

**Final  
Environmental Impact Report  
of the  
Condition Use Permit  
for the  
1993-1997 Reggae on the River Concert  
Mateel Community Center**

**prepared by:**

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**for:**

**Mateel Community Center  
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**May 14, 1993**

**Final  
Environmental Impact Report  
of the  
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for the  
1993-1997 Reggae on the River Concert  
Mateel Community Center**

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## **I. Introduction**

This document incorporates the responses to public agency review and public comments on the Draft Environmental Impact Report (DEIR) of the 5-year Condition Use Permit (CUP) for the 1993-1997 Reggae on the River Concert submitted by the Mateel Community Center. The DEIR was circulated to allow review by and comments from affected state and local agencies and the public. Written comments received within the 45 day review period are presented in Section II of this document along with a written response to "significant environmental points" as required under the California Environmental Quality Act (CEQA).

## **II. Responses to Comments Received on the Draft Environmental Impact Report (DEIR) for the 1993-1997 Reggae on the River Concert**

This section presents a copy of each written comment received by the Humboldt County Planning Department on the DEIR of Mateel Community Center's application for a 5-year Condition Use Permit (CUP) for the 1993-1997 Reggae on the River Concert in the following order:

- A. California Department of Transportation
- B. Allison B. Carmichael

## DEPARTMENT OF TRANSPORTATION

DISTRICT 1, P.O. BOX 3700  
 EUREKA, CA 95502-3700  
 TDD PHONE 707/445-6463  
 (707) 445-6412



April 21, 1993

1-Hum-101-0.8  
 APN 33-271-05  
 DEIR for Mateel Community  
 Center "Reggae on the River"  
 SCH No: 92033035

4/26R

Mr. Kevin Caldwell  
 Humboldt County Planning Division  
 3015 H Street  
 Eureka, CA 95501-4484

APR 26 1993

Dear Mr. Caldwell:

We have reviewed the draft Environmental Impact Report (EIR) for the application of a five-year (1993-1997) Conditional Use Permit by Mateel Center, Inc., for the annual "Reggae on the River" event held the first weekend in August of each year, located in the Richardson Grove area adjacent to Route 101 and have the following comments:

We commend the applicant for identifying the traffic and safety impacts of the proposed event in the DEIR. We support the implementation of mitigation measures that include a detailed Traffic Control Plan that is designed to minimize the impact of the event on the State highway system.

1. The final EIR Off-site Traffic Control Plan (Appendix 1, page 8), should specify that security personnel used to enforce the "No U-Turn" signs will not be placed along Route 101 at locations south of Cooks Valley (where access to Route 101 is controlled).

2. The draft EIR Off-site Traffic Control Plan (Appendix 1, Appendix C., Sheet 3 of 4), shows the off-site Reggae Festival parking signs on a topography map. We recommend that the final EIR include an expanded off-site parking plan that demonstrates how the drivers will be directed to the off-site parking areas (by brochure and/or map) and the specific location of the off-site parking areas. The off-site parking plan should identify that there will be adequate parking spaces for the event, and
3. that drivers proceeding to the off-site parking areas would not increase vehicular conflicts on Route 101. The details of this off-site parking plan will be reviewed by Caltrans when the applicant applies for the Caltrans encroachment permit. We encourage early consultation with Caltrans in applying for this encroachment permit.

Mr. Kevin Caldwell  
April 21, 1993  
Page 2

Should you have any questions, please contact Dave Carstensen  
at (707) 441-5813.

Very truly yours,

CHERYL S. WILLIS, Chief  
Transportation Planning  
Branch

cc: Tom Loftus  
State Clearinghouse  
1400 Tenth Street  
Sacramento, CA 95814



RICK KNAPP  
Deputy District Director  
Planning and Programming

A. Responses to Comments from the California Department of Transportation

Item 1. Placement of "No U-Turn" signs.

The Off-site Traffic Control Plan (See DEIR, Appendix I of Operation Plan/Mitigation and Monitoring Plan,) encompasses a 5-mile area along Highway 101 both north and south of the concert event site. Additional "No U-Turn" signs will be placed between the concert site and the Piercy off-ramp to eliminate all U-turns. Mateel security personnel will be placed between the concert site and Cook's Valley exit to enforce "No U-Turn" signs. (See DEIR, Appendix I - Figure 5. Security Position Plan) Security personnel used to enforce the "No U-turn" signs will not be placed along Highway 101 south of Cook's Valley where access to the Highway is controlled.

Item 2. Directions to Off-site Parking Areas:

Event attendees arriving in vehicles, but camping or lodging off-site, will be directed to off-site parking areas by 4 new temporary signs along Highway 101. (See Figure 1.a. and 1.b.) The specific locations of the off-site parking areas are presented in Figure 2. These signs will be placed south of the Piercy off-ramp for north bound traffic when the on-site parking area is full, as follows:

SS1 - Off-site Festival Parking - 6 miles

SS2 - Off-site Festival Parking - 2 miles

SS3 - Off-site Festival Parking - 1 mile

SS4 - exit to Off-site parking (at Piercy off-ramp)

Note: All signs will conform with Caltrans requirements for highway signage.

Details of the off-site parking plan and signage will be reviewed by Caltrans upon application for encroachment permit.

Item 3. Demonstration of adequate parking spaces for the event:

Off-site demand for parking spaces is estimated to be approximately 1,500 (@ 6,000 people @ 4 people per vehicle). The off-site parking plan identifies 6 areas for off-site parking for attendees arriving by vehicle but camping or lodging off-site.

Approximately 200 vehicles will be parked at Oak Flat Campground of Richardson Grove State Park and another 375 at the KOA Campground. Additionally, a new 3 acre site has been leased next to the entry road to French's Camp providing approximately 150 parking spaces. Concert attendees using the above areas will park their vehicles and walk to the concert site from the new 3 acre site, Oak Flat and KOA campgrounds.

The other off-site parking areas will be used as staging areas where people staying with friends or at motels, bed and breakfast inns or other private and public campgrounds can park their vehicle and take the shuttle bus to and from the concert site. A shuttle bus service will pick-up and return concert attendees from each of these off-site parking areas according to the schedule set forth in the Off-site Camping, Lodging & Parking Plan and Shuttle Service. (See DEIR, Appendix I, Section IV. F. and IV. G.)

These areas include the parking area at Benbow at approximately 150 spaces; the Garberville (Riverside) parking area at approximately 500 spaces; and, the Piercy parking area (Kiwanis) at approximately 500 spaces. The total estimated off-site parking/staging areas capacity is listed below:

<u>Parking/staging Area</u>	<u>Estimated Capacity</u>
3 acre site next to entrance	150
Oak Flat Campground	150
KOA Campground	375
Benbow	200
Piercy (Kiwanis)	500
Garberville (Riverside)	<u>500</u>
	Total = 1,875

The total parking spaces available for off-site parking/staging is estimated to be approximately 1,875 which is adequate to accommodate the demand for approximately 1,500 vehicles not parking at on-site.

Item 3. Demonstrate that Off-site parking areas will not increase vehicular traffic conflicts on Highway 101:

Off-site parking and staging areas will not significantly increase vehicular traffic conflicts on Highway 101. Vehicular access and egress to and from Oak Flat and KOA campgrounds is directly off 101 adjacent to the project site. Concert attendees parking their vehicles at Oak Flat and KOA will be walking to the concert site thus eliminating vehicle use during the 2-day concert duration.

Some vehicle congestion can be expected when campers leave the campgrounds at the end of the Concert on Sunday night entering Highway 101 in both north bound and south bound directions. Mateel staff will work with CHP and State Parks personnel in safely directing vehicles exiting Oak Flat and KOA Campgrounds so as to minimize the potential for traffic conflict as they enter Highway 101.

The remaining off-site parking/staging areas to be served by the Shuttle Bus Service are accessed via off-ramps as illustrated in Figure 2. and listed below:

<u>Parking/staging Area</u>	<u>Off-ramp Location</u>
Piercy Parking (Kiwanis)	Piercy exit
Benbow Parking	Benbow exit
Garberville Parking (Riverside)	Redway exit

Thus, vehicles using parking/staging areas will be leaving and entering Highway 101 on the existing off-ramp and on-ramp facilities identified above. The dispersal of vehicles from these 3 off-site parking/staging areas in both north and south bound directions will result in a temporary increase of vehicles entering and leaving the highway. However, this temporary increase is not expected to be significant nor result in an increase in traffic-related conflicts.



Humboldt County Planning Department  
3015 H St.  
Eureka, Ca. 95501

Attn: Kevin Caldwell

RECEIVED

APR 27 1993

HUMBOLDT COUNTY  
PLANNING COMMISSION

Allison B. Carmichael  
P.O. Box 97  
Piercy, Ca. 95587  
22 April 1993

Dear Mr. Caldwell;

I oppose permits for any more Reggae on the River events and demand the county to stand accountable for and apply its own attendance limits, health standards and regulations regarding sanitation facilities for large crowds such as the Reggae concert attracts.

1. Ten thousand people is too many people for that narrow stretch of highway and cozy concert area. The permit requirement is set at 10,000 this year, but regardless of what the attendance limit is, there are always between 15,000 and 20,000 people at the Reggae event. An unofficial count of 13,000 was recorded in 1991 by Sheriff's Department Lt. Greg Busey. After he quit counting, public officials opened the gates and let in more people to dispel the traffic jam.

2. For this big of a crowd, permanent bathroom (handwashing and toilet) facilities are required by county law; port-a-potties just don't do the trick. We don't want people urinating and defecating in the Eel River in which we fish and swim. That's what happens when there are so many people camping on the river bar during that weekend.

The catch is permanent facilities are not possible at French's Camp because the rising river would destroy them in the winter; the water was up around the stage this winter.

I wonder why the owner of the property had his permit revoked in 1991 for failing to provide adequate health facilities, yet Mateel received a permit six months later without making the required improvements?

3. The crowd is uncontrollable and infringes on the personal and public privacy of the local residents and businesses. For example, the Piercy KOA campground store had problems with people shoplifting, urinating in the corner, and eating food right in the store so they wouldn't have to pay for it.

Move Reggae, Mateel. We enjoy the peace and beauty of our community and resent your intrusion.

Sincerely,

*Allison B Carmichael*  
Allison B. Carmichael

## B. Responses to Comments from Allison B. Carmichael

### Item 1. Verification of Concert Attendance

The peak total of 10,000 people will only last for a portion of the two day event. Attendance is estimated to reach approximately 3,000 by Friday night, with another 7,000 arriving the next morning to peak at 10,000 between 10:00am and 10:00pm on Saturday. The peak of 10,000 is reached again on Sunday between 10:00am and 7:00pm.

Concert attendance is verified in a number of ways as summarized below:

- 1) only 8,000 tickets are sold.
- 2) ticket attendees are screened and wrist-banded.
- 3) a heat system is used to check for counterfeit tickets.
- 4) non-ticketed (or counterfeit) people are turned away before they cross the river. Sneak-ins are not wrist-banded and are turned away.
- 5) staff, volunteers and guests are checked-in and wrist-banded.
- 6) total attendance is determined by number of tickets sold and list of staff, volunteers, and guests.

### Item 2. Sanitary Facilities and Public Health Concerns:

The proposed project will not create any health hazard or potential health hazard. Ambient river water quality is not expected to be adversely affected by the 2-day event.

The provision of 120 portesans at above the standard of 1 per 100 people and the monitoring and pumping program will provide adequate sanitary facilities for the concert population. Additionally, a gray water tank will store runoff from both hot and cold water hand and food washing facilities. These systems will be pumped as necessary by licensed contractors who will deliver the waste off-site to proper municipal treatment plant facilities. (See Operation Plan, Mitigation and Monitoring Plan - Section H. Sanitary Facilities & Water Supply.)

The Operation Plan section on Sanitary Facilities & Solid Waste Disposal & Recycling has been modified to include the provision of portesans, hand washing facilities and a liquid disposal receptacle for

camping and cooking-related liquids in blocks of 10, 1, and 1 respectively for each 125 campsites. This modification will maximize accessibility and serviceability of these facilities.

Handwashing facilities and proposed liquid waste containers will reduce or eliminate discharge of wash water and cooking water from camping areas into the surface water of the River.

Additional signs will be placed at water supply stations throughout the site stating "no dish or hair washing" and violators will be asked to cease such activity by on-site security staff.

River water quality monitoring will occur during the 1993 event according to North Coast Water Quality Control Board or Humboldt County Division of Environmental Health (DEH) standards. Samples will be taken at one (1) upstream location and two (2) downstream locations (including the summer bridge at Richardson Grove State Park) and will measure total and fecal coliform during afternoon periods of the 2-day event. This monitoring will occur on an annual basis.

### Item 3. Concerns for Public Safety & Security

Uniformed professional security personnel will be assigned to protect the Hartsook Inn, The Grandfather Tree, KOA Campground, Woodsman Cafe, along Highway 271 south to Piercy and the businesses and residences in the Piercy area. (See Operation Plan, Mitigation & Monitoring Plan - Figure 5.A Off-site Security.)

A staff security coordinator will supervise security staff and volunteers who oversee public safety. The Security Plan (See DEIR, Appendix 1 - 1992 Operation Plan) will be modified to include the provision of 2 Mateel "Rangers" to provide staff assistance at Richardson Grove State Park during the peak hours of the concert event. One "ranger" will assist in directing traffic at the entrance on Friday afternoon beginning at 4:00pm - 11:00pm and again Saturday morning from 7:00am to 10:00am or as directed by on-duty State Park rangers. A second "ranger" will patrol the camping areas to ensure that concert attendees and others drawn by the concert obey park rules and regulations. Any problems with rule-breakers will be referred to an on-duty State Park ranger for appropriate action.

SIGN LEGEND	
C3A	- FLAGGER SYMBOL
C36	- PREPARE TO STOP
R1	- STOP SIGN
R17	- NO LEFT TURN
R34	- NO U TURN
W54	- CROSSWALK WARNING SIGN
▲	- FLAGGER
○	- POST MILE

25  
ZONE  
AHEAD

SS8

SPEED  
LIMIT  
25

SS8A

TURN AROUND

SS9

↓ | ↑ ↑ ↑  
EXIT | ENTER  
FORM 3 LANES

SS10

WILL CALL  
USE RIGHT LANE

SS11

SHUTTLE EXEMPT

SS12

THRU  
TRAFFIC

SITE PARKING  
A TICKET

THRU TRAFFIC  
USE LEFT LANE

SPECIAL SIGN DETAILS

10-1-01

SS13

\* NEW SIGNS

*Conversano*  
S. CONVERSANO, TE 80037  
Expires 3-31-92

*Walt J. DeWitt*  
J. DEWIT, RCE 46426  
Expires 12-31-94

NO.	REVISION	BY	CHK	DATE
▲	SPECIAL SIGNS, LEGEND, LOCATIONS	RDH		6-20-91
▲	REVISE SIGN, REFERENCE DETAILS	RDH		4-11-91

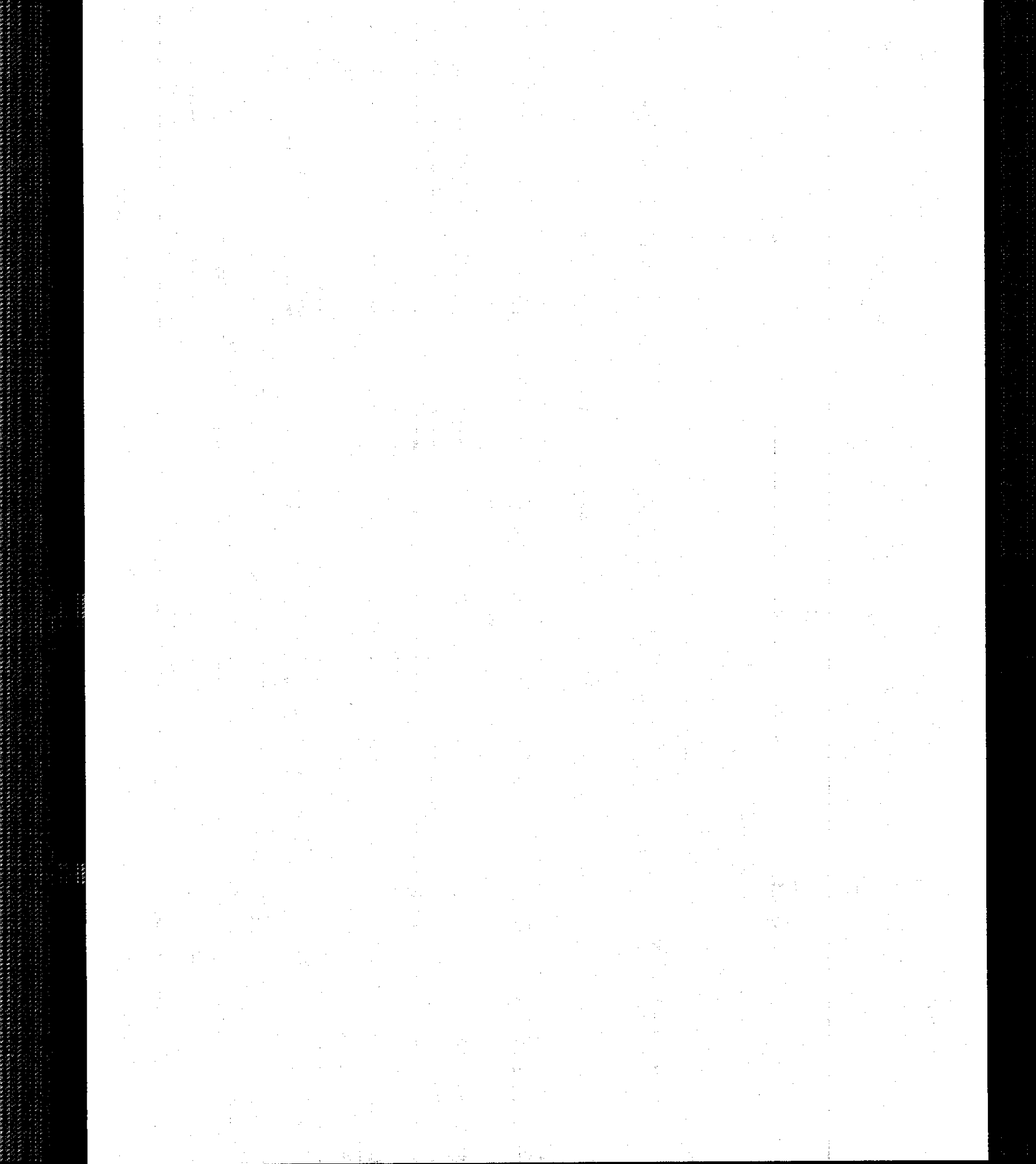
**LACO ASSOCIATES**  
CONSULTING ENGINEERS  
216 J ST. EUREKA, CA 95501 (707)443-5054

ROUTE SIGN LOCATIONS MAP  
& SPECIAL SIGN (SS) DETAILS

MARTEL COMMUNITY CENTER PRESENTS  
"BOCCAS OF THE RIVER" AUGUST 2 & 3, 1991  
BILL GRAMM PRESENTS "ELECTRIC ON THE KAL" JULY 13, 1991

