   - 2.2 Bridges with an inside width of 6'-0" or greater:
     - ☐ a. For occasional passenger vehicle use, golf carts, recreational vehicles, pickups, ground maintenance vehicles (tractors, mowers, trail groomers, etc.) the vehicle load shall be 10,000 pounds plus 30% impact. The load shall be distributed as a four-wheel vehicle with 80% of load on the rear wheels. The wheels shall be spaced for a pickup truck driving down the center of the bridge.
     - ☐ b. For heavier vehicles (fire trucks, concrete trucks, moving vans, construction vehicles) _____ pounds gross weight vehicle (please note loading required). These bridges should be posted with weight restrictions and loading should be strictly enforced.
3. Custom loading conditions are available upon request for your equipment support, material handling, pipe support, and specialized walkway projects.
4. Allowable Design Stresses:
   - ☐ 4.1 All bridge applications, except for Paragraph 2.2b, shall be designed in accordance with the "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings by the American Institute of Steel Construction" (AISC)—latest edition.
   - ☐ 4.2 Emergency use and highway vehicular bridges shall be designed in accordance with the "Standard Specifications for Highway Bridges" by the American Association of State Highway and Transportation Officials (AASHTO)—latest edition.

GEOMETRY

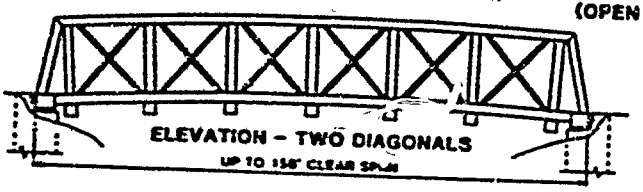
- ☐ 1. Low Profile Design
- ☐ 2. High Profile Design
- 3. Railing Height:
  - 3.1 Railing height (top of truss top chord) shall exceed 42" as specified by the American Association of State Highway and Transportation Officials.
  - ☐ 3.2 Railing height to be _____ ft _____ inches above deck
- 4. Diagonals:
  - ☐ 4.1 One diagonal per panel.
  - ☐ 4.2 Two diagonals per panel.
- 5. Camber:
  - ☐ 5.1 Bridge camber at center of bridge span shall be 2 ½% of the total bridge span. This produces localized deck slopes that are approximately equal to the maximum handicap access slop of 8.33%.
  - ☐ 5.2 Bridge camber at center of bridge span shall be _____ ft. _____ inches.
  - ☐ 5.3 Flat Bridges-Bridge shall be cambered to offset full dead load deflections.
- 6. Bridges in excess of 65'-0" in length may be spliced for shipment.
- 7. Bridges can be provided to accommodate abutment elevation differences.

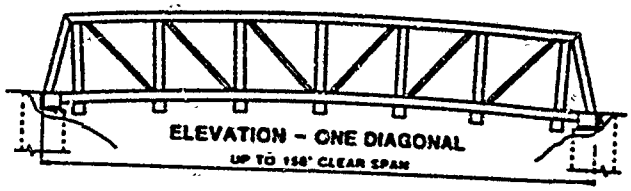
MATERIALS

1. Bridges which are not to be painted shall be fabricated from high strength, self-weathering, low alloy, atmospheric corrosion-resistant ASTM A847 cold-formed welded square and rectangular tubing, and ASTM A588, ASTM A606, or ASTM A242 plate and structural shapes (Fy=50,000 psi).
2. Bridges which are to be painted shall be fabricated using ASTM A500 Grade B (Fy=46,000 psi) structural tubing, and/or ASTM A36 (Fy=36,000 psi) structural steel shapes.
3. Field splices shall be fully bolted with ASTM A325 Type 3 high strength bolts in accordance with "Specifications for Structural Joints Using ASTM A325 or A490 Bolts".

LOW PROFILE DESIGNS

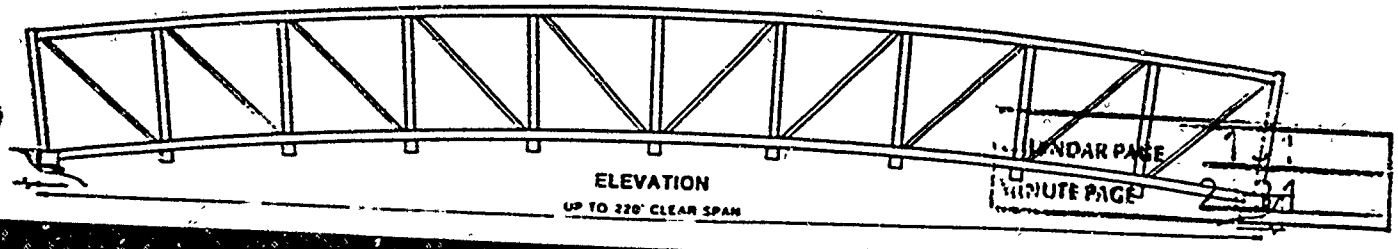
(OPEN TRUSS)