SC  
DR  
CH  
AP  
CM  
JK  
SI

FIG.  
1a



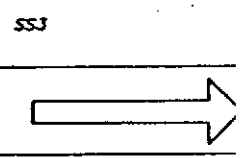
\* REGGAE  
FESTIVAL  
PARKING

SS1 \* TITLE AS REQ.  
5" HIGH WHITE CHARACTER  
GREEN BACKGROUND

\_\_\_ MIL

SS2  
5" HIGH BLACK CHARACTER  
WHITE BACKGROUND-TYPICAL

SOLD 0



SS4

TOW  
AWAY  
ZONE

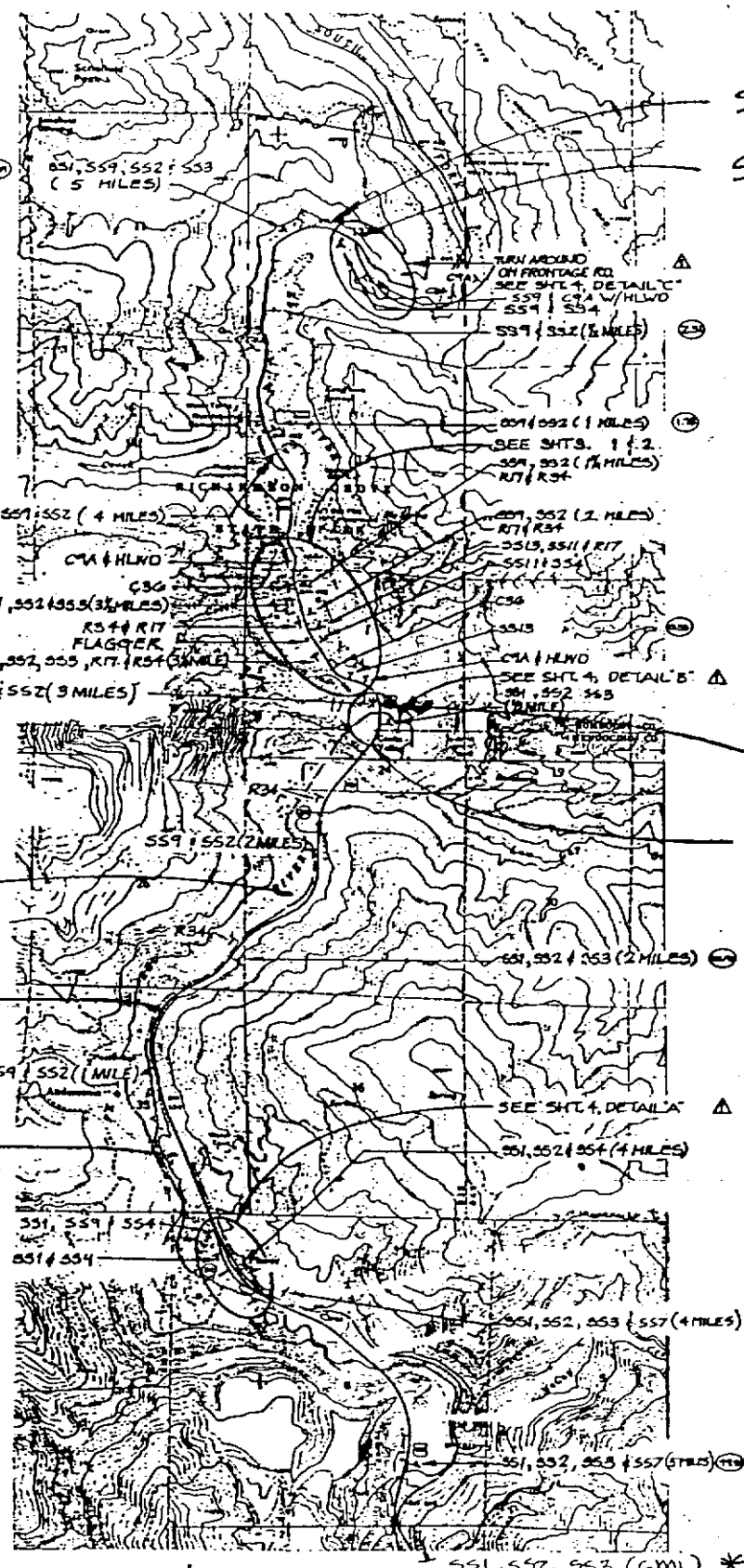
SS5

NO  
TRA

SS6

NO ON  
WITHOUT

SS7



SS8 \*

SS8A \*

SS8A \*

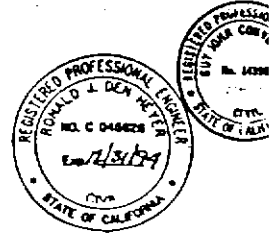
SS8 \*

\* R34

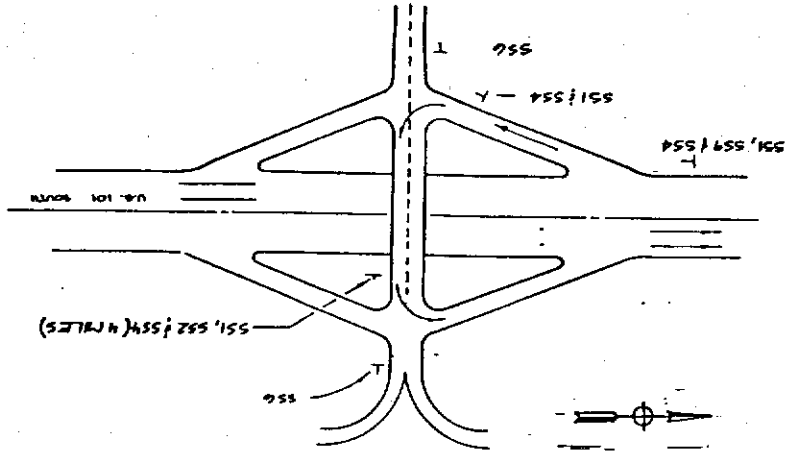
\* R34

\* R34

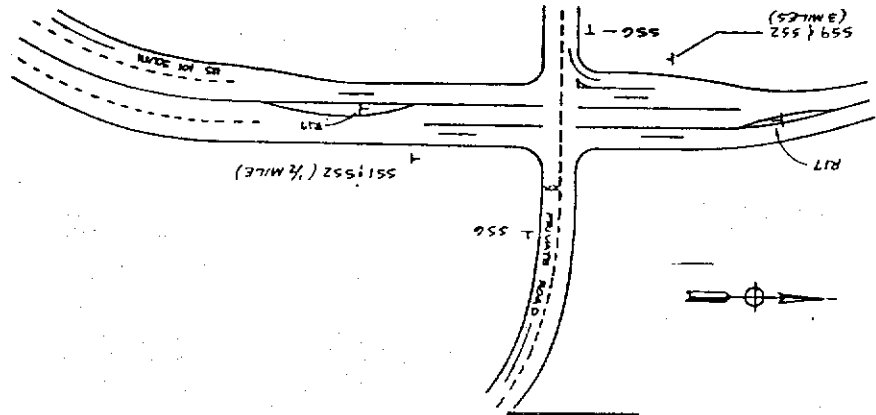
SIGN LOCATIONS ALONG ROUTES  
1" = 2000' ±



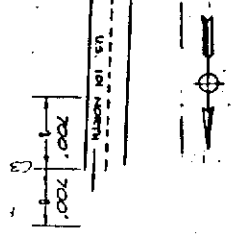




PERCY OFF-RAMP 101 - A



COOK'S VALLEY TURNOFF 101 - B

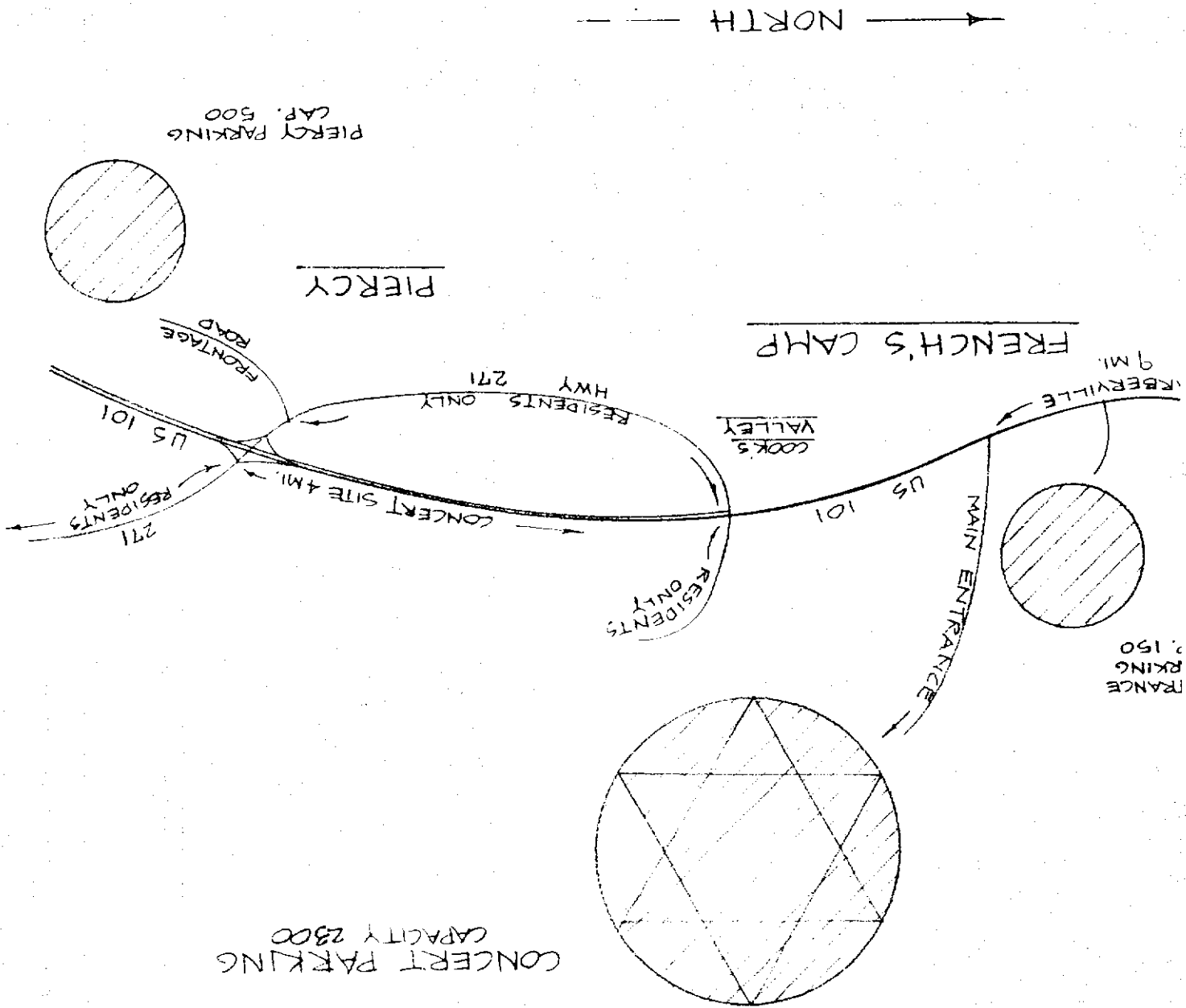


DETA  
BEN

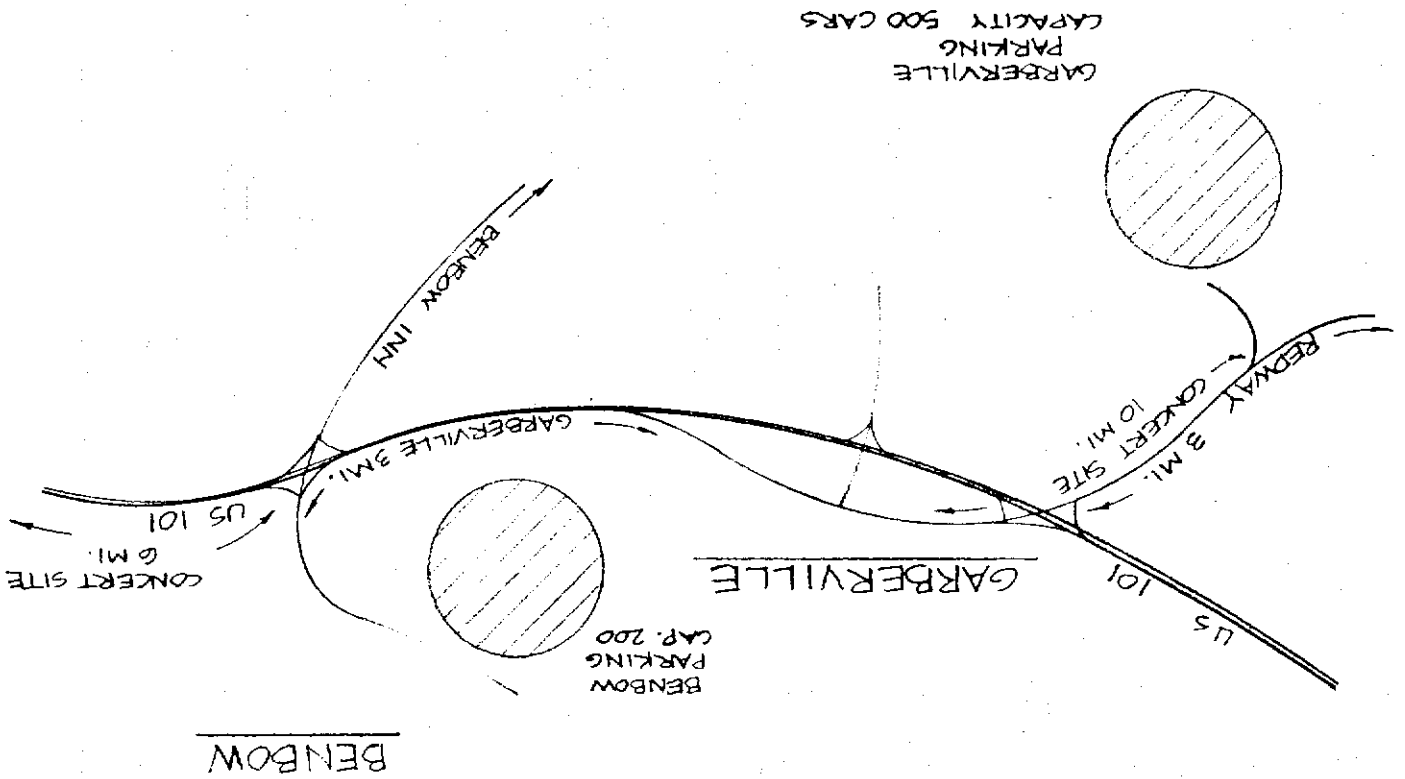


REGGAE OF THE RIVER 1993.  
PARKING SITES  
LOCATION MAP

FIG. 2



← NORTH



**Draft  
Environmental Impact Report**

**for**

**Conditional Use Permit  
for the 1993-1997  
Reggae on the River Concert  
Mateel Community Center**

**Prepared By:**

**Michael Sweeney  
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**&**

**Doug Green and Jerry Sevier  
Mateel Community Center Staff**

**for:**

**Mateel Community Center  
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Redway, CA 95560  
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**March 1993**



**Draft  
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1. 1992 Operation Plan/ Mitigation & Monitoring Plan
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## I. Executive Summary

The Mateel Community Center has applied for a 5-year Conditional Use Permit (CUP) for the 1993 - 1997 (10th annual through the 14th annual) Reggae on the River Concerts. Humboldt County Planning Department is the Lead Agency for the permit application process and has requested that an Environmental Impact Report be prepared in support of the permit application.

This Environmental Impact Report evaluates the environmental issues identified in the County-prepared Initial Study and comments received from the Notice of Preparation (NOP) circulated among state and county regulatory agencies. Specific mitigations are proposed to reduce or eliminate potential significant environmental impacts. These mitigations are either included in the 1992 Operation Plan (See Appendix 1) or will be incorporated into the 1993 Operation Plan through specific amendments identified in this EIR. The 1992 Operation Plan as amended will be the governing document for the upcoming 1993 event.

Mitigation monitoring will involve Mateel staff, with the assistance of local agencies, in a post-event review and evaluation of the effectiveness of mitigation measures for the 1993 event. Refinements and additional mitigation measures will be incorporated, as necessary, into the Operation Plan for the next annual event. This process will occur annually for the 5-year life of the Conditional Use Permit.

### A. Summary of Potential Effects

This EIR finds no significant, adverse, environmental effects associated with the proposed project that are not capable of being reduced to less-than-significant levels through proper mitigation for the temporary 2-day time period of the concert event. Environmental Effects are discussed in detail in Chapter VI.

The revenue generated by the proposed project and its contribution to the local economy is a positive significant effect. Likewise, the opportunities for cultural enrichment resulting from the proposed project and other performance events funded by the proposed project revenues are positive significant effects.

Temporary effects of the proposed project are summarized below:

- o substantial additional vehicular traffic and movement is expected in the morning and evening hours on the days of the event as vehicles arrive and leave the concert site.
- o Demand for new parking facilities will be required on a temporary basis on the days of the event.
- o temporary impacts on existing transportation systems will occur during days of the event.
- o temporary and minimal increase in traffic hazards to motor vehicles, bicyclists or pedestrians will occur during the days of the event.
- o temporary impact upon the quality or quantity of existing recreational opportunities will result during the days of the event.
- o temporary need for new systems to provide communications, water supply, sanitary facilities, solid waste disposal and recycling will occur for the days of the event.

The loss of economic benefits to the Mateel Community Center, community non-profits, and the Southern Humboldt County economy would be significant adverse environmental effects if Alternative A (Reduced Attendance), Alternative B, (1-day event rather than 2-day event), Alternative C (Another time) or Alternative E (No project) were implemented. The Mateel Community Center would be forced into bankruptcy, disallowing continuing construction of the Mateel Community Center and eliminating the Center's function as employer and primary provider of cultural events in Southern Humboldt and Northern Mendocino Counties. Additionally, other non-profit groups who raise money at the event through food and craft booths would see a major source of income reduced or eliminated.

## B. Summary of Mitigation Measures

1. Concert grounds and other areas subject to temporary compaction, dryness and dust will be watered and mowed prior to the event and seeded and maintained after the event to maintain grassy cover in good condition.

More frequent watering will occur on the second day of the event in response to County Planning observations that dusty conditions occurred during the second day of the 1992 event.

2. Bridges and other facilities that might effect high water flows or natural channel configuration will be installed at the end of June and removed by October 1 for site preparation and post event restoration.

3. The On-site Camping & Parking Plan (See Appendix 1 - 1992 Operation Plan) will be modified to provide a 20 foot setback from the existing river edge. No camping or parking will be allowed within this 20 foot buffer area. The setback will be marked with white chalk and enforced by security staff.

4. River water quality monitoring will occur during the 1993 event according to North Coast Water Quality Control Board or Humboldt County Division of Environmental Health (DEH) standards. Samples will be taken at one (1) upstream location and two (2) downstream locations (including the summer bridge at Richardson Grove State Park) and will measure total and fecal coliform during afternoon periods of the 2-day event. This monitoring will occur on an annual basis.

5. On-site sanitary facilities will be provided by 120 portasans at above the standard of 1 portasan per 100 people. The portasans will be monitored on an hourly basis and "full" facilities will be temporarily closed. Pumping will be done when necessary by two on-site pump trucks provided and staffed by Empire Waste Management from Ukiah. Waste will be delivered to the Redway Community Services District (RCSD) sewage treatment plant and the Eureka Municipal Sewage Treatment facility. Verbal agreements have been received from RCSD and the Eureka facility to accept the waste. Formal letters to this effect will be forthcoming.

6. Handicapped accessible portasans will be provided near the handicapped camping and parking area.

7. A 1500 gallon gray water tank located near the food booths will store gray water from both hot and cold water hand and food washing facilities. Another 1600 gallon gray water tank with a leach field is located behind the stage kitchen and will receive gray water from the kitchen sink. (See Appendix 1 - 1992 Operation Plan - Figure 8.)

8. The Operation Plan section on Sanitary Facilities & Solid Waste Disposal & Recycling will be modified to improve distribution, accessibility and serviceability of portasans and hand washing facilities in blocks of 10 and 1 respectively for each 125 campsites.

9. The existing and revised On-site camping provisions and the policy of restricted "ins and outs" (which was inaugurated last year with considerable success) will further reduce on-site use of vehicles and their effect on river resources and water quality. The grass seeding and water program will reduce dust in and around food booths and concert areas

10. Dirt roads will be watered by an on-site water truck provided by Round Mountain Water Truck Service as necessary or as directed by California Highway Patrol and staff.

11. Additional signs will be placed at water supply stations throughout the site stating "no dish or hair washing" and violators will be asked to cease such activity by on-site security staff.

12. The implementation of the amended Traffic Control Plan is expected to mitigate the affects of vehicular and pedestrian traffic both on site and off-site. (See Figure 1. Amended Traffic Control Plan and Appendix 1 - 1992 Operation Plan: Sections A. On-site Traffic Control and B. Off-site Traffic Control.) According to Caltrans, the amended traffic control plan will be reviewed for approval as part of the DEIR review process.

13. The policy of "no in and outs" successfully reduced the amount of vehicle and pedestrian traffic moving on and off site during concert hours of the 1992 event and will be implemented again for the 1993 and

subsequent events.

14. The On-site Traffic Control Plan will allow vehicular traffic entering from Highway 101 to move into the site and parking areas rapidly thus reducing the possibility of traffic backing up on the highway. (See Appendix 1 - 1992 Operation Plan: Figure 4. Traffic Control Plan) The traffic flow through the entrance and will call area will allow for a multiple lane checkpoint system for ticket verification. In addition, implementation of restricted "ins & outs" policy will substantially reduce traffic flow and congestion.

Similarly, off-site traffic control along 101 will encompass a 5-mile area both north and south of the event site. (See Appendix 1 - 1992 Operation Plan: Section C. Public Safety & Security)

15. The Traffic Plan will be modified to reduce the speed limit to 25 mph during peak traffic periods through the high hazard corridor from the project site to Richardson Grove State Park. Temporary speed limit signs and notices of reduced speed will officially designate the 25 mph speed zone (a reduced speed which occurs already as traffic slows as a result of congestion). The 25mph speed limit will reduce the potential for serious accidents much as a highway construction project would temporarily reduce the speed of vehicle traffic through a construction area. According to Caltrans, the amended traffic control plan will be reviewed for approval as part of the DEIR review process.

16. The Traffic Plan will be also be modified to reduce the unlawful u-turns south of the concert site and significantly reduce the hazards posed as follows:

- o provide 6 additional "no u-turn" signs along the southerly approach to the area between the project site and Piercy turn-off where the majority of the illegal u-turns occur. (See Figure 1.)

- o provide additional event security staff to monitor the area to discourage potential u-turns.

- o request CHP provide 2 black and white CHP vehicles in highly visible areas of the high u-turn potential area to further discourage unlawful u-turns.

o provide additional "to concert site turnaround exit" signs along southbound traffic lanes of 101 to prevent tendency to want to cross northbound traffic to enter concert site grounds or make illegal u-turns. (See Figure 1.)

17. Implementation of the On-site Camping & Parking Plan is expected to minimize the effects of on-site parking. Capacity is available for parking approximately 2300 vehicles on-site. There are 9 separate parking areas P 1 - P9. (See Appendix 1 - 1992 Operation Plan: Section D. On-site Camping & Parking and Figures 6. On-site Camping & 7. On-site Parking Plan).

18. Campers at adjoining Oak Flat Campground of Richardson Grove State Park will be able to walk to the concert grounds on the back road thereby reducing the need for on-site parking and the presence of pedestrian traffic along 101. Similarly, campers at the adjoining KOA Campground and Hartsook Inn will be walking to the site reducing vehicle traffic flow and the need to park additional vehicles on-site.. (See Appendix 1 - 1992 Operation Plan: Sections D. On-site Camping; E. On-site Parking; F. Off-site Camping, Lodging & Parking; and G. Shuttle Service)

19. Implementation of the Shuttle Service & Off-site Parking Plan expanded in the 1992 Operation Plan is expected to reduce the amount of on-site parking needed by providing transport to off-site lodgers and campers. For 1993, one more bus will be provided for shuttle service. (See Appendix 1 - Appendix E. Shuttle Bus schedule and stops)

20. The Shuttle Service and Off-site Camping & Parking Plan (See Appendix 1 - 1992 Operation Plan) will eliminate some of the vehicular traffic on Highway 101. The Off-site Camping & Parking Plan will be modified to include additional camping and parking space for approximately 2,000 additional people available at Riverview Ranch in Mendocino operated by the Redwood Chapter of the Kiwanis International. An additional Shuttle Service will provide pick up and delivery for concert attendees staying at Riverview Ranch. The camping and parking provided by this facility will relieve the pressure for on-site camping and parking as well as the pressure on other lodging and camping facilities in the vicinity of the project site. According to the Kiwanis Chapter, permits for camping facilities in Mendocino County will not be a problem.

21. The proposed project will reduce or eliminate any potential health hazard through the implementation of the 1992 Operation Plan as amended thus further eliminating the exposure to potential health hazards for the 1993 event.

22. The Sanitary Facilities & Water Supply Plan is expected to provide adequate sanitary facilities and a safe drinking water supply for conference attendees in accordance with County Health Standards. Licensed contractors will pump portasans and gray water tanks as necessary and deliver the waste to Redway Community Service Districts sewage treatment facility and/or Eureka Municipal Sewage Disposal Plant in accordance with government regulations.

23. The 1992 Sanitary Facilities & Water Supply Plan (See Appendix 1 - 1992 Operation Plan) will be modified to include the provision of on-site shower facilities. Contractors providing shower wagons to the California Department of Forestry and Fire Protection (CDF) have been contacted to secure the temporary use of one or more shower wagons that are typically used in support of fire suppression efforts. These trucks provide their own water supply and also collect and store waste water. Waste water will be delivered to Redway Community Service District's sewage treatment facility and/or Eureka Municiple Sewage Disposal Plant. Detailed plans for backup shower facilities in the event a fire removes the shower wagon are being discussed with County DEH staff. Backup shower facility design will be submitted to the DEH for approval prior to installation.

24. Evidence of contract with licensed waste disposal haulers and disposal destination will be provide to County DEH at least 30 days prior to the event.

25. Drinking water samples from the well will be taken 2 weeks prior to the event for bacteriological analyses and submitted to the County DEH.

26. A temporary Communication System will be installed on-site to provide immediate transmission of information for event management, security and public safety purposes. (See Appendix 1 - 1992 Operation Plan: Section L. Communications)

27. The Fire Protection Plan (See 1992 Operation Plan) will be modified to reflect the fire protection mitigation measures as identified by the State Department of Forestry and Fire Protection (CDF) as listed below:

- o Three quick-attack units and at least one fire engine will be on site from 10:00am until 11:00 pm during the day prior to the event and the two days of the event. From 11:00pm to 10:00am the next morning, fire equipment will be located within 5 miles or 10 minutes travel time of the project site.

- o Patrols of the area from Piercy to the Miranda off ramp will occur at least twice between the hours of 6:00pm and 11:00 pm, Friday, Saturday, and Sunday nights of the event. The two fire patrols will include 2 people each with radios, waterpacks and shovels. Each patrol will be on duty from 6:00pm to 7:00pm and from 10:00pm to 11:00pm Friday, Saturday and Sunday evenings. These patrols will educate campers that fire permits are required and will extinguish fires if not in compliance. CDF will be notified of all illegal fires.

- o There will be a one-and-one-half-inch (1-1/2") hose pre-laid from the concert area to the top of the bluff behind it. This hose will be supported by a fire engine capable of pumping that hose and will be supplied with adequate water for fire-fighting.

- o Each fire engine and quick-attack unit will have the ability to communicate with CDF via radio.

- o Each fire engine shall have at least 3 firefighters assigned to it at all times.

- o Each quick-attack unit will have will have at least 2 firefighters assigned to it at all times.

- o All fires shall be immediately reported to CDF, except safely burning campfires with a legal permit. Fires will be reported to CDF even if the fire is extinguished before the firefighters discover them.



28. The Security Plan (See Appendix 1 - 1992 Operation Plan) will be modified to include the provision of 2 Mateel "Rangers" to provide staff assistance at Richardson Grove State Park during the peak hours of the concert event. One "ranger" will assist in directing traffic at the entrance on Friday afternoon beginning at 4:00pm - 11:00pm and again Saturday morning from 7:00am to 10:00am or as directed by on-duty State Park rangers. A second "ranger" will patrol the camping areas to ensure that concert attendees and others drawn by the concert obey park rules and regulations. Any problems with rule-breakers will be referred to an on-duty State Park ranger for appropriate action.

29. Mateel maintenance staff and the recycling crew will offer personnel to Richardson Grove State Park to assist in post-event clean-up of Park camping areas and facilities as directed by the State Park Maintenance supervisor.

30. The Security Plan (See Appendix 1 - 1992 Operation Plan) is designed to accomplish the following: minimize non-paying customer access; provide information and assistance to public and law enforcement personnel; provide instructions on all site activities (i.e., first aid, sanitary and water station locations, etc.); eliminate illicit sales; eliminate the incidence of vandalism and break-ins; effectively respond to lost children, emergencies, injuries, etc. in cooperation with on-site medical team; search all ice chests, backpacks, etc. to prevent alcohol, dogs, drugs, weapons, fireworks and glass from entering the site.

31. The 1992 Security Plan will be modified to provide additional enforcement of no Permitted fires (including hibachis).

32. An on-site emergency first aid team will be provided by RockMed, a professional medical team out of San Francisco with experience in concert events ranging in size from 1000 - 300,000 people. The team will consist of 2 M.D.s, 4 RNs, 5 Psych-Techs, 3 Paramedics and 25 EMTs/CPRs. A First Aid Station will occupy an area inside the concert grounds. Another First Aid Station will be located by the River between Camping Areas C1 and C2. Two ambulances (staffed with 2 EMTs each) will be available on-site from Friday morning until the close of the concert. Additionally, a helicopter landing area will be provided for emergency evacuation. The helicopter evacuation service is provided by Airvac, the North Coast evacuation system. (See Appendix 1 - 1992

Operation plan Figure 10. Emergency Services)

33. For emergency medical aid purposes, a gridded site map describes general locations on the site by x and y coordinates facilitating location and response to emergency medical situations. All security and medical staff will have site maps on their person in addition to 2 way radio communicators enabling them to communicate immediately with security and other concert staff. (See Figure 2. Gridded Site Map)

34. Annual evaluation will review current information on habitat condition and status of plant and animal species. Any changes in habitat or species will be carefully noted and mitigation measures incorporated into the next annual operation plan in cooperation with California Department of Fish & Game staff biologists.

35. The concert music will end at 10:00 am on Saturday night and 7:00pm on Sunday night. This will mitigate late-night noise that will allow people residing around the concert site to get a "good night's sleep."

36. The On-site Camping and Parking plan will be modified to provide for Quiet Camping Area Zones and signs will be placed and enforced for the on-site camping areas to restrain post-concert cheer and noise-making.

C. Mitigation Monitoring

Monitoring the effectiveness of mitigation measures will involve a number of different parties, including the Mateel Community Center, Humboldt County Planning Department and Division of Environmental Health, State Departments of Transportation, Fish and Game, and State Parks. Post event evaluations will be carried out annually and modifications or additions to the Operation Plan and mitigation measures will be made as necessary to minimize or reduce potential effects to less than significant. The annual post event evaluation will be a condition of the use permit and spell out the responsibilities of each agency, the Mateel Community Center and Humboldt County Planning Division. The Mitigation Monitoring Program is discussed in detail in Section VII. of this EIR.

## II. Introduction

The Mateel Community Center has applied for a 5-year Conditional Use Permit for the 1993 - 1997 (10th annual through the 14th annual) Reggae on the River Concerts. Reggae on the River is the major annual fund-raiser for the Mateel Community Center and approximately 27 other non-profit organizations in Southern Humboldt County. The 5-year permit is desired by both the applicant (Mateel Community Center) and lead agency (Humboldt County Planning) to avoid the annual costs of applying and reviewing a use permit every year.

In the nine year history of the event, attendance has grown from approximately 1200 in 1984 to over 10,000 in 1990 and 1991. In 1991, a compromise was made with the lead agency to reduce and maintain the number of attendees to 10,000 people (including 7,500 ticket holders and approximately 1,500 volunteers and staff plus approximately 1000 band members, guests, press people, vendors, and children under 12 who get in free), and to allow the concert to take place over a 2 day timeframe.

The growing popularity and success of the event has raised issues and concerns regarding public health and safety as well as environmental impact. Each year over the past nine years, the Mateel has demonstrated its willingness and commitment to making the improvements necessary to meet health and safety standards and address community concerns regarding environmental impact.

In 1991, \$51,350 was spent on on-site improvements in response to agency and neighborhood concerns. A total of \$166,724 went to reimburse public agencies for their staff time and equipment in providing fire protection, traffic control and security both on and off-site. (See Appendix 1 - Appendix A. Economic Costs & Benefits) The Mateel Community Center has emphasized "soft" improvements (short-term, temporary, event-specific and people intensive) over "hard" improvements (long-term, permanent, capital intensive) due to the fact that the event is a once-a-year, 2 day "event" rather than a permanent development-oriented "project" which can amortize investments and realize benefits over an extended timeframe. Additionally, the Mateel does not own the site and long-term, capital intensive improvements are seen as inappropriate and economically unfeasible.

This Environmental Impact Report evaluates the environmental issues identified in the County-prepared Initial Study and comments received in response to the 1993 5-year Condition Use Permit Application and the Notice of Preparation (NOP) circulated among state and county regulatory agencies. Specific mitigations are proposed to reduce or eliminate potential significant environmental impacts. These mitigations are either included in the 1992 Operation Plan (See Appendix 1) or will be incorporated into the 1993 Operation Plan through specific amendments identified in this EIR. The 1992 Operation Plan as amended will be the governing document for the upcoming 1993 event.

This EIR will use as a baseline five major documents as follows:

- o The 1992 Operation Plan/Mitigation & Monitoring Plan (See Appendix 1);

- o The Responses to Comments on the 1992 Operation Plan;

(Note: both of the above documents were prepared in support of the 1992 1-year Conditional Use Permit application)

- o a post-event assessment of the 1992 event by concerned agencies;

- o a post event evaluation report prepared by Mateel staff; and,

- o agency review comments received in response to the 1993 5-year Condition Use Application and Notice of Preparation (NOP)

This report will also evaluate alternatives to the proposed project as summarized below: (See Section VII. Alternatives to the Project)

1. Reduced attendance
2. 1-day event rather than 2-day event
3. Another time.
4. Another location
5. No project

### III. Project Description

The Tenth Annual Reggae on the River Concert will be held at the French's Camp location in Piercy, California on property known as 675 Highway 101. The site is 9 miles south of the Garberville area on the east side of Highway 101, approximately 0.5 miles from the intersection of Cook's Valley Road and Highway 101. (See Appendix 1 - 1992 Operation Plan: Figure 1. Project Location)

The Mateel Community Center has leased the site for the period between June 15, 1993 and October 15, 1993. Subsequent annual leases will likely cover the same time frame.

Mateel Community Center staff will occupy the site according to the following schedule:

June 15 - June 30 - perform necessary roadwork and prepare bridges

July 1 - July 30 - occupy site to set up facilities and prepare site for event

July 31 - August 1 - manage the 2-day event (first weekend in August, dates may vary from year to year)

August 2 - August 31 - dismantle facilities, clean-up, and perform site restoration work as necessary

Gates will open for concert attendees on Friday morning at 8:00 am

Saturday, the Gates will open for concert attendees at 8:00am on Saturday with the concert occurring from 10:00am to 10:00pm.

On Sunday, the Gates will open for concert attendees at 8:00am with the concert occurring from 10:00am to 7:00pm

Attendance will be limited to 8,000 ticket-holders and 2000 staff, volunteers, band members, guests, etc. for a peak total of 10,000. For 1993, the attendance will be increased by 500 and volunteer staff will be reduced by 500, thus, maintaining the 10,000 person limit.

The increase in ticket revenues will help offset the \$70,000 expense for providing the level of security established in 1992 and cover other site improvement, promotion and production expenses. Over the past few years, mitigation and other costs have continued to increase while revenues have stayed the same. As a result the Mateel has not been able to finish work on their community center.

The peak total of 10,000 people will only last for a portion of the two days of the event. Attendance is estimated to reach approximately 3,000 by Friday night with another 7,000 arriving the next morning to peak at approximately 10,000 between 10:00am and 10:00pm on Saturday night.

As the concert ends on Saturday night, approximately 4,000 people will remain on-site, while the remainder will be redistributed to surrounding lodging and camping facilities. The peak of approximately 10,000 attendees is reached again on Sunday between 10:00am and 7:00 pm and is reduced drastically as the concert ends and people begin leaving the site. By Monday at 12:00 noon an estimated 300 people will remain on site for clean-up and dismantling of event facilities.

Approximately 4000 people will be camping on-site. Additionally, approximately 1000 local people stay at their own homes and another 1000 are estimated to stay with friends in the greater Redway community. The balance of 4,000 will be distributed throughout the region at private campgrounds and motels and nearby state parks.

Concert attendance is verified in a number of ways as summarized below:

- 1) only 8,000 tickets are sold.
- 2) ticket attendees are screened and wrist-banded.
- 3) a heat system is used to check for counterfeit tickets.
- 4) non-ticketed (or counterfeit) people are turned away before they cross the river. Sneak-ins are not wrist-banded and are turned away.
- 5) staff, volunteers and guests are checked-in and wrist-banded.
- 6) total attendance is determined by number of tickets sold and list of staff, volunteers, and guests.

## IV. Environmental Setting

### A. Land Use

The project site is approximately 80 acres in size encompassing approximately 3,000 linear feet of the South Fork of the Eel River in Southern Humboldt County. The actual concert site encompasses approximately 30 acres. (See Appendix 1 - 1992 Operation Plan, Figure 2. Site Plan ) The Humboldt County General Plan designates the site as Agricultural Land (AL) and the zoning is Unclassified (U). There is a cluster of tourist-oriented and recreation facilities in the immediate vicinity, namely, Richardson Grove State Park, KOA Campground, Hartsook Inn, Woodsman Cafe, BP Gas Station, and The Grandfather Tree. (See Appendix 1. 1992 Operation Plan, Figure 3. French's Camp 101 Entrance & Security Positions)

Historically, the first commercial use of the site was for a motorcross track and campground called French's Camp. The Mateel Community Center has produced the Reggae on the River concert at the site for the past nine years.

### B. Soils, Geology & Hydrology

Most of the site is within the 100 year floodplain of the South Fork of the Eel River and is composed of gravels and sands deposited by the River especially during wet-season high water flows. Water flow during August is low to very low depending on rainfall. Approximately 1/3 of the site is adjoining river terrace above the 100 year flood plain. The terrace is composed of alluvial soils (flood-deposited) on top of well-draining river gravels. No other drainage or water courses occur on the site.

### C. Air & Water Quality

Air quality in the vicinity is of high quality though affected by auto emissions (Carbon monoxides and particulates) along the Highway 101 corridor which includes commercial truck traffic, local traffic, and tourist-related traffic utilizing the facilities in the area or passing through during peak summer months of July and August.

#### D. Traffic & Circulation

Access to the site is off Highway 101 which parallels the river immediately west of the site. Vehicular access is provided by a 4-lane dirt road and 3 temporary flat car bridges across the River. Pedestrian access is along the same roadway to a footbridge which crosses the River. There are no existing public transportation systems serving the area.

Highway 101 is the major north/south travel way linking the north coast with Mendocino and Bay Area counties to the south and Del Norte County and the Oregon Coast to the north. Along its route, the roadway varies back and forth from 2-lanes to 4-lanes and speeds vary from 25 mph to 55 mph. Vehicular travel along the Highway 101 corridor includes commercial truck traffic, local traffic, and tourist-related traffic utilizing the facilities in the area or passing through. The latter is highest during the summer tourist season.

The section of Highway 101 in the vicinity of the proposed project is a 2-lane roadway with a 40mph speed limit and returns to 4-lanes approximately 2-miles north of the project site. Summer traffic is aggravated by vehicles leaving and entering the 2-lane roadway from Richardson Grove State Park, KOA Campground, Hartsook Inn, Woodsman Cafe, BP Gas Station, and The Grandfather Tree. Frequently the traffic is reduced to 25 mph due to tourist-facility related traffic congestion. Serious accidents have occurred in the area when vehicles enter the congestion area at 40mph or higher speeds.

Traffic speed is reduced to approximately 25 mph during periods in the morning and evening hours on the days of the event as vehicles arrive and leave the concert site. There is no record of serious accidents or injuries associated with the 2-day concert event. The Traffic Control Plan (Figure 1) is designed to maintain this record in conformance with California Highway Patrol requirements for highway vehicular traffic and pedestrian safety.