HIGH PROFILE DESIGNS

(BOX TRUSS)



CALENDAR PAGE 1
MINUTE PAGE 231

4. All welding shall utilize E80 series electrodes which have the same weathering characteristics as corrosion-resistant steel.
5. Deckings:
   5.1 Wood decking shall be West Coast Region Douglas Fir select structural planks graded according to WCLB standard grading. Decking to be treated to AWPA standard P-5. Preservatives utilized shall be either Ammoniacal Copper Arsenate (Chemonite or ACA) or Chromated Copper Arsenate (CCA). Decking shall be treated to a total absorption of 0.40 pounds per cubic foot of wood, or to refusal.
   - ☐ a. Nominal 2 x 10 planks for pedestrian and 5000 pound vehicle loads.
   - ☐ b. Nominal 3 x 12 planks for equestrian and 10,000 pound vehicle loads.
   - ☐ c. Nominal 4 x 12 planks for heavy vehicle loads.

   5.2 Steel Deckings:
   - ☐ a. Open bar grating, galvanized.
   - ☐ b. Open bar grating, self-weathering steel.
   - ☐ c. Interlock-type grating, galvanized.
   - ☐ d. Four-way safety plate, galvanized.

   5.3 Concrete Deckings:
   - ☐ a. Galvanized form deck, shop attached, for owner's use in pouring reinforced concrete deck.

   5.4 Asphalt Deckings:
   - ☐ a. Galvanized bridge planks, shop attached, for owner's use in applying an asphalt surface.
6. Steel Attachments:
   - ☐ 6.1 Continuous life safety rails (maximum clear opening of _____ inches).
   - ☐ 6.2 Continuous 6" high toe plate, 1½" above deck level.
   - ☐ 6.3 Continuous skirting to conceal floor beams.
   - 6.4 Custom handrails.
7. Wood Attachments:
   - ☐ 7.1 Nominal 2 x 6 wood rub rails on inside of bridge, placed 32 inches above top of deck.
8. Other Possible Customer Options:
   8.1 Vinyl coated or galvanized screening on sides and top.
   8.2 Acrylic dome or pyramid roofing.
   8.3 Acrylic or tempered glass siding.
   8.4 Steel or aluminum roofing and/or siding.
   8.5 Any other custom option per your requirements.

FABRICATION

1. Workmanship, fabrication and shop connections shall be in accordance with American Association of State Highway and Transportation Officials Specifications (AASHTO).
2. Welding operations shall be properly accredited experienced operators, each of whom shall submit satisfactory evidence of experience and skill in welding structural steel with the kind of welding to be used in the work and who has demonstrated the ability to make uniform good welds of the type required.

FINISHING

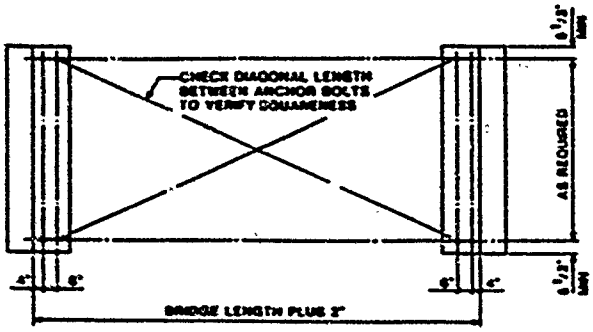
1. Painted Bridges:
   a. All exposed surfaces of steel shall be cleaned in accordance with the Steel Structures Painting Council Surface Preparation Specifications No. 6 Commercial Blast Cleaning, SSPC-SP 6-63.
   b. Primer coat and two finish coats shall be electrostatically applied.
   c. Bridges shall be provided with paint for touch-up after erection.
2. Self Weathering Bridges:
   All exposed surfaces of self-weathering steel shall be cleaned in accordance with Steel Structures Painting Council Surface Preparation Specifications No. 6 Commercial Blast Cleaning, SSPC-SP 6-63.

DELIVERY AND ERECTION

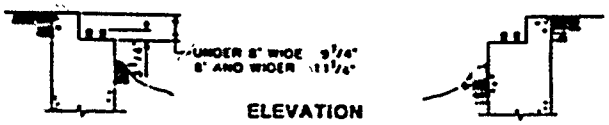
1. Delivery of the bridge (bridges) will be made to a location nearest the site which is accessible to over-the-road trucks, unless otherwise specified.
2. The Owner (Purchaser) will be responsible for unloading the bridge from the truck at the time of arrival. Continental Custom Bridge Company will notify the Owner in advance of the expected time of arrival at the site.
3. The Manufacturer or his representative will instruct the Owner or his representative in the proper lifting procedure for the unloading of the bridge. Care must be taken to prevent damage to the finish of the bridge.
4. The unloading, splicing (if required), and placement of the bridge will be the responsibility of the Owner. The procedure for bolting field splices will be given to the Owner by the manufacturer.