#### E. Utilities

Improvements on the site include a 25 gallon per minute well, a 500 gallon water storage and pressure tank, a filtration system, and 1,440 linear feet of 1-1/2" PVC water main. The system is capable of



generating 36,000 gallons per day. (See Appendix 1 - 1992 Operation Plan: Figures 9.A. Water Distribution System Plan; 9.B. Water Distribution System Detail; 9.C. Water Distribution System Detail; and 9.D. Fountain & Sink House Detail; and Appendix F. Letter from Laco Engineers on Water System Capacity).

The 1992 Operation Plan was amended to include an additional water supply for last year's event and will be provided again by 2-3500 gallon tanks located on the hill above concert area and gravity fed to 2 banks of fountains in the C-1 camping area.

An on-site gray water disposal system has a design load of 1,600 gallons per day. This system serves the back stage and concession area near the stage by draining gray water into a 300 linear foot leach field. (See Appendix 1 - 1992 Operation Plan: Appendix H. On-site Sewage Disposal System Design.) The on-site septic system is not useable as no toilet facilities are provided. A 1500 gallon gray water tank serves the hand and food washing facilities for food vendors.

The site is served by electricity with an electrical main near the concert stage which was installed by PG & E.

A permanent 40 x 80 concrete stage is located at the center of the concert area. A permanent chain link fence surrounds the concert area.

#### F. Public Services

The project is not expected to effect fire protection services. The history of response to fire hazards over the past 9 years has been excellent. The Fire Protection Plan was designed with the help of local residents of the Piercy/Cook's Valley area. Additional coordination has occurred with California Department of Forestry and Fire Protection. Fire protection will be provided by the Piercy Volunteer Fire Department (PVFD).

The Security Plan is designed with both California Highway Patrol and the Humboldt County Sheriff's office who will be compensated for providing law enforcement services in support of on-site staff security personnel.

Many of the concert attendees camp in nearby public or private campgrounds or stay in motels or inns. Total capacity of campgrounds, motels and bed and breakfast inns in Southern Humboldt and Northern Mendocino is 9,766 people not counting the approximately 4,000 people camping on-site and the 1000 local volunteers who will stay at home with an estimated 1000 guests. The designation of Oak Flat at Richardson Grove as a concert attendee campground should minimize the disruption of non-concert attendees activities.

#### G. Archeological Resources

No archeological sites are known to exist on the site.

A July 1992 study of the Lower Eel River (Final Program EIR on Gravel Removal From the Lower Eel River prepared by the Natural Resources Division of the Humboldt County Public Works Department) discusses the massive changes in river channel location with corresponding changes in river bank as a result of the historically high floods of 1861-62 and again in 1964. The study concludes that most of the known archaeological sites located along the lower river were likely wiped out by these historic floods. The conclusion can be similar for any possible sites historically located along the South Fork of the Eel.

#### H. Biological Resources

Vegetation on the site consists of willows occupying portions of the gravel stream way, grass meadows on the terrace above and scattered fir, oak, cottonwood and chapparel. Climate of the areas is typically characterized by hot and dry summers with cooler and wet weather during late fall, winter, and early Spring.

There are no known rare or endangered plants or animals on the site or in the immediate vicinity. California Department of Fish & Game has surveyed the site and found no evidence of spotted owls or habitat. (See Appendix 1 - 1992 Operation Plan: Appendix B. Federal Register description of Spotted Owl Habitat)

There are eight native fish species found in the Eel River and its tributaries: rainbow trout (including steelhead), pacific lamprey, West Coast three-spined stickleback, Western sucker, Aleutian sculpin, prickly

sculpin, King Salmon and Silver Salmon. The lamprey, steelhead, Silver and King Salmon have an anadromous life cycle in which they reproduce in fresh water but acquire their full growth in the Pacific Ocean.

Adult Kings enter the river soon after heavy winter storms cause a rise in water flows. Juvenile Kings leave the river by June of the same year they hatch. Young Silvers remain in fresh water for a full year after hatching and migrate seaward beginning in May or June of the year after hatching. Steelhead enter the river in April or May, spending the summer in deep pools and spawn the following Spring. The Fall/Winter (November through February) run of steelhead enters the river after the first sizable storms and peaks in mid-winter and early spring. These fish spawn in all parts of the river below migration barriers.

Resident rainbow are common in several headwater tributaries and, during the summer, in deeper pools of the river.

#### I. Visual Environment & Aesthetics

The event site is a non-descript river bar with no particular scenic values of its own. The aesthetics of the landscape surrounding the site is, in part, what makes the site a good place for an outdoor concert, and is composed of old growth redwood to the north, and second growth conifers and riparian vegetation to the south. The aesthetics of the site during the event is much like a carnival or fiesta with lots of people, color, activity, and music.

#### J. Noise, Light & Glare

Ambient noise levels of the 101 corridor are considerable with heavy trucks and cars breaking and gearing down along the highway as traffic slows for the exiting and entering vehicles to and from the tourist facilities along the highway.

The concert stage is directed easterly into a natural amphitheater and away from the residential population to the west. All on-site lighting is per requirements of County for public safety and security purposes. All-night lighting will be powered by 12 volt batteries with no spill over into surrounding commercial or recreational areas. Lighting is provided by each bank of portesans. Battery-operated lanterns light the

roadway from Oak Flat Campground to the concert site. (See Figure 3.)

## **V. Regulatory Setting**

The proposed project is subject to regulations and permit procedures of two (2) Humboldt County agencies, three (3) State agencies, and one (1) federal agency as listed below:

1. Conditional Use Permit - Humboldt County Planning Department
2. Stream Alteration Permit - California Department of Fish & Game
3. Encroachment Permit - California Department of Transportation
4. 2-day Temporary Sales Permit - California Department of Alcoholic Beverage Control
5. Food Handling Permits (for Food Vendors) - County Division of Environmental Health
6. Section 404 Permit (for bridge) - Army Corps of Engineers

## **VI. Impact Analysis & Mitigation Measures**

### **A. Land Use**

#### **1. Impacts**

Proposed use of the site for tourism and recreation is well within current land use practices of the Highway 101 corridor, specifically the complex of tourist/recreation facilities adjoining the site. The proposed use is consistent with the County General Plan and Zoning for the site and may be allowed with a Use Permit.

The proposed project will not result in a substantial alteration of the present or planned land use of the site or immediate environs nor will it alter the location, distribution, density or growth rate of the human population of the area.

## 2. Mitigation

No mitigation is required as there are no significant adverse environmental impacts related to land use.

### B. Soils, Geology & Hydrology

#### 1. Impacts

There will be little to no disruption, displacement, compaction or overcovering of the soil. All public parking for the event takes place on the river bar which is composed of rock and gravel and does not result in compaction of soil.

Likewise, there will be no changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of the river.

Similarly, there will be no changes in currents, or course of direction of water movements. (See Approved Stream Alteration Permit, DFG on file with County Planning)

Any potential vehicular compaction of river rock and gravel will be minimal and temporary as Fall, Winter and Spring rains annually reconfigure the placement of the river bars.

Foot traffic within the concert grounds (alluvial terrace) does result in minimal, temporary compaction and generates dust.

River water quality monitoring occurred during last years event according to a DEH-approved monitoring plan. Results indicated elevated coliform levels in the river and immediate vicinity but the levels did not exceed DEH-recommended levels for recreation use.

#### 2. Mitigation

The concert grounds and other areas subject to temporary compaction, dryness and dust will be watered and mowed prior to the event and seeded and maintained after the event to maintain grassy cover in good condition. More frequent watering will occur on the

second day of the event in response to County Planning observations that dusty conditions occurred during the second day of the 1992 event.

Bridges and other facilities that might effect high water flows or natural channel configuration will be removed by October 1.

The On-site Camping & Parking Plan (See Appendix 1 - 1992 Operation Plan) will be modified to provide a 20 foot setback from the existing river edge. No camping or parking will be allowed within this 20 buffer area. The setback will be marked with white chalk and enforced by security staff.

River water quality monitoring will occur during the 1993 event and occur annual for the 5-year life of the use permit according to North Coast Water Quality Control Board or DEH standards. Samples will be take at one (1) upstream location and two (2) downstream locations (including the summer bridge at Richardson Grove State Park) and will measure total and fecal coliform during afternoon periods of the 2-day event. This monitoring will occur on an annual basis.

### C. Air & Water Quality

#### 1. Impacts

Ambient air and water quality are not expected to be adversely affected by the 2-day event. Substantial air emissions or deterioration of ambient air quality will be minimal and temporary.

No objectionable odors will be created as a result of the event.

No discharge into surface waters or alteration of surface water quality is expected including but not limited to temperature, dissolved oxygen or turbidity. All gray water is drained to holding tanks which will be pumped and removed from the site. Human waste will be accomodated by the on-site portasans, pumped and hauled off-site to the Redway Community Services District or the Eureka Municipal Sewage Treatment facility.

Handwashing facilities and proposed liquid waste containers will reduce or eliminate discharge of wash water and cooking water from camping areas into the surface water of the River.

No alteration of the direction or rate of flow of ground water is expected.

No change is expected in the quantity and quality of groundwater. There will be a temporary increase in use of well-water. The capacity of the well and distribution system is capable of supporting the event population for the 2-day period and will recharge itself once the event has ended. Past use of water for site preparation, dust control and fire hazard protection has not noticeably reduced the water table.

## 2. Mitigation

The on-site septic system will be supplemented by providing 120 portasans at above the standard of 1 portasan per 100 people. The portasans will be monitored on an hourly basis and "full" facilities will be temporarily closed. Pumping will be done when necessary by two on-site pump trucks provided and staffed by Empire Waste Management from Ukiah. Waste will be delivered to the Redway Community Services District sewage treatment plant or the Eureka Municipal Sewage Treatment facility. Verbal agreements have been received from RCSD and the Eureka facility to accept the waste. Formal letters to this effect will be forthcoming.

Handicapped accessible portasans will be provided near the handicapped camping and parking area. Additionally, a gray water tank will store runoff from both hot and cold water hand and food washing facilities. (See Appendix 1 - 1992 Operation Plan: Figure 8. Sanitary Facilities & Solid Waste Disposal & Recycling)

The Operation Plan section on Sanitary Facilities & Solid Waste Disposal & Recycling will be modified to include the provision of portasans, hand washing facilities and a liquid disposal receptacle for camping and cooking-related liquids in blocks of 10, 1, and 1 respectively for each 125 campsites. This modification will maximize accessibility and serviceability of these facilities.

The existing and revised On-site camping provisions and the policy of restricted "ins and outs" (which was inaugurated last year with considerable success) will further reduce on-site use of vehicles and their effect on river resources and water quality. The grass seeding and watering program will reduce dust in and around food booths and concert areas

The On-site Camping and Parking plan will be modified to provide a 20 foot setback from the existing river edge. No camping or parking will be allowed within this 20 buffer area. The setback will be marked with white chalk and enforced by security staff.

The Shuttle Service and Off-site Camping & Parking Plan (See Appendix 1 - 1992 Operation Plan) will eliminate some of the vehicular traffic on Highway 101. The Off-site Camping & Parking Plan will be modified to include camping and parking spaces for approximately 2,000 additional people available at Riverview Ranch in Mendocino operated by the Redwood Chapter of the Kiwanis International. An additional Shuttle Service will provide pick up and delivery for concert attendees staying at Riverview Ranch. The camping and parking provided by this facility will relieve the pressure for on-site camping and parking as well as the pressure on other lodging and camping facilities in the vicinity of the project site. According to the Kiwanis Chapter, permits for camping facilities in Mendocino County will not be a problem.

Dirt roads will be watered by an on-site water truck provided by Round Mountain Water Truck Service as necessary or as directed by California Highway Patrol and staff.

Additional signs will be placed at water supply stations throughout the site stating "no dish or hair washing" and violators will be asked to cease such activity by on-site security staff.

#### D. Traffic & Circulation

##### 1. Impacts

Substantial impacts on existing transportation systems are not expected.



Temporary generation of substantial additional vehicular movement is expected in the morning and evening hours on the days of the event as vehicles arrive and leave the concert site.

By the Friday night before the concert, an estimated 5,000 people (1250 cars at 4 people per car) will arrive on site. Saturday morning, an additional 6,000 people will arrive though not all by vehicle. Some arrive on foot from nearby Oak Flat and KOA campgrounds while others arrive on Shuttle Buses from off-site lodging facilities. Saturday night's peak of 10,000 people is reduced to approximately 4,000 as people leave following the end of the concert at 10:00pm. Again, the return of approximately 6,000 people Sunday morning (by foot, car, and shuttle bus) peaks Sunday at 10,000. Sunday's concert ends at 7:00pm and the majority of people leave the concert site that evening. By 12:00 noon the following Monday, approximately 300 people may remain on site, most of whom are event staff responsible for clean-up and dismantling of concert facilities.

Demand for new parking facilities will be required on a temporary basis on the days of the event.

There will be no long-term alteration to present patterns of circulation or movement of people and/or goods.

Increases in traffic hazards to motor vehicles, bicyclists, or pedestrians are temporary and minimal. There is no record of serious accidents or injuries associated with the 2-day concert event. The Traffic Control Plan (Appendix 1 - 1992 Operation Plan) is designed to maintain this record in conformance with California Highway Patrol requirements for highway vehicular traffic and pedestrian safety.

The August 10, 1992 CHP "After Action Report" states that the Traffic Plan should be modified to address safety concerns caused by unlawful u-turns south of the project site (see below under mitigation).

## 2. Mitigation

The implementation of the amended Traffic Control Plan is expected to mitigate the affects of vehicular and pedestrian traffic both on site and off-site. (See Figure 1. Amended Traffic Control Plan and Appendix 1 -

1992 Operation Plan: Sections A. On-site Traffic Control and B. Off-site Traffic Control.) According to Caltrans, the amended traffic control plan will be reviewed for approval as part of the DEIR review process.

Last year's inaugural policy of "no in and outs" successfully reduced the amount of vehicle and pedestrian traffic moving on and off site during concert hours and will be implemented again for the 1993 and subsequent events.

The On-site Traffic Control Plan will allow vehicular traffic entering from Highway 101 to move into the site and parking areas rapidly thus reducing the possibility of traffic backing up on the highway. (See Appendix 1 - 1992 Operation Plan: Figure 4. Traffic Control Plan) The traffic flow through the entrance and will call area will allow for a multiple lane checkpoint system for ticket verification. In addition, implementation of restricted "ins & outs" policy will substantially reduce traffic flow and congestion. Similarly, off-site traffic control along 101 will encompass a 5-mile area both north and south of the event site. (See Appendix 1 - 1992 Operation Plan: Section C. Public Safety & Security)

The Traffic Plan will be modified to reduce the speed limit to 25 mph during peak traffic periods through the high hazard corridor from the project site to Richardson Grove State Park. Temporary speed limit signs and notices of reduced speed will officially designate the 25 mph speed zone (a reduced speed which occurs already as traffic slows as a result of congestion). The 25mph speed limit will reduce the potential for serious accidents much as a highway construction project would temporarily reduce the speed of vehicle traffic through a construction area. According to Caltrans, the amended traffic control plan will be reviewed for approval as part of the DEIR review process.

The Traffic Plan will be also be modified to reduce the unlawful u-turns south of the concert site and significantly reduce the hazards posed as follows:

o provide 6 additional "no u-turn" signs along the southerly approach to the area between the project site and Piercy turn-off where the majority of the illegal u-turns occur. (See Figure 1.)

o provide additional event security staff to monitor the area to discourage potential u-turns.

o request CHP provide 2 black and white CHP vehicles in highly visible areas of the high u-turn potential area to further discourage unlawful u-turns.

o provide additional "to concert site turnaround exit" signs along southbound traffic lanes of 101 to prevent tendency to want to cross northbound traffic to enter concert site grounds or make illegal u-turns. (See Figure 1)

Implementation of the On-site Camping & Parking Plan is expected to minimize the effects of on-site parking. Capacity is available for parking approximately 2300 vehicles on-site. There are 9 separate parking areas P 1 - P9 (See Appendix 1 - 1992 Operation Plan: Section D. On-site Camping & Parking and Figures 6. On-site Camping & 7. On-site Parking Plan).

Campers at adjoining Oak Flat Campground of Richardson Grove State Park will be able to walk to the concert grounds on the back road thereby reducing the need for on-site parking and the presence of pedestrian traffic along 101. Similarly, campers at the adjoining KOA Campground and Hartsook Inn will be walking to the site reducing vehicle traffic flow and the need to park additional vehicles. (See Appendix 1 - 1992 Operation Plan: Sections D. On-site Camping; E. On-site Parking; F. Off-site Camping, Lodging & Parking; and G. Shuttle Service)

Implementation of the Shuttle Service & Off-site Parking Plan expanded in the 1992 Operation Plan is expected to reduce the amount of on-site parking needed by providing transport to off-site lodgers and campers.

The Shuttle Service and Off-site Camping & Parking Plan (Appendix 1 - 1992 Operation Plan) will eliminate some of the vehicular traffic on Highway 101. Highway 101 becomes 2-lane with a speed limit of 40mph near the entrance of the concert site. Traffic in this area is also entering and leaving the highway to and from nearby recreation and tourist facilities. CHP has noted that normal speeds are reduced to 25mph in the vicinity of the event entrance. The highway is 4-lanes within

1/2 mile to the south of the site accomodating more traffic at higher speeds.

The Off-site Camping & Parking Plan will be modified to include additional camping and parking space for approximately 2,000 additional people available at Riverview Ranch in Mendocino operated by the Redwood Chapter of the Kiwanis International. An additional Shuttle Service will provide pick up and delivery for concert attendees staying at Riverview Ranch. The camping and parking provided by this facility will relieve the pressure for on-site camping and parking as well as the pressure on other lodging and camping facilities in the vicinity of the project site.

According to the Kiwanis Chapter, permits for camping facilities in Mendocino County will not be a problem.

#### E. Utilities

##### 1. Impacts

The proposed project will not create any health hazard or potential health hazard (including mental health). There will be no exposure of people to potential health hazards.

Existing on-site water supply and treatment facilities are capable of supporting the concert attendees for the 2-day event. The site is served by an existing 25 gallon per minute well, a 500 gallon water storage and pressure tank, a filtration system, 1,440 feet of 1-1/2" PVC water main. The system is capable of generating 36,000 gallons per day. At 3.5 gallons per person per day this is adequate to serve the needs of the 10,000 concert attendees and support staff. (See See Figures 9.A.B.C. & D. Water Distribution System Plan and Appendix F. Letter from Laco Engineers on Water System Capacity.)

The 1992 Operation Plan was amended to include an additional water supply for last year's event and will be provided again by 2-3500 gallon tanks located on the hill above concert area and gravity fed to 2 banks of fountains in the C-1 camping area. These tanks will be filled by a new pipe from the existing well before the event and each evening during off hours. This system design will be approved by an engineer before installation will be installed according to Environmental Health

Standards. An estimate 50 foot elevation change will be necessary to maintain a minimum of 25psi and a pressure gauge will be installed at the endline to monitor pressure.

At 3.5 gallons per person per day this is adequate to serve the needs of the 10,000 concert attendees and support staff. (See Calculations in Response to Comments for the 1992 Reggae on the River Concert)

The provision of 120 portesans at above the standard of 1 per 100 people and the monitoring and pumping program will provide adequate sanitary facilities for the concert population. Additionally, a gray water tank will store runoff from both hot and cold water hand and food washing facilities. These systems will be pumped as necessary by licensed contractors who will deliver the waste off-site to proper municipal treatment plant facilities. (See Section H. Sanitary Facilities & Water Supply.)

In their review of the current 5-year Conditional Use Permit, the County Division of Environmental Health recommends that shower facilities be provided in adequate numbers.

The 1992 Sanitary Facilities & Water Supply Plan (See Appendix 1 - 1992 Operation Plan) will be modified to include the provision of on-site shower facilities. Contractors providing shower wagons to the California Department of Forestry and Fire Protection (CDF) have been contacted to secure the temporary use of one or more shower wagons that are typically used in support of fire suppression efforts. These trucks provide their own water supply and also collect and store waste water. Waste water will be delivered to Redway Community Service District's sewage treatment facility and/or Eureka Munciple Sewage Disposal Plant. Detailed plans for backup shower facilities in the event a fire removes the shower wagon are being discussed with County DEH staff. Backup shower facility design will be submitted to the DEH for approval prior to installation.

Solid waste disposal will be provided by 2, 10-yard dumpsters, 1, 15-yard dumpster and a number of 2-yard dumpsters placed at each of Sanitary Facility Stations which include toilet facilities and drinking fountains. Additionally, 6, 2-yard dumpsters will be placed in high traffic areas around the concert grounds and 75 50-gallon

barrels will be available within the concert grounds, along trails, in parking areas and along the river. 75 50-gallon recycling barrels will be provided by Southern Humboldt Recycling Center and will also be placed in the same areas. (See Figure 8. Sanitary Facilities & Solid Waste Disposal & Recycling)

All solid waste will be sorted for recyclable material by volunteers from the Mateel sanitation staff before disposal. The entire site will be cleaned up after the event to the condition it was in before the event. The Mateel's history of site clean up is exemplary.

Solid waste disposal services will be provided by Empire Waste Management out of Ukiah. No glass bottles will be allowed into the concert area and soft drink booths have been redesigned to eliminate all cans and bottles thereby eliminating all can/bottle-related litter in the concert grounds.

There will be an on-site trash coordinator with a crew of 20 volunteers to monitor and maintain the solid waste disposal and recycling facilities.

## 2. Mitigation

The proposed project will reduce or eliminate any potential health hazard through the implementation of the 1992 Operation Plan as amended thus further eliminating the exposure to potential health hazards for the 1993 event.

The Sanitary Facilities & Water Supply Plan is expected to provide adequate sanitary facilities and a safe drinking water supply for conference attendees in accordance with County Health Standards. Licensed contractors will maintain and deliver to Redway Community Service Districts sewage treatment facility and/or Eureka Municipal Sewage Disposal Plant in accordance with government regulations.

The 1992 Sanitary Facilities & Water Supply Plan (See Appendix 1 - 1992 Operation Plan) will be modified to include the provision of on-site shower facilities. The California Department of Forestry and Fire Protection (CDF) will be contacted to secure the temporary use of one or more Shower wagons or trucks that are typically used in support of fire

suppression efforts. These trucks provide their own water supply and also collect and store waste water. Waste water will be delivered to Redway Community Service District's sewage treatment facility and/or Eureka Municipal Sewage Disposal Plant. Detailed plans for the shower facility will be submitted to the DEH for approval prior to installation.

Evidence of contract with licensed waste disposal haulers and disposal destination will be provide to DEH at least 30 days prior to the event.

Drinking water samples from the well will be taken 2 weeks prior to the event for bacteriological analyses and submitted to the County Division of Environmental Health.

#### F. Public Services

##### 1. Impacts

The project is not expected to effect fire protection services. The history of response to fire hazards over the past 8 years has been excellent. The Fire Protection Plan was designed with the help of local residents of the Piercy/Cook's Valley area with coordination with California Department of Forestry and Fire Protection.

The project is not expected to effect police protection services. The Security Plan (See Appendix 1 - 1992 Operation Plan) is designed with both California Highway Patrol and the Humboldt County Sheriff's office who will be compensated for providing law enforcement services in support of on-site staff security personnel.

Effects on nearby parks and other recreational facilities, including roads will be temporary and minimal. Many of the concert attendees camp in nearby public or private campgrounds or stay in motels or inns. Total capacity of campgrounds, motels and bed and breakfast inns in Southern Humboldt and Northern Mendocino is 9,766 people not counting the approximately 3,800 people camping on-site and the 1000 local volunteers who will stay at home with an estimated 1000 guests. The designation of Oak Flat at Richardson Grove as a concert attendee campground should minimize the disruption of non-concert attendees activities.

The State Department of Parks and Recreation's response to the current application for a 5-year Conditional Use Permit, identifies potential significant impacts associated with the 2-day concert event. In general, the increase in vehicles to the project site causes traffic control problems at the entrance to Richardson Grove State Park. Additionally, non-ticket holders refused entry to the concert site or those who arrive after on-site facilities are full, often park or camp in non-designated places in the Richardson Grove or other State Park in the area. Pedestrian traffic along Highway 101 through the "Grove" also presents a potential traffic hazard.

According to State Parks staff, Visitor Maintenance and Service functions are completely overwhelmed by the influx of people into all the State Parks in the area during the concert weekend aggravating the ability of park personnel to safely maintain and protect the parks.

Maintenance of other public facilities, including roads, is not expected to be affected by concert event activities.

No other government services will be affected by the concert event.

## 2. Mitigation

A temporary Communication System will be installed on-site to provide immediate transmission of information for event management, security and public safety purposes. (See Appendix 1 - 1992 Operation Plan: Section L. Communications)

The Fire Protection Plan (See 1992 Operation Plan) will be modified to reflect the fire protection mitigation measures as identified by the State Department of Forestry and Fire Protection (CDF) as listed below:

1. Three quick-attack units and at least one fire engine will be on site from 10:00am until 11:00 pm during the day prior to the event and the two days of the event. From 11:00pm to 10:00am the next morning, fire equipment will be located within 5 miles or 10 minutes travel time of the project site.



2. Patrols of the area from Piercy to the Miranda off ramp will occur at least twice between the hours of 6:00pm and 11:00 pm, Friday, Saturday, and Sunday nights of the event. The two fire patrols will include 2 people each with radios, waterpacks and shovels. Each patrol will be on duty from 6:00pm to 7:00pm and from 10:00pm to 11:00pm Friday, Saturday and Sunday evenings. These patrols will educate campers that fire permits are required and will extinguish fires if not in compliance. CDF will be notified of all illegal fires.

3. There will be a one-and-one-half-inch (1-1/2") hose pre-laid from the concert area to the top of the bluff behind it. This hose will be supported by a fire engine capable of pumping that hose and will be supplied with adequate water for fire-fighting.

4. Each fire engine and quick-attack unit will have the ability to communicate with CDF via radio.

5. Each fire engine shall have at least 3 firefighters assigned to it at all times.

6. Each quick-attack unit will have at least 2 firefighters assigned to it at all times.

7. All fires shall be immediately reported to CDF, except safely burning campfires with a legal permit. Fires will be reported to CDF even if the fire is extinguished before the firefighters discover them.

The Security Plan (See Appendix 1 - 1992 Operation Plan) will be modified to include the provision of 2 Mateel "Rangers" to provide staff assistance at Richardson Grove State Park during the peak hours of the concert event. One "ranger" will assist in directing traffic at the entrance on Friday afternoon beginning at 4:00pm - 11:00pm and again Saturday morning from 7:00am to 10:00am or as directed by on-duty State Park rangers. A second "ranger" will patrol the camping areas to ensure that concert attendees and others drawn by the concert obey park rules and regulations. Any problems with rule-breakers will be referred to an on-duty State Park ranger for appropriate action.

The Off-site Camping & Parking Plan will be modified to include approximately 2,000 additional campsites and parking places available at Riverview Ranch in Mendocino County operated by the Redwood Chapter of the Kiwanis International. An additional Shuttle Service will provide pick up and delivery for concert attendees staying at Riverview Ranch. The camping and parking provided by this facility will relieve the pressure for on-site camping and parking as well as the pressure on other lodging and camping facilities in the vicinity of the project site, especially Richardson Grove and other State Parks.

Mateel maintenance staff and the recycling crew will offer personnel to Richardson Grove State Park to assist in post-event clean-up of Park camping areas and facilities as directed by the State Park Maintenance supervisor.

The Security Plan (See Appendix 1 - 1992 Operation Plan) is designed to accomplish the following:

1. minimize non-paying customer access
2. provide information and assistance to public and law enforcement personnel
3. provide instructions on all site activities (i.e., first aid, sanitary and water station locations, etc.)
4. eliminate illicit sales
5. eliminate the incidence of vandalism and break-ins.
6. effectively respond to lost children, emergencies, injuries, etc. in cooperation with on-site medical team
7. search all ice chests, backpacks, etc. to prevent alcohol, dogs, drugs, weapons, fireworks and glass from entering the site.

The 1992 Security Plan will be modified to provide additional enforcement of non-permitted fires (including hibachis).

An on-site emergency first aid team will be provided by RockMed, a professional medical team out of San Francisco with experience in concert events ranging in size from 1000 - 300,000 people. The team will consist of 2 M.D.s, 4 RNs, 5 Psych-Techs, 3 Paramedics and 25 EMTs/CPRs. A First Aid Station will occupy an area inside the concert grounds. Another First Aid Station will be located by the River between Camping Areas C1 and C2. Two ambulances (staffed with 2 EMTs each) will be available on-site from

Friday morning until the close of the concert. Additionally, a helicopter landing area will be provided for emergency evacuation. The helicopter evacuation service is provided by Airvac, the North Coast evacuation system. (See Appendix 1 - 1992 Operation Plan: Figure 10. Emergency Services)

For emergency medical aid purposes, a gridded site map describes general locations on the site by x and y coordinates facilitating location and response to emergency medical situations. All medical staff have 2 way radio communicators enabling them to communicate immediately with security and other concert staff.

## G. Archeological Resources

### 1. Impacts

The event will not result in the alteration or destruction of prehistoric or historic archaeological site as there are no known archaeological sites on the site. Historically, the river, during 2 catastrophic floods (1861-62 and 1964), has most likely removed any possible artifacts associated with indigenous peoples' use of the river.

Similarly, the proposed project will not cause a physical change which would affect unique ethnic cultural values.

### 2. Mitigation

No mitigation is necessary as there are no significant adverse environmental impacts on archaeological or cultural resources. The project involves no cutting or filling of on-site soil or gravel which may disturb or cover any possible archaeological resources.

## H. Biological Resources

### 1. Impacts

No change in diversity of species or numbers of any species of animals is expected. The site and its immediate environs are not included in the legal description as a critical habitat area for any unique, rare or endangered species, especially the spotted owl.

(See Appendix 1 - 1992 Operation Plan: Appendix B. Federal Register Description of Spotted Owl Habitat. Also See California Department of Fish & Game Response letter on file with County Planning).

No deterioration to existing fish or wildlife habitat is expected.(See California Department of Fish & Game Response letter on file with County Planning).

The 2-day event in early August and the preparation of the site before and after the event do not interfere with anadromous fish whose migratory and spawning activity is confined to the Fall, Winter, and Spring months of the year. Resident rainbow trout will likely occupy the deeper pools of the river above and below the event site during the summer months and will not be effected by event activity.

## 2. Mitigation

Annual evaluation will review current information on habitat condition and species composition and status. Any changes in habitat or species will be carefully noted and mitigation measures incorporated into the next annual operation plan in cooperation with California Department of Fish & Game staff biologists.

### I. Visual Environment & Aesthetics

#### 1. Impacts

The event will not create an aesthetically offensive site open to public view. The event site is a non-descript river bar with no particular scenic values of its own. The aesthetics of the landscape surrounding the site is, in part, what makes the site a good place for an outdoor concert. The aesthetics of the site during the event is much like a carnival or fiesta with lots of people, color, activity, and music.

#### 2. Mitigation

No mitigation is necessary as there are no significant visual or aesthetic impacts.

## J. Noise, Light & Glare

### 1. Impacts

Temporary increase in noise levels is not expected to have a negative effect. The stage is directed easterly into a natural amphitheater and away from the residential population to the west.

Noise levels are not severe nor prolonged. There is no record of these noise levels being damaging to any concert attendees. Ambient noise levels of the 101 corridor are considerable with heavy trucks and cars breaking and gearing down along the highway.

All on-site lighting is per requirements of County for public safety and security purposes. All-night lighting will be powered by PG&E power poles with lights, 12-volt batteries at each bank of portasans, and battery powered lanterns along the trail between concert site and Oak Flat campground. (See Figure 3. Lighting Plan)

### 2. Mitigation

The concert music will end at 10:00 am on Saturday night and 7:00pm on Sunday night. This will mitigate late-night noise that will allow people residing around the concert site to get a "good night's sleep."

The On-site Camping and Parking plan will be modified to provide for Quiet Camping Area Zones and signs will be placed and enforced for the on-site camping areas to restrain post-concert cheer and noise-making.

## **VII. Mitigation Monitoring Program**

### A. Monitoring & Reporting

Mitigation monitoring will be the responsibility of Mateel staff and various State and County regulatory agencies who are contacted after the concert event regarding their review of the effectiveness of specific mitigation measures. The agencies contacted are listed below:

Reggae on the River has become an event of international caliber with the prestige to attract the finest and most famous artists in this musical genre. Reduced attendance of ticketed attendees below the 8,000 maximum would make it financially impossible to attract the best artists and maintain the caliber of the performance. Reduced attendance would force the Community Center into bankruptcy, disallowing continuing construction of the Mateel Community Center and eliminating the Center's function as employer and primary provider of cultural events in Southern Humboldt and Northern Mendocino Counties. Additionally, other non-profit groups who raise money at the event through food and craft booths would see a major source of income reduced. Current attendance is necessary to fund County-mandated improvements and facilities for the event.

## 2. Mitigation

There is no mitigation to off-set the loss of economic benefits to the Mateel Community Center, community non-profits, and the Southern Humboldt County economy.

### B. One-day event (rather than Two-day event) at the Current Site

#### 1. Impact

The duration of the temporary and minimal environmental impacts of the proposed 2-day concert event would most certainly be reduced by a one-day rather than a two-day event. Traffic and demand for camping space, water and sanitation facilities, security, among others would only exist for 1-day rather than 2-days.

In 1991, a compromise was made to reduce the number of attendees to 10,000, but to allow the concert to take place for 2 days. A reduction of the event to 1-day would make the concert economically unfeasible and eliminate economic benefits. (See Discussion above on Reduced Attendance)

## 2. Mitigation

There is no mitigation to off-set the loss of economic benefits to the Mateel Community Center, community non-profits, and the Southern Humboldt County economy.

### C. Different Date for Event at the Current Site

#### 1. Impact

The temporary and minimal environmental impacts of the proposed 2-day concert event would likely be similar if the event were held earlier or later in the summer season. Most environmental impacts would be the same. There would be the same level of traffic, same demand for camping space, water and sanitation facilities, security, among others.

The climate in the Southern Humboldt areas provides an assured "good weather window" between July 1st and September 15. Any time outside of this "window" presents far too great an economic risk to the producers of the event. An event of the caliber of "Reggae on the River" concert would not be produced successfully in the Fall, Winter, or Spring months and the resulting economic benefits to the Mateel, area non-profits and Southern Humboldt economy would be lost.

Many students, who make up much of the audience, would be unable to attend an event scheduled during the months of the school year (September through May).

For example, a similar concert, slated for June 26, 1982 was rained out. Likewise, the Summer Arts Festival, formerly held in September and plagued by wet weather conditions and was finally moved to the last weekend in June when wet weather is less likely but still very possible. Additionally, County law enforcement agencies have expressed a desire for no other large events in the area during the month of June.

The "good weather window" of Summer in Southern Humboldt attracts many tourists to the region and the local economy (including the State Parks) depends on these tourists as a major source of annual revenues. The Mateel Community center is no exception and relies on this event as a major source of revenue in its fund-raising efforts. The proposed project utilizes the camping and lodging facilities in the area to their maximum capacity for the 2 days and 2 nights of the event. Competition for outdoor recreation resources is high during the dry and warmer months of the year.

State Parks staff have repeatedly expressed concern about overcrowded campgrounds and displacement of traditional visitors in Richardson Grove and other State Park in the area. During the 1992 event, Oak Flat Campground was designated for Reggae event campers though non-event visitors could camp there if they so wished. Similarly, event campers can and do reserve campsites throughout Richardson Grove and other State Parks in the area. These people are often families or groups of friends who, like other park visitors, must reserve their campsite months in advance. Their motive is to attend the "Reggae on the River" Concert and spend time with family and friends in an outdoor natural setting.

Competition is the heart of the free enterprise system.

## 2. Mitigation

There is no mitigation to off-set the loss of economic benefits to the Mateel Community Center, community non-profits, and the Southern Humboldt County economy.

### D. Another Site for the Current Event

#### 1. Impacts

The Mateel Community Center has researched the possibility of using another site for future events. The event is somewhat bound by its community base in Garberville and Redway and can't move too far without losing much of its corps of volunteers. Similarly, relocating the event outside the area would remove the economic benefits to the local community. The Mateel Community Center has already invested over \$150,000 in the past 9 years on site improvements at French's Camp.

Currently, the Mateel has made an offer to purchase a 34-acre site near Myers Flat. If the price is negotiable, the financing available, and permanent permits are obtained, the Reggae and many other Mateel events could be on the new alternative site by 1994 at the earliest. The current site would still be necessary for at least two more seasons in order to keep the venue and other Mateel activities intact and functional.



## 2. Mitigation

The environmental impacts of the alternative site are difficult to determine at this point in time as are mitigation measures. However, alternative site development would be preceded by thorough environmental review as part of the permit application process and any mitigation measures for potential significant environmental impacts would likely be required as conditions of approval of necessary permits.

### E. No project

#### 1. Impact

The temporary and minimal environmental impacts of the proposed 2-day concert event would not occur if there were no event held. There would be no increase in traffic, no additional demand for camping space, water and sanitation facilities, security, among others.

If the Reggae on the River event does not occur, the Mateel Community Center would file for bankruptcy and cease to exist. It would no longer be a place of employment nor provide the vast variety of cultural events and community services it currently offers. The many non-profit organizations which derive partial or total funding from this event would be negatively impacted and may similarly cease to exist or have their services severely reduced.

#### 2. Mitigation

There is no mitigation to off-set the loss of economic benefits to the Mateel Community Center, community non-profits, and the Southern Humboldt County economy.

## **IX. Other CEQA Considerations**

### A. Significant Effects and Effects Found Not Significant

This EIR finds the following to be significant effects of the proposed project and alternatives:

- o the revenue generated by the proposed project and its contribution to the local economy is a positive significant effect.
- o the opportunities for cultural enrichment resulting from the proposed project and other performance events funded by the proposed project revenues are positive significant effects.
- o substantial additional vehicular traffic and movement is expected in the morning and evening hours on the days of the event as vehicles arrive and leave the concert site.
- o Demand for new parking facilities will be required on a temporary basis on the days of the event.
- o temporary impacts on existing transportation systems will occur during the days of events.
- o temporary and minimal increase in traffic hazards to motor vehicles, bicyclists or pedestrians.
- o temporary impact upon the quality or quantity of existing recreational opportunities.
- o temporary need for new systems to provide communications, water supply, sanitary facilities, solid waste disposal and recycling.
- o loss of economic benefits to the Mateel Community Center, community non-profits, and the Southern Humboldt County economy if Alternatives A, B, C, or E are implemented.

This EIR finds the following effects of the proposed project and alternatives not to be significant:

- o substantial alteration of the present or planned land use of the site or immediate environs.
- o location, distribution, density or growth rate of the permanent human population of the area.
- o disruption, displacement, compaction or overcovering of the soil.

- o changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of the river.
- o changes in currents, or course of direction of water movements.
- o air emissions or deterioration of ambient air quality.
- o objectionable odors created as a result of the event.
- o discharge into surface waters or alteration of surface water quality.
- o alteration of the direction or rate of flow of ground water.
- o change in the quantity and quality of groundwater.
- o long-term alteration to present patterns of circulation or movement of people and/or goods.
- o creation of any health hazard or potential health hazard (including mental health).
- o exposure of people to potential health hazards.
- o effect upon, or result in a need for new or altered governmental services including fire protection, police protection, parks and other recreation facilities.
- o maintenance of public facilities, including roads.
- o other governmental services.
- o alteration or destruction of prehistoric or historic archaeological site as there are no known archaeological sites on the site.
- o physical change which would affect unique ethnic cultural values.
- o change in diversity of species or numbers of any species of animals.

- o deterioration to existing fish or wildlife habitat.
- o creation of an aesthetically offensive site open to public view.
- o increase in existing noise levels.
- o exposure of people to severe noise levels.
- o production of new light or glare.
- o increase in the rate of use of any natural resources.
- o possible interference with an emergency response plan or an emergency evacuation plan.
- o alteration of location, distribution, density or growth rate of the human population of the area.
- o use of substantial amounts of fuel or energy
- o substantial increase in demand upon existing sources of energy, or development of new sources of energy.