FOUNDATIONS

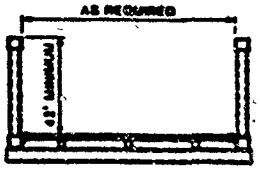
1. The Owner shall procure all necessary information about the site and soil conditions. Soil tests shall be procured by the Owner, if required.
2. Information as to bridge support reactions, anchor bolt location and placement will be furnished by Continental Custom Bridge Company.
3. Engineering design and construction of the bridge supporting foundation (abutment, pier or footing) will be the responsibility of the Owner.
4. Continental Custom Bridge Company will provide a complete design for foundations, or will provide a total design/build package for your crossing project. Please contact Continental Custom Bridge Company on their toll-free number for additional information or to discuss a complete in-place installation.



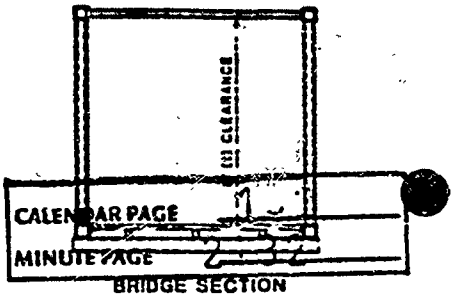
ANCHOR BOLT PLAN



ELEVATION



BRIDGE SECTION



BRIDGE SECTION

State of California

The Resources Agency

Memorandum

To : 1. A-38
Gordon F. Snow
Assistant Secretary for Resources
The Resources Agency
2. Terry L. Hanson
Planning and Community Development
City of Redding
760 Parkview Avenue
Redding, CA 96001-3396

From : THE RECLAMATION BOARD
Department of Water Resources

Date : MAR 2 1987

File No.:

Subject: Sacramento River, Trail-Pedestrian Bridge in Redding (SCH 84101608)

Staff for The Reclamation Board has reviewed the Environmental Assessment for the subject project and has the following comments.

It is noted that the bridge deck and trail will be above the elevation of the 100-year flood in the Sacramento River. This being the case, the project proponent will be required to file an application with The Reclamation Board for only the bridge crossing the Sacramento River. An application packet is attached for the convenience of the project proponent in preparing the application.

For more information, the project proponent should contact Ted Allen, Encroachment Control Section, 1416 Ninth Street, Room 455-8, Sacramento, California, 95814, telephone (916) 445-9225.

Thank you for the opportunity to comment.

RAYMOND E. BARSCH
General Manager
(916) 445-9454

Attachment

RECEIVED
MAR 11 1987
STATE CLEARINGHOUSE

CALENDAR PAGE 1[illegible]
MINUTE PAGE 2133

STATE OF CALIFORNIA—OFFICE OF THE GOVERNOR

GEORGE DEUKMEJIAN, Governor

OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET
SACRAMENTO, CA 95814

RECEIVED
MAR 16 1987
DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

March 13, 1987

Terry Hanson
City of Redding
760 Parkview Avenue
Redding, CA 96001

Subject: Sacramento River Trail-Pedestrian Bridge
SCH# 84101608

Dear Mr. Hanson:

The State Clearinghouse submitted the above named proposed Negative Declaration to selected state agencies for review. The review period is closed and the comments of the individual agency(ies) is(are) enclosed. Also, on the enclosed Notice of Completion, the Clearinghouse has checked which agencies have commented. Please review the Notice of Completion to ensure that your comment package is complete. If the package is not in order, please notify the State Clearinghouse immediately. Your eight-digit State Clearinghouse number should be used so that we may respond promptly.

Please note that recent legislation requires that a responsible agency or other public agency shall only make substantive comments on a project which are within the area of the agency's expertise or which relate to activities which that agency must carry out or approve. (AB2583, Ch. 1514, Stats. 1984.)

These comments are forwarded for your use in adopting your Negative Declaration. If you need more information or clarification, we suggest you contact the commenting agency at your earliest convenience.

Please contact Norma Wood at 916/445-0613 if you have any questions regarding the environmental review process.