B. Unavoidable Effects

- o the revenue generated by the proposed project and its contribution to the local economy is a positive significant effect.
- o the opportunities for cultural enrichment resulting from the proposed project and other performance events funded by the proposed project revenues are positive significant effects.
- o substantial additional vehicular traffic and movement is expected in the morning and evening hours on the days of the event as vehicles arrive and leave the concert site.
- o Demand for new parking facilities will be required on a temporary basis on the days of the event.

- o temporary impacts on existing transportation systems will occur during days of events.
- o temporary and minimal increase in traffic hazards to motor vehicles, bicyclists or pedestrians.
- o temporary impact upon the quality or quantity of existing recreational opportunities.
- o temporary need for new systems to provide communications, water supply, sanitary facilities, solid waste disposal and recycling.
- o loss of economic benefits to the Mateel Community Center, community non-profits, and the Southern Humboldt County economy if Alternatives A, B, C, or E are implemented.

#### C. Growth Inducing Effects

The proposed project is not growth inducing. The potential for growth inducement occurs where development or improvements of infrastructure removes a significant barrier to development, or creates additional capacity for land development that exceeds the planned growth of the area. None of these growth inducing effects result from the proposed project.

#### D. Cumulative Effects

Section 15130, Article 9 of CEQA, requires a discussion of cumulative impacts when they are significant. This EIR finds the significant effects of the proposed project to be temporary over the 2-day time period of the event. During this time period, the facilities of the site and immediate environs will be used to the fullest extent. Long-term use would undoubtedly strain the capacity of on- and off-site facilities and natural resources resulting in significant cumulative effects. However, the short-term, temporary effects of the proposed project are not expected to result in cumulative impacts.

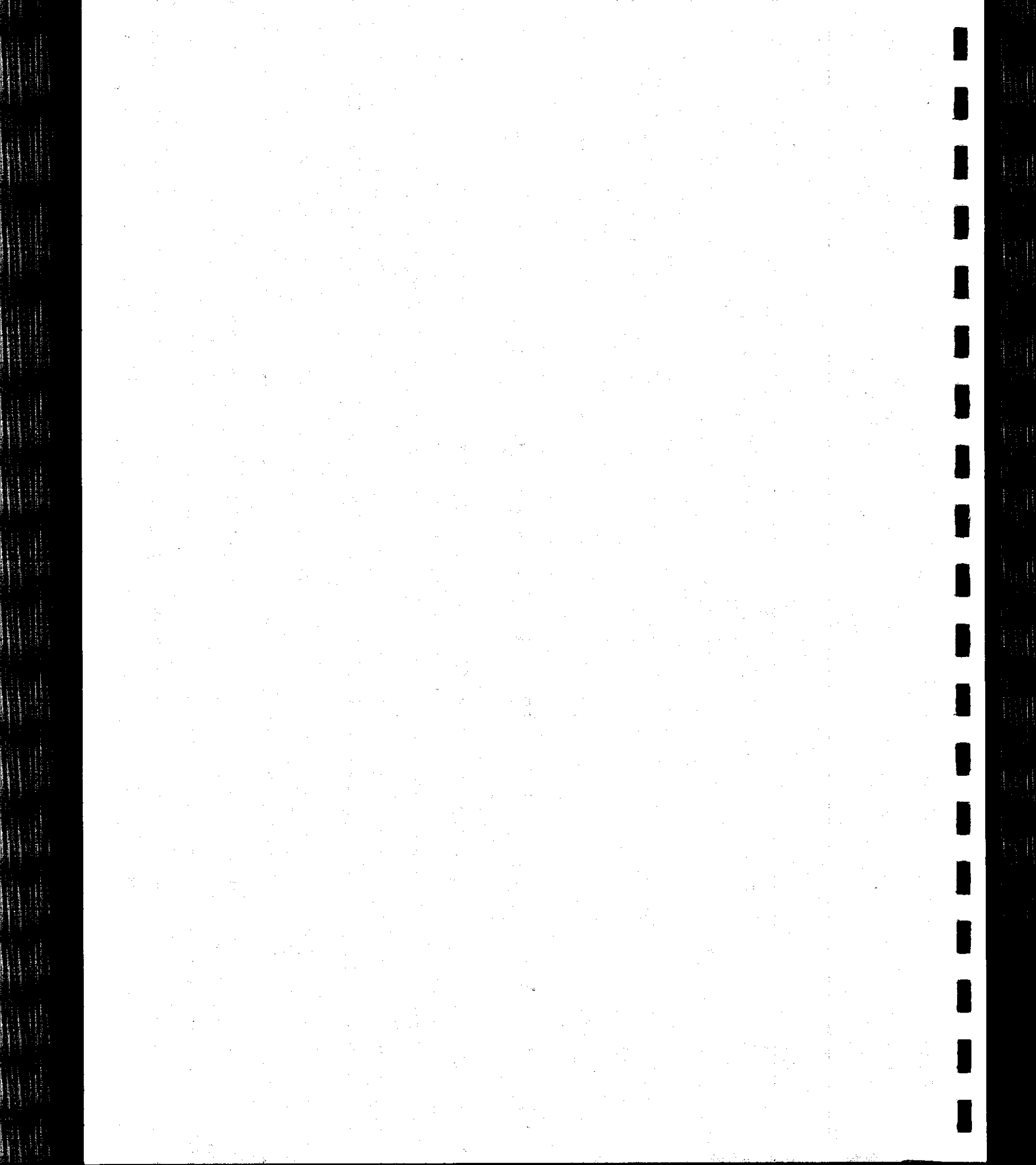
The site is leased from June through October and no other events are planned which could contribute to additional cumulative significant impacts. The Operation Plan will incorporate the mitigation measures

setforth in this EIR and comply with the conditions of the 5-year Conditional Use Permit. Subsequent post event evaluations will result in further modification of Operation Plan procedures and mitigation measures as necessary over the 5-year period of the use permit. The 5-year use of the proposed project site and surrounding facilities is not expected to result in cumulative effects.

#### **X. Organizations and Persons Consulted**

- o Peter Esco, Humboldt County Department of Environmental Health
- o Sgt. Stan Templeton, California Highway Patrol
- o Patricia Secoy, Chief, Transportation Planning Branch, California Department of Transportation (Caltrans)
- o California Department of Forestry and Fire Protection
- o California Department of Parks and Recreation
- o Kevin Caldwell, Humboldt County Planning Department
- o Natural Resource Division, Humboldt County Department of Public Works
- o Redwood Chapter of the Kiwanis International

**Figure 1. Amended Traffic Control Plan**





**A SIGN LEGEND**

CH - PLACED BY CH  
 SH - PLACED BY SH  
 SL - NO LEFT TURN  
 SLT - CHANGIBLE WARNING SIGN  
 SVA - CHANGIBLE WARNING SIGN  
 O - NOT SET

\* REGGAE FESTIVAL PARKING

SSI \* TITLE AS REQ.  
 3" HIGH WHITE CHARACTERS  
 GREEN BACKGROUND

--- MILES  
 5" HIGH BLACK CHARACTERS  
 WHITE BACKGROUND-TYPICAL

SOLD OUT



TOW AWAY ZONE

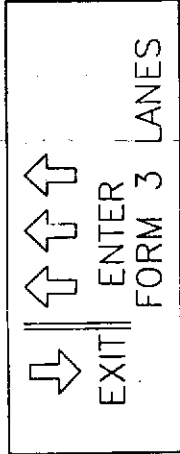
NO THRU TRAFFIC

NO ON-SITE PARKING WITHOUT A TICKET

SPEED LIMIT 25

25 ZONE AHEAD

TURN AROUND



WILL CALL USE RIGHT LANE

SHUTTLE EXEMPT

THRU TRAFFIC USE LEFT LANE

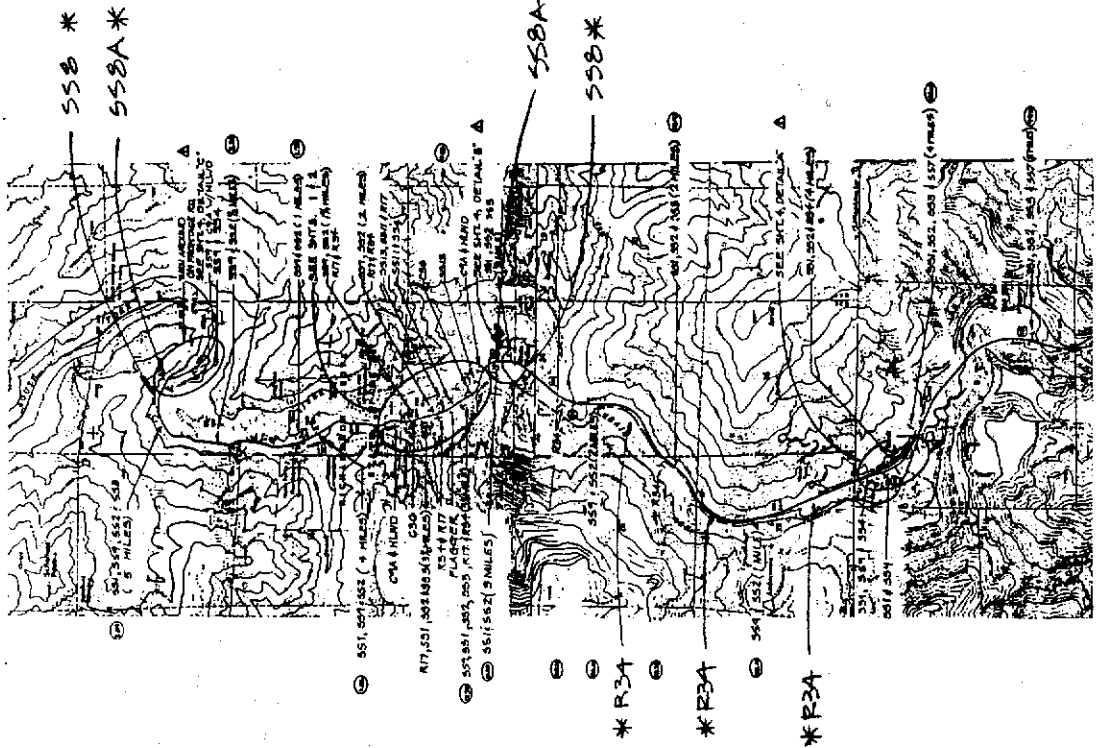


FIG. 1a

\* NEW SIGNS

551	552	553	554	555	556	557	558	558A
1	1	1	1	1	1	1	1	1

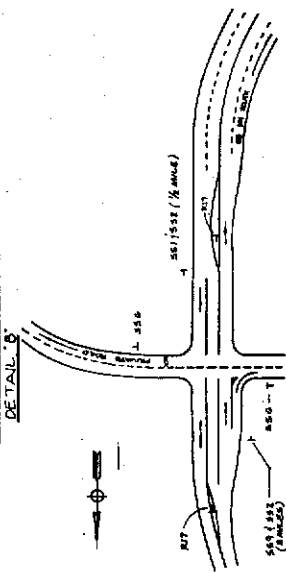
SPECIAL SIGN LOCATION	NO.	DATE	BY
REVISION <td></td> <td></td> <td></td>			
BY			

**LACO ASSOCIATES**  
 CONSULTING ENGINEERS  
 110 J. W. BARRON, OR BERRY DRIVE-5054  
 WASHINGTON, D.C. 20007

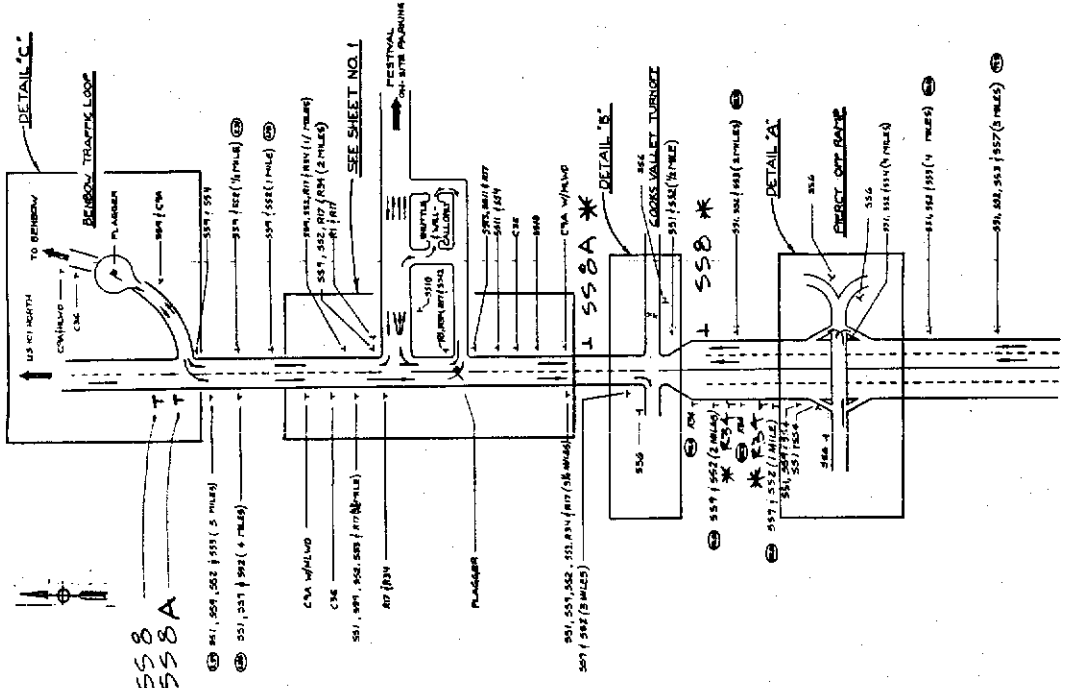


SIGN LOCATIONS ALONG ROUTE 1  
 P. 20007-2

COOK'S VALLEY TURNOFF - 101 - A

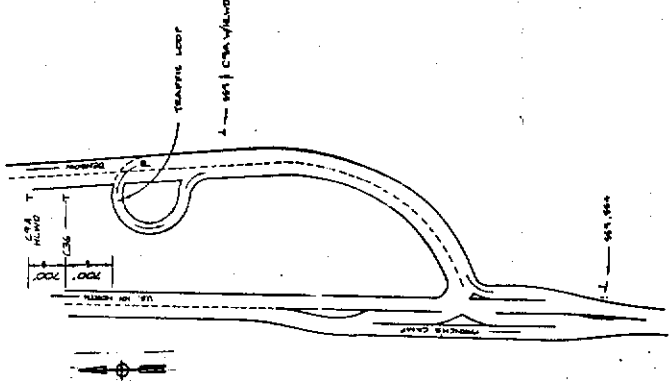


TRAFFIC FLOW DIAGRAM

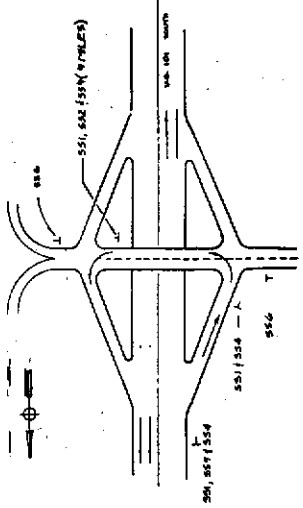


SSB  
SSB

BENBOW TRAFFIC LOOP - A  
DETAIL 'C'



PIERCY OFF-RAMP - 101 - A  
DETAIL 'A'



\* NEW SIGNS

NO.	DESCRIPTION	DATE	BY	CHKD.
1	FLOW DIAGRAM DETAILS AS SHOWN	4-20-78	...	...
2	NEW SHEET	4-20-78	...	...
3	REVISION	...	...	...
4	REVISION	...	...	...
5	REVISION	...	...	...

DATE: 4-20-78  
BY: [Signature]  
CHKD.: [Signature]

LACO ASSOCIATES  
CONSULTING ENGINEERS  
715 J. ST. BOSTON, MA 02111-1084

TRAFFIC FLOW DIAGRAM AND INTERSECTION DETAILS  
MAY 1978  
ISSUED FOR THE STATE OF MASSACHUSETTS  
STATE ROAD PROJECT - TURNOFF ON THE 101 - 7017 21, 1991