Sincerely,

John B. Ohanian
Chief Deputy Director
Office of Planning and Research

cc: Resources Agency

Enclosures

CALENDAR PAGE 134
MINUTE PAGE 2134

(2-21-87) SCH # 84101608

1. Project Title: Sacramento River Trail-Pedestrian Bridge / Sacramento Riverman
2. Lead Agency: City of Redding — 2. Contact Person: Terry Hanson
3a. Street Address: 760 Parkview Avenue — 3b. City: Redding
3c. County: Shasta — 3d. Zip: 96001 — 3e. Phone: (916) 225-4020
4. County: Shasta — 4a. City/Community: Redding
4b. Assessor's Parcel No.: Lot 14, 15 — 4c. Section: 28 — 4d. Twp.: T32N — 4e. Range: 5W
4f. Cross Streets: 1/2 mile below Keswick Dam Rd — 4g. Zip Code: Redding
6. Within 2 miles: a. State Hwy #: n/a — b. Air Port: n/a — c. Rail: n/a — d. Waterway: Sacramento River
7. Section Type: CEQA: 01. NOP; 02. Early Cons; 03. Neg Dec; 04. Draft EIR; 05. Supplement/Subsequent; 06. EIR; 07. Draft; 08. Final; 09. Other
8. Local Action Type: 01. General Plan Update; 02. General Plan Amendment; 03. General Plan Element; 04. Master Plan; 05. Planned Unit Development; 06. Site Plan; 07. Zoning; 08. Subdivision; 09. Tentative Map; 10. Parcel Map; 11. Land Division (Subdivision, Parcel Map, Tract Map, etc.); 12. Use Permit; 13. Conditional Use Permit; 14. Other
9. Development Type: 01. Residential: Units ___ Acres ___; 02. Office: Sq. Ft. ___ Acres ___ Employees ___; 03. Commercial: Sq. Ft. ___ Acres ___ Employees ___; 04. Industrial: Sq. Ft. ___ Acres ___ Employees ___; 05. Educational; 06. X Recreational: Type Recreation Trail; 07. Water Facility; 08. Transportation: Type ___; 09. Mining: Mineral ___; 10. Power: Type ___ Watts ___; 11. Waste Treatment: Type ___; 12. Hazardous Waste; 13. Other: Recreation

Neg. Dec. 84101608

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Project Issues Discussed in Document: 01. X Aesthetic/Visual; 02. X Agricultural Land; 03. Air Quality; 04. X Archeological/Historical; 05. Coastal Zone; 06. Economic/Jobs; 07. Flood Plain/Flooding; 08. Forest Land/Fire Hazard; 09. Geologic/Seismic; 10. Minerals; 11. Noise; 12. Population/Housing Balance; 13. Public Services/Facilities; 14. Recreation/Parks; 15. Schools/Universities; 16. Septic Systems; 17. Sewer Capacity; 18. Soil Erosion/Compaction/Grading; 19. Solid Waste; 20. Toxic/Hazardous; 21. Traffic/Circulation; 22. X Water Quality; 23. Water Supply/Groundwater; 24. X Wetland/Riparian; 25. Wildlife; 26. Growth Inducement; 27. Land Use; 28. Cumulative Effects; 29. Other

13. Funding (approx): Federal $ 93,450 — State $ 137,000 — Total $ 230,450

14. Zoning: County zoning is "OS" Open Space. The area is currently being annexed. City zoning will be "U-FP" Flood Plain and Open space.

15. Project Description:
Construct a 10 foot wide pedestrian bridge across Sacramento River as part of Sacramento River Trail system. Bridge will clear span the river (135 feet span) no abutments or piers will be in normal river channel. Previous review of project under SCH # 84101608 included entire trail system, including bridge. This req. now identifies specifics of the bridge based on preliminary engineering. Letter attached.

CLEARINGHOUSE CONTACT: Norma Wood

STATE REVIEW BEGAN: 2-20-87

DEPT. REVIEW TO AGENCY: 3/9

AGENCY REVIEW TO SCH: 3/11

SCH COMPLIANCE: 3/13

21-day review

W/C	N/C		W/C	N/C	
		*RESOURCES			*REGL WQCB 5 (Redding)
		[redacted]			*CALTRANS 2
		*CONSERVATION			[redacted]
		*FISH & GAME			AERONAUTICS
		*FORESTRY			CALIF HWY PATROL
		[redacted]			HOUSING & COMM DEV
X		*RECLAMATION BD			EMERGENCY SERVICES
		*PARKS & REC / OHP			FOOD & AG
		[redacted]			PUBLIC UTILS COMM
		[redacted]			PUBLIC WORKS
		[redacted]			CORRECTIONS
		[redacted]			GENERAL SERVICES
		*STATE LANDS COMM			(OLA SCHOOLS)
		[redacted]			SANTA MONICA MTN CONS
X		SOLID WASTE MGMT			COLORADO RIVER BD
X		ST WATER RESOURCES CONT BD:			TAHOE REGL PLNG AGCY
X		WATER QUAL (4th Fl)			COASTAL CONSERVANCY
X		WATER RTS (2nd Fl)			CCC - OPR
X		[redacted] Fl)			COASTAL - OPR
					[redacted]

(Revised 1/87)

CALENDAR PAGE 135
MINUTE PAGE 21