**Figure 2. Gridded Site Map**

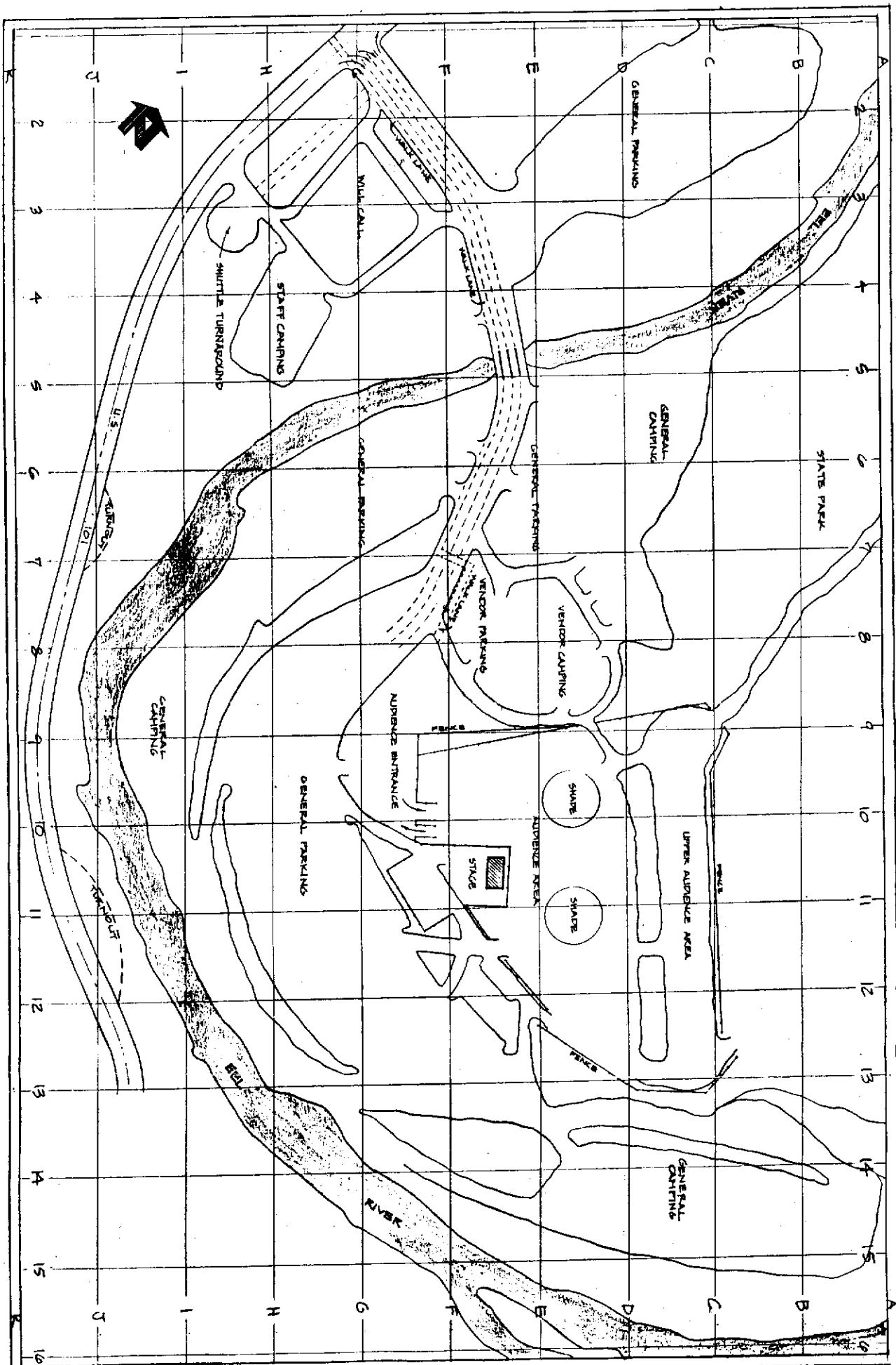


FIG. 2 SITE MAP / GRIDDED

REGGAE ON THE RIVER ©  
FRENCH'S CAMP

**Figure 3. Lighting Plan**

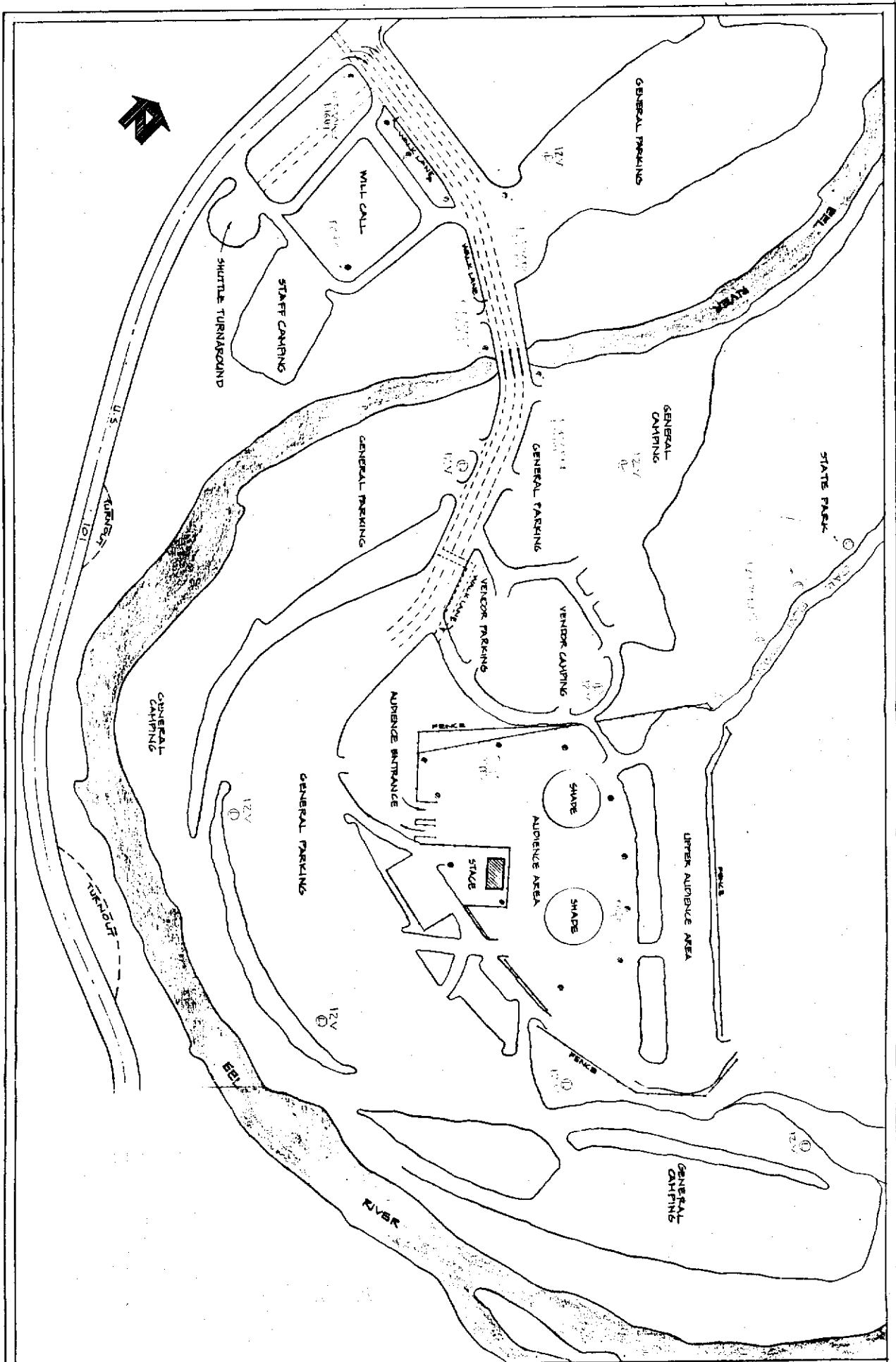


FIG. 3.

SITE MAP / LIGHTING PLAN

REGGAE ON THE RIVER ©  
FRENCH'S CAMP

**Appendix 1 – 1992 Operation/Mitigation/Monitoring Plan**

**OPERATION PLAN/MITIGATION & MONITORING PLAN  
for  
1992 REGGAE ON THE RIVER CONCERT**

**August 1 & 2, 1992**

**prepared by:**

**North Coast Planning Services  
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(707) 786-9159**

**&**

**Mateel Community Center Staff**

**for:**

**Mateel Community Center  
P.O. Box 1910  
Redway, CA 95560  
(707) 923-3368**

**May 18, 1992**



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## I. Introduction

The Mateel Community Center has applied for a Conditional Use Permit for the 1992 Reggae on the River Concert. Reggae on the River is the major annual fund-raiser for the Mateel Community Center and approximately 27 other non-profit organizations in Southern Humboldt County. The 1991 event generated \$433,937. at a cost of \$322,291. Approximately \$250,000 of the money spent producing the event went to local businesses including \$17,500 reimbursed to the California Highway Patrol for traffic control, \$13,000 for professional security personnel, and \$5,000 for shirts and meals for volunteer security staff. In 1992, the Humboldt County Sheriff's Department will be reimbursed approximately \$12,000 as estimated by Sheriff Dave Renner. 1991 Net income for Mateel was \$78,094.15. An additional \$90,000 was raised by local non-profit-sponsored food vender booths during the event. In addition, 25 local crafts people earned another estimated \$75,000. (See Appendix A. Economic Costs & Benefits)

In the eight year history of the event, attendance has grown from approximately 1200 in 1984 to over 10,000 in 1991 (7,500 ticket holders and approximately 1,500 volunteers and staff plus approximately 1000 band members, guests, press people, vendors, and children under 12 who get in free). As the event has become more popular, it obviously has become a more effective fund-raiser. However, the growing popularity and success of the event has also raised issues and concerns regarding public health and safety as well as environmental impact. Over the past eight years, the Mateel has demonstrated its willingness and commitment to making the improvements necessary to meet health and safety standards and address community concerns regarding environmental impact.

In 1991, \$51,350 was spent on on-site improvements in response to agency and neighborhood concerns. A total of \$166,724 went to reimburse public agencies for their staff time and equipment in providing fire protection, traffic control and security both on and off-site. (See Appendix A. Economic Costs & Benefits) The Mateel Community Center has emphasized "soft" improvements (short-term, temporary, event-specific and people intensive) over "hard" improvements (long-term, permanent, capital intensive) due to the fact that the event is a once-a-year, 2 day "event" rather than a permanent development-oriented

"project" which can amortize investments and realize benefits over an extended timeframe. Additionally, the Mateel does not own the site and long-term, capital intensive improvements are seen as inappropriate and economically unfeasible.

This document addresses those issues raised by reviewing agencies during the comment period of the Conditional Use Permit application process as well as a post-event assessment of the 1991 event by concerned agencies. Subsequent recommendations for refinements to the operations plan and site improvements are incorporated into this years Operation Plan.

The Operation Plan offers specific and detailed procedures and measures to reduce or eliminate (mitigate) potential undesirable effects of the event's activities. Lastly, site carrying capacity for on-site camping is analyzed and specific mitigation measures identified in response to environmental review.

## **II. Project Description**

The Ninth Annual Reggae on the River Concert will be held at the French's Camp location in Piercy, California on property known as 675 Highway 101. The site is 9 miles south of the Garberville area on the east side of Highway 101, approximately 0.5 miles from the intersection of Cook's Valley Road and Highway 101. (See Figure 1. Project Location)

The Mateel Community will occupy the site according to the following schedule:

July 27th - August 9 - occupy the site to set-up, manage and dismantle the show

Friday, July 31 at 8:00am - Gates will open for concert attendees

Saturday, August 1st at 8:00am - Gates will open for concert attendees  
- concert from 10:00am to 10:00pm

Sunday, August 2nd at 8:00am - Gates will open for concert attendees  
- concert from 10am to 7:00pm

Attendance will be limited to 7,500 ticket-holders and approximately 2500 staff, volunteers, band members, guests, etc. for a peak total of 10,000. Approximately 3800 people will be camping on-site. Additionally, approximately 1000 local people stay at their own homes and another 1000 are estimated to stay with friends in the greater Redway community. The balance of 4,200 will be distributed throughout the region at private campgrounds and motels and nearby state parks.

### Alternatives to the Project

Many alternatives to the proposed project have been suggested by review agencies and others to include the following:

1. Reduced attendance

Reggae on the River has become an event of international caliber with the prestige to attract the finest and most famous artists in this musical genre. Reduced attendance of ticketed attendees below the 7,500 maximum would make it financially impossible to attract the best artists and maintain the caliber of the performance. Reduced attendance would force the Community Center into bankruptcy, disallowing continuing construction of the Mateel Community Center and eliminating the Center's function as employer and primary provider of cultural events in Southern Humboldt and Northern Mendocino Counties. Additionally, other non-profit groups who raise money at the event through food and craft booths would see a major source of income reduced. The site, with the proper support systems in place, can safely and adequately handle the maximum of 10,000, for the short, 2-day period of the event.

2. 1-day event rather than 2-day event

In 1991, a compromise was made to reduce the number of attendees, but to allow the concert to take place for 2 days. A reduction of the event to 1-day would make the concert economically unfeasible and eliminate economic benefits.

3. Another time.

The climate in the Southern Humboldt areas provides an assured "good weather window" between July 1st and September 15. Any time outside of this "window" presents far too great an economic risk to the producers of the event. For example, a similar concert, slated for June 26,

1982 was rained out. Additionally, County law enforcement agencies have expressed a desire for no other large events in the area during the month of June.

This "good weather window" also attracts many tourists to the region and the local economy depends on these tourists for a major source of the annual revenue. The Mateel Community center is no exception and relies on this event as a major source of revenue in its fund-raising efforts. Competition is the heart of the free enterprise system.

#### 4. Another location

The Mateel Community Center has researched the possibility of using another site for future events. The event is somewhat bound by its community base in Garberville and Redway and can't move too far without losing much of its corps of volunteers. Similarly, relocating the event outside the area would remove the economic benefits to the local community. The Mateel Community Center has already invested over \$150,000 in the past 8 years on site improvements at French's Camp. The capital necessary to develop a new site is beyond the Southern Humboldt community's economic resources.

#### 5. No project

If the Reggae on the River event does not occur, the Mateel Community Center would file for bankruptcy and cease to exist. It would no longer be a place of employment nor provide the vast variety of cultural events and community services it currently offers. The many non-profit organizations which derive partial or total funding from this event would be negatively impacted and may similarly cease to exist or have their services severely reduced.

### **III. Environmental Setting**

The concert site is approximately 80 acres in size encompassing approximately 3,000 linear feet of the South Fork of the Eel River in Southern Humboldt County. (See Figure 2. Site Plan) Most of the site is within the 100 year floodplain of the river and is composed of gravels and sands deposited by the River especially during wet-season high water flows. Water flow during August is low to very low depending on rainfall. Approximately 1/3 of the site is adjoining river terrace above the 100 year flood plain.

Vegetation on the site consists of willows occupying portions of the gravel stream way, grass meadows on the terrace above and scattered fir, oak, cottonwood and chapparel. Climate of the areas is typically characterized by hot and dry summers with cooler and wet weather during late fall, winter, and early Spring.

No archeological sites are known to exist on the site. Likewise, there are no known rare or endangered plants or animals on the site or in the immediate vicinity. California Department of Fish & Game has surveyed the site and found no evidense of spotted owls or habitat. (See Appendix B. Federal Register description of Spotted Owl Habitat)

Access to the site is off Highway 101 which parallels the river immediately west of the site. There is a cluster of tourist-oriented and recreation facilities in the immediate vicinity, namely, Richardson Grove State Park, KOA Campground, Hartsook Inn, Woodsman Cafe, BP Gas Station, and The Grandfather Tree. The Humboldt County General Plan designates the site as Agricultural Land (AL) and the zoning is Unclassified (U). (See Figure 3. French's Camp 101 Entrance & Security Positions)

Vehicular access is provided by a 4-lane dirt road and 3 temporary flat car bridges across the River. Pedestrian access is along the same roadway to a footbridge which crosses the River.

Improvements on the site include a 25 gallon per minute well, a 500 gallon water storage and pressure tank, a filtration system, and 1,440 linear feet of 1-1/2" PVC water main. The system is capable of generating 36,000 gallons per day. (See See Figures 9.A. Water Distribution System Plan; 9.B. Water Distribution System Detail; 9.C. Water Distribution System Detail; and 9.D. Fountain & Sink House Detail; and Appendix F. Letter from Laco Engineers on Water System Capacity)

An on-site sewage disposal system has a design load of 1,600 gallons per day. The on-site septic system is not useable as no toilet facilities are provided. A 1500 gallon gray water tank serves the hand and food washing facillites for food vendors. Additionally, 1200 and 1800 gallon below-ground tanks serve the back stage and concession area near

the stage by draining gray water into a 300 linear foot leach field. (See Appendix H. On-site Sewage Disposal System Design.)

The site is served by electricity with an electrical main near the concert stage which was installed by PG & E.

A permanent 40 x 80 concrete stage is located at the center of the concert area. A permanent chain link fence surrounds the concert area.

#### **IV. Operations Plan**

The Operation Plan contains 14 elements as presented below:

##### A. On-site Traffic Control

On-site traffic control will allow vehicular traffic entering from Highway 101 to move into the site and parking areas rapidly thus reducing the possibility of traffic backing up on the highway. (See Figure 4. On-site Traffic Flow Plan)

- o The 4-lane entry road will provide 3-lanes for incoming traffic to be directed to parking areas and 1-lane for outgoing traffic allowing for immediate return of non-ticketed drivers and vehicles.
- o Ticketed attendees will be wrist-banded on the east side of the temporary flat car bridges as requested by the California Highway Patrol. The 3-lane road will expand to 10-lanes allowing for the wrist-banding to take place thus reducing the possibility of vehicle traffic backing up onto Highway 101. (See Figure 7. On-site Parking Plan)
- o 6' high temporary plastic fencing will delineate concert site entrance for both vehicles and pedestrians. (See Figure 3. French's Camp 101 Entrance & Security Positions)
- o Traffic cones will delineate turn lanes into and out of the access road.



- o The CHP will supervise professional flaggers who will direct traffic in and out of the entry road with the assistance of the CHP.
- o A pedestrian walk will connect with the Highway 101 pedestrian cross walk and parallel the entry road allowing foot traffic to enter the site. (See Figure 3. French's Camp 101 Entrance & Security Positions)
- o The crosswalk shall be of temporary tape with warning signs installed at the crosswalk.
- o The Shuttle Service will use the southern entrance to the Will Call area. A professional flagger will direct traffic in and out of this road.
- o non-ticketed drivers and vehicles will be immediately returned to the exit via the 1-lane exit road.
- o A "no ins & outs" policy will be implemented to discourage people from entering, leaving and re-entering the site. This policy will be in effect during actual concert hours. People who leave once the music has started will not be allowed to re-enter that day. This will minimize the number of pedestrians moving back and forth across 101 from concert grounds to the KOA Campground and back.
- o A water truck will be available for the suppression of dust for 2 days prior to the event and during the event on an as-needed basis or as directed by CHP.

#### B. Off-site Traffic Control

Off-site traffic control along 101 will encompass a 5-mile area both north and south of the event site. (See Appendix G. Off-site Traffic Control Plan)

- o Southbound traffic will be directed by signs to the Piercy exit to return northbound to the event site entry road.

- o Additional "no U-turn" signs will be placed between concert site and the Piercy off-ramp to eliminate all U-turns.
- o Security personnel will be placed between concert site and Cook's Valley to enforce no U-turn signs. (See Figure 5. Security Position Plan)
- o Professional flaggers will direct traffic around Piercy off-ramp and the Benbow Loop. (See Detail C.4., Appendix C. Off-site Traffic Control Plan)
- o Vehicles and officers of the California Highway Patrol will be on duty at locations of their determination to monitor and direct traffic movements in the interest of safety.
- o All traffic control devices will be in conformance with the current edition of the State of California Department of Transportation Traffic Manual. (See Sheet 3., Appendix C. Off-site Traffic Control Plan)
- o All traffic control devices and special signs will be in place along Highway 271 the Thursday before the event and elsewhere before 9:00am the day before of the event.
- o traffic cone devices and regulatory signs will be reflectorized for night time visibility.

### C. Public Safety & Security

Over the past 9 years, there have never been major security problems as evidenced by the relatively few arrests that have occurred.

- o The Public Safety & Security Plan is designed to accomplish the following:
  - minimize non-paying customer access
  - provide information and assistance to public and law enforcement personnel
  - provide instructions on all site activities (i.e., first aid, sanitary and water station locations, etc.)
  - eliminate illicit sales

- eliminate the incidence of vandalism and break-ins.
- effectively respond to lost children, emergencies, injuries, etc. in cooperation with on-site medical team
- search all ice chests, backpacks, etc. to prevent alcohol, dogs, drugs, weapons, and fireworks from entering the site.

o There will be 4 main security stations:

1. A central station will be located in the will call area;
2. Another in the concert grounds;
3. On the hillside overlooking camping area C.1.; and,
4. Located on top of mountain behind concert grounds and overseeing the entire site.

o All security booths will be equipped (as are security coordinators) with 2 way radio communicators allowing communications with site manager, office staff, stage crew, backstage security, first-aid team, fire crews, and a Piercy community representative.

o Security staff will communicate and coordinate with local law enforcement agencies in "emergency" situations.

o A professional Security Supervisor will be responsible for all perimeter security (Steve Rigney, Security Coordinator for Bill Graham Presents for 17 years).

o 75 professional security personnel (a 50% increase over 1991), under the direction of Security Supervisor will occupy the perimeter security positions overseeing public safety and guarding against unlawful entry and trespass.

o The perimeter of the site will be fenced, signed with "no entry" signs and staffed by the above security personnel.

o A staff security coordinator will supervise other staff and volunteers to oversee public safety.

o Approximately 170-200 security volunteers will work 6-hour, rotating shifts with an estimated 40-60 on duty at any one time depending on need. (This number does not include backstage

security, parking crew, fire protection crew, and wristband gate crew who are also responsible for security.) (See Figure 5. Security Positions Plan)

- o Uniformed professional security personnel will be assigned to protect the Hartsook Inn, The Grandfather Tree, KOA Campground, Woodsman Cafe, along Highway 271 south to Piercy and the businesses and residences in the Piercy area. (See Figure 5.A Off-site Security.)
- o Motorcycle/ATV patrols will patrol swimming areas.
- o All security personnel attend orientation meetings before the event where they receive specific instructions regarding their assignment. All volunteer security personnel will wear Security "T-shirts" during the event to be easily identifiable with the exception of uniformed security personnel. Off-duty security staff are still on-call for emergency situations.
- o Temporary perimeter fencing will be installed north of entry road, along the east side of the river north of the bridge, west side of the river south of the bridge, and along the east side of 101 for approximately 200 yards. (See Figures 3. French's Camp 101 Entrance & Security Positions and 5. Security Position Plan )

#### D. On-site Camping

The concert event is limited to 7,500 ticket holders and approximately 2,500 volunteers and staff, guests, performers, etc. In the past, approximately 3,000 people have camped on-site on a first come and first serve basis. An additional 1000 on-site campers are expected for the 1992 event.

There are 6 major camping areas. Camping area C-1 occupies the river bar along the southeasterly boundary of the site. This area is approximately 160,000 square feet in area. Camping area C-2 occupies the river bar along the southerly boundary and encompasses an area of approximately 70,000 square feet. Camping area C-3 is designated for food vender accomodation. This area encompasses approximately 50,000 square feet. (See Figure 6. On-site Camping Plan)

Camping Area C-4 is an area of approximately 30,000 square feet that is an unimproved portion of Richardson Grove State Park north of the river bridge immediately adjacent to the site. An agreement with California Department of Parks & Recreation will allow camping in this area. A small camping area C-5 of approximately 1000 square feet will be designated for handicapped people adjacent to the food booths and audience area. Camping Area C-6, near the Will Call area will accommodate staff in an approximately 30,000 square foot area. (See Figure 6. On-site Camping Plan)

The total camping area encompasses approximately 341,000sf. Using a standard 20' x 25' campsite dimension for a total of 500sf per campsite, the camping area can accommodate approximately 682 campsites. (See Figure 6.A. Typical Campsite) At 8-10 people per campsite the total number of people that could be accommodated would be between 5456 - 7820. The proposed number of people camping is 4000. No vehicles will be allowed in the camping areas, however, some people will camp in their vehicles in the parking lots. (See Table 1., Campsite Areas & Densities)

**Table 1. Campsite Areas & Densities**

Camping Area	Square Feet	# of Campsites	Density	
			Maximum	Proposed
C-1	160,000sf	320	2560 - 3200	1,500
C-2	70,000sf	140	1120 - 1400	1,000
C-3	50,000sf	100	800 - 1000	800
C-4	30,000sf	60	480 - 600	500
C-5	1,000sf	2	16 - 20	20
<u>C-6</u>	<u>30,000sf</u>	<u>60</u>	<u>480 - 600</u>	<u>100</u>
Total =	341,000sf	682	5456 - 7820	4000

No campfires will be allowed at any campsite. Sanitary and water supply facilities along with containers for solid waste disposal and recycling will be provided for each camping area. (See Section H. Sanitary Facilities & Water Supply and Figures 8. Sanitary Facilities, Solid Waste Disposal & Recycling; and 9.A. Water Distribution System Plan.)

Additionally, lighting will be provided at selected points through out the camping area. Lights will be flourescent and powered by 12 volt batteries to be charged during daylight hours.

#### E. On-site Parking

Capacity is available for parking approximately 2300 vehicles on-site. There are 9 separate parking areas P 1 - P9 (See Figure 7. On-site Parking Plan) as described below in Table 2.:

**Table 2. Parking Area Capacity**

<u>Parking Area</u>	<u>Capacity</u>
P1 - General Parking	600
P2 - Will Call Parking	115
P3 - General Parking	70
P4 - General Parking	416
P5 - Staff Paking	185
P6 - Vendor Parking	185
P7 - Handicapped Parking	27
P8 - General Parking	555
P9 - General Parking ( 10 lane area)	<u>138</u>
Total = 2291	

---

Note: Capacity figures = total square feet of parking area  
216 square feet per vehicle

216 square feet = 8' x 18' parking bay \*( 144sf) + 8' x 9' 1/2 backing lane (72sf)

\*Humboldt County Zoning Code Parking Bay Requirements

There are 7,500 ticket attendees and approximately 2,500 staff, volunteers, guests, performers, press people, and children under 12. Assuming an average of 3.5 people per vehicle, there would be an estimated demand for 2,857 vehicles parking spaces. Many of these vehicles will park at nearby campgrounds or at prescribed parking areas for shuttle bus service. (See Section F. Off-site Camping, Lodging & Parking and Section G. Shuttle Service.)

#### F. Off-site Camping, Lodging & Parking

Many of the concert attendees camp in nearby public or private campgrounds. Total capacity of campgrounds, motels and bed and breakfast inns in Southern Humboldt and Northern Mendocino is 9,766 people not counting the approximately 3,800 people camping on-site. (See Appendix D. Off-site Camping & Lodging)

According to Garberville Chamber of Commerce, there are 858 public and private campsites in Southern Humboldt County capable of accomodating 4290 people. Motels and Bed and Breakfast Inns can provide for an additional 1281 people for a total of 5571 accomodations.

According to the Chambers of Commerce in Leggett, Laytonville, and Willits , there are over 600 campsites available in Northern Mendocino County with an overall capacity for 3,030 people. Additionally, motels and bed and breakfast inns can accomodate an additional 1,165 people for a total of 4,195.

While many of these lodging facilities are full or near capacity during the height of the tourist season, by far most of these reservations are concert attendees who have learned to secure their camping or lodging spot well in advance and have been doing so at an increasing rate for the past 5 years. It is estimated that at least 1000 local people involved in producing the event stay in their own homes as well as hosting friends from out of the area. A conservative estimate for those staying with friends is 1000 people, furthur reducing demand on public and private facilities.

A KOA Campground and Richardson Grove State Park are immediately adjacent to the concert site. In order to minimize conflict between concert attendees and other park users, State Park staff will designate

## I. Fire Protection Plan

The history of response to fire hazards over the past 8 years has been excellent. The Fire Protection Plan was designed with the help of local residents of the Piercy/Cook's Valley area. Additional coordination has occurred with California Department of Forestry and Fire Protection. Fire protection will be provided by the Piercy Volunteer Fire Department (PVFD) who will have one fire engine and one fully staffed Quick Response Unit on site on-site Friday, Saturday, and Sunday during the show. Two additional Quick Response Units will be on-site from Telegraph Ridge Fire Protection District. This is a total of 30 professional fire fighters on-site. Additionally, at least 200 of the 1500 volunteers who work on the show have been or are currently members of volunteer fire departments in their communities.

- o Highway 271 at Cook's Valley Road will be closed to through traffic and will be staffed by professional security personnel equipped with 2-way radios.

- o 1 roving patrol will provide continuous surveillance of a 7-mile section of 271 from Cook's Valley turn-off to Reynolds overpass.

- o All major security stations will be provided with 2-way radios.

- o A 24-hour staffed security station will be located on the hill above the concert grounds for overall security and fire control. This station will be equipped with shovels and water packs for quick response and a hose will be pre-laid from the top of the hill to the base where water pump trucks can connect to it in the event of a fire.

- o Continuous surveillance will be provided by volunteer patrols along the South Fork of the Eel River from Piercy to Miranda to eliminate illegal camp fires and the possibility of escapes.

- o A "No campfire" policy enforced throughout the event.

- o All parking areas will be bare ground or closely mowed grass to eliminate fire hazard.

- o CDF, Fortuna will be notified immediately in the event of fire.



## J. Solid Waste Disposal & Recycling

Solid waste disposal will be provided by 2, 10-yard dumpsters, 1, 15-yard dumpster and a number of 2-yard dumpsters placed at each of Sanitary Facility Stations which include toilet facilities and drinking fountains. Additionally, 6, 2-yard dumpsters will be placed in high traffic areas around the concert grounds and 75, 50-gallon barrels will be available within the concert grounds, along trails, in parking areas and along the river. 75, 50-gallon recycling barrels will be provided by Southern Humboldt Recycling Center and will also be placed in the same areas. (See Figure 8. Sanitary Facilities & Solid Waste Disposal & Recycling)

All solid waste will be sorted for recyclable material by volunteers the Mateel sanitation staff before disposal. The entire site will be cleaned up after the event to the condition it was in before the event. The Mateel's history of site clean up is exemplary.

Solid waste disposal services will be provided by Empire Waste Management out of Ukiah. No glass bottles will be allowed into the concert area and soft drink booths have been redesigned to eliminate all cans and bottles thereby eliminating all can/bottle-related litter in the concert grounds.

There will be an on-site trash coordinator with a crew of 20 volunteers to monitor and maintain the solid waste disposal and recycling facilities.

## K. First Aid

An on-site emergency first aid team will be provided by RockMed, a professional medical team out of San Francisco with experience in concert events ranging in size from 1000 - 300,000 people. The team will consist of 2 M.D.s, 4 RNs, 5 Psych-Techs, 3 Paramedics and 25 EMTs/CPRs. A First Aid Station will occupy an area inside the concert grounds. Another First Aid Station will be located by the River between Camping Areas C1 and C2. Two ambulances (staffed with 2 EMTs each) will be available on-site from Friday morning until the close of the concert. Additionally, a helicopter landing area will be provided for emergency evacuation. The helicopter evacuation service is provided by Airvac, the North Coast evacuation

system. (See Figure 10. Emergency Services)

For emergency medical aid purposes, a gridded site map describes general locations on the site by x and y coordinates facilitating location and response time to emergency medical situations. All medical staff have 2 way radio communicators enabling them to communicate immediately with security and other concert staff.

#### L. Communications

Communications will be handled by the Southern Humboldt Amateur Radio Club using a system outfitted with crystal units and a repeater enabling communications with outlying areas. The Communications Center will be located in the back stage area. (See Figure 10. Emergency Services) Three key systems will be in place as outlined below:

1) Telephone lines

- 2 lines to both the First Aid Station and backstage, with priority use for First Aid.

2) Mateel VHF Rental System

- 4 base radios for First Aid Station, Security Station, Will Call, and Communications Center.
- 24 hour handheld radios; 4 on site early for set-up; 4 for First Aid; 16 for key security, site, parking, traffic control, fire control, etc.
- Repeater will be located on top of mountain above Cook's Valley for extended coverage on-site and full coverage in Cook's Valley and Highway 271.

3) Ham radio operators will be on-site to provide a back-up system for emergency situations and will also be able to communicate with staff in the Communications Center and local law enforcement personnel.

#### M. Food Service

Food Vendor Booths will be located to the north of the concert grounds and stage. There will be approximately 17 individual booths served by 2 sink houses with hot & cold running water. (See Figure 11.A Booth Layout Plan and Figure 9.D. Fountain & Sink House Detail.)

Additionally, the sink houses and food booths will be provided with 3/4" plywood flooring on 2" x 4" floor framing. These floors will eliminate dust and mud conditions and will be painted to facilitate washing down. (See Figure 11.B. Food Booth Floor Detail.) The sink houses will drain into the 1500 gallon grey water tank through 1-1/2" drain pipes. The grey water tank will be monitored by the sanitation crew and pumped by Empire Waste Management as needed.

A refrigeration truck will be positioned near the food booths allowing food vendors access to refrigerated food supplies.

#### N. Craft Booths

Approximately 30 craft booths will be located around the southeasterly perimeter of the concert grounds and adjacent to the concert stage. (See Figure 11.A. Booth Layout Plan.)

#### **V. Carrying Capacity Analysis**

The site is capable of handling 10,000 people for the short, two-day period of the concert. The site has an adequate land base which is suitable for recreation use and the sanitary and water facilities are capable of supporting the concert population. For the purpose of this study, 4 criteria were used to evaluate the carrying capacity for camping:

- 1) adequate land area to accommodate camping related uses;
- 2) adequate land area to accommodate parking;
- 3) suitability of land for such uses, and;
- 4) availability and adequacy of water supply and sanitary facilities in support of such uses.

These criteria as applied to the site are discussed below:

*Adequacy of Land Area for Camping-* The proposed 20' x 25' campsite area totals 500 square feet and is larger than the standard public or private campsite. With 2, 4-5 person tents per site there will be a capacity of 8-10 people per site. (See Figure 6.A Typical Campsite) Table 1. Campsite

Areas & Densities (page 11) illustrates the total square footage for each of the 6 camping areas, numbers of possible campsites, maximum allowable densities, and proposed densities. The capacity of the land areas designated for camping is between 5 - 8,000 people. The proposed camping for 4000 people will allow for ample room for walkways, ice chests, chairs, etc. within the campsite perimeter. No vehicles will be allowed in the campsite areas.

*Adequate Land Area for Parking*-Table 2. Parking Area Capacity (page 12.) illustrates that the site can accommodate approximately 2300 vehicles. There are 7,500 ticket attendees and approximately 2,500 staff, volunteers, guests, performers, press people, and children under 12. Assuming an average of 3.5 people per vehicle, there would be an estimated demand for 2,857 vehicles parking spaces. Many of these vehicles will park at nearby campgrounds or at prescribed parking areas for shuttle bus service. (See Section F. Off-site Camping, Lodging & Parking and Section G. Shuttle Service.)

*Suitability of Land*- Each of the camping areas occupy gravel and sand bars along the river shore. These areas do not support permanent vegetation due to seasonal highwater that tends to scour the river channel. Similarly, the areas are not subject to compaction given the rocky nature of the terrain. Concentrated use, especially for a short period of time, is not likely to effect the physical, hydrological, or biological properties of the land in any way.

*Sanitary Facilities and Water Supply*- The on-site septic system has a capacity for 1600 gallons per day. The provision of 100 portesans at the standard of 1 portesan for every 100 people will supplement the on-site system. The portesans will be monitored on an hourly basis and "full" facilities will be temporarily closed. Pumping will be done when necessary by two on-site pump trucks provided and staffed by Empire Waste Management from Ukiah. Waste will be delivered to the nearest municipal sewage treatment facility. Handicapped accessible portesans will also be provided near the handicapped camping and parking area. Additionally, a gray water tank will store runoff from both hot and cold water hand and food washing facilities.

The site is served by an existing 25 gallon per minute well, a 500 gallon water storage and pressure tank, a filtration system, and 1,440

linear feet of 1-1/2" PVC water main. The system is capable of generating 36,000 gallons per day. At 3.5 gallons per person per day this is adequate to serve the needs of the 10,000 concert attendees and support staff. (See Figures 9.A. Water Distribution System Plan; 9.B. Water Distribution System Detail; and 9.C. Water Distribution System Detail; and Appendix F. Letter from Laco Engineers on Water System Capacity.)

54 fountains incorporated into banks of 6 each will be located at 9 station points throughout the site. (See Figure 9.D. Fountain & Sink House Detail.) Each bank of fountains is filtered for sediment, odor and taste and crews will monitor fountains and change filters every 2 hours. Each bank also has a spring-loaded faucet, allowing individuals to fill their own containers with potable water. Additionally, water will be provided back stage in a refrigerator.

## **VI. Mitigation & Monitoring Plan**

### A. Annotations to Environmental Checklist (See Appendix G. Initial Study)

#### 1. Earth

b. There will be little to no disruption, displacement, compaction or overcovering of the soil. All public parking for the event takes place on the river bar which is composed of rock and gravel and does not result in compaction of soil. Foot traffic within the concert grounds does result in minimal, temporary compaction. Each year the grounds are seeded and watered to maintain the grass meadow ground cover in good condition.

*Mitigation Measure #1* - The concert grounds and other areas subject to temporary compaction, dryness and dust will be watered and mowed prior to the event and seeded and maintained after the event to maintain grassy cover in good condition.

f. No changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the river channel will occur. (See Approved Stream Alteration Permit, DFG on file with County Planning)

#### 2. Air

a. Substantial air emissions or deterioration of ambient air quality

will be minimal and temporary. On-site camping provisions and new policy of restricted "ins and outs" will further reduce on-site use of vehicles. The grass seeding and water program will reduce dust in and around food booths and concert areas (See Mitigation Measure #1).

*Mitigation Measure #2-* Dirt roads will be watered by an on-site water truck provided by Round Mountain Water Truck Service as necessary or as directed by California Highway Patrol and staff.

b. No objectionable odors will be created as a result of the event.  
(See Mitigation Measure #3)

### 3. Water

a. No changes in currents, or course of direction of water movements are expected. (See Approved Stream Alteration Permit, DFG on file with County Planning)

e. No discharge into surface waters or alteration of surface water quality is expected. All gray water is drained to a holding tank which will be pumped and removed from the site. Human waste will be accommodated by the on-site portasans and hauled off-site to the nearest municipal sewage treatment facility.

*Mitigation Measure #3-* The on-site septic system has no toilet facilities but is capable of storing 1600 gallons of human waste per day. This system will be supplemented by providing 100 portasans at a standard of 1 portasan per 100 people. The portasans will be monitored on an hourly basis and "full" facilities will be temporarily closed. Pumping will be done when necessary by two on-site pump trucks provided and staffed by Empire Waste Management from Ukiah. Waste will be delivered to the nearest municipal sewage treatment facility. Handicapped accessible portasans will also be provided near the handicapped camping and parking area. Additionally, a gray water tank will store runoff from both hot and cold water hand and food washing facilities. (See Figure 8. Sanitary Facilities & Solid Waste Disposal & Recycling)

f. No alteration of the direction or rate of flow of ground water is expected.

area both north and south of the event site. (See Section C. Public Safety & Security)

b. Demand for new parking facilities will be required on a temporary basis on the days of the event.

*Mitigation Measure #7*- Implementation of the On-site Camping & Parking Plan is expected to minimize the effects of on-site parking. Capacity is available for parking approximately 2300 vehicles on-site. There are 9 separate parking areas P 1 - P9 (See Section D. On-site Camping & Parking and Figures 6. On-site Camping & 7. On-site Parking Plan). Campers at adjoining Oak Flat Campground of Richardson Grove State Park will be able to walk to the concert grounds on the back road thereby reducing the need for on-site parking and the presence of pedestrian traffic along 101. Similarly, campers at the adjoining KOA Campground and Hartsook Inn will be walking to the site reducing vehicle traffic flow and the need to park additional vehicles. (See Sections D. On-site Camping; E. On-site Parking; F. Off-site Camping, Lodging & Parking; and G. Shuttle Service)

Additionally, implementation of the expanded Shuttle Service & Off-site Parking Plan is expected to reduce the amount of on-site parking needed by providing transport to off-site lodgers and campers.

c. Substantial impacts on existing transportation systems are not expected. There are no existing public transportation systems serving the area. The Shuttle Service and Off-site Camping & Parking Plan will eliminate some of the vehicular traffic on Highway 101. Highway 101 becomes 2-lane with a speed limit of 40mph near the entrance of the concert site. Traffic in this area is also entering and leaving the highway to and from nearby recreation and tourist facilities. CHP has noted that normal speeds are reduced to 25mph in the vicinity of the event entrance. The highway is 4-lanes within 1/2 mile to the south of the site accomodating more traffic at higher speeds.

*Mitigation Measure #8* - See Mitigation Measures #6 & #7.

d. There will be no alteration to present patterns of circulation or movement of people and/or goods.

f. There is no record of serious accidents or injuries associated with the 2-day concert event. The Traffic Control Plan is designed to maintain this record in conformance with California Highway Patrol requirements for highway vehicular traffic and pedestrian safety.

*Mitigation Measure #9-* See Mitigation Measures #6 & #7 & #8.

#### 14. Public Services

a. The project is not expected to effect fire protection services. The history of response to fire hazards over the past 8 years has been excellent. The Fire Protection Plan was designed with the help of local residents of the Piercy/Cook's Valley area. Additional coordination has occurred with California Department of Forestry and Fire Protection. Fire protection will be provided by the Piercy Volunteer Fire Department (PVFD) who will have one fire engine and one fully staffed Quick Response Unit on site on site Friday, Saturday, and Sunday during the show. Two additional Quick Response Units will be on site from Telegraph Ridge Fire Protection District. This is a total of 30 professional fire fighters on site. Additionally, at lease 200 of the 1500 volunteers who work on the show have been or are currently members of volunteer fire deparments in their communities. There are no campfires allowed at any of the on-site campsites and no record of any "out of control" fires throughout the history of the event .

*Mitigation Measure #10-* The Fire Protection Plan was designed with the help of local residents of the Piercy/Cook's Valley area. Additional coordination has occurred with California Department of Forestry and Fire Protection. Fire protection will be provided by the Piercy Volunteer Fire Department (PVFD) who will have one fire engine and one fully staffed Quick Response Unit on site on site Friday, Saturday, and Sunday during the show. Two additional Quick Response Units will be on site from Telegraph Ridge Fire Protection District. This is a total of 30 professional fire fighters on site. Additionally, at lease 200 of the 1500 volunteers who work on the show have been or are currently members of volunteer fire deparments in their communities. On- and off-site security personnel will patrol the site and immediate environs enforcing the "no fire" policy.

b. The project is not expected to effect police protection services. The Security Plan is designed with both California Highway Patrol and the Humboldt County Sheriff's office who will be compensated for providing



law enforcement services in support of on-site staff security personnel.

*Mitigation Measure #11* - See Section C. Public Safety & Security and Figures 5. Security Positions and 10. Emergency Services.

d. Effects on nearby parks and other recreational facilities, including roads will be minimal. Many of the concert attendees camp in nearby public or private campgrounds or stay in motels or inns. Total capacity of campgrounds, motels and bed and breakfast inns in Southern Humboldt and Northern Mendocino is 9,766 people not counting the approximately 3,800 people camping on-site and the 1000 local volunteers who will stay at home with an estimated 1000 guests. The designation of Oak Flat at Richardson Grove as a concert attendee campground should minimize the disruption of non-concert attendees activities.

e. Maintenance of public facilities, including roads is not expected to be affected by concert event activities.

f. No other government services will be affected by the concert event.

## 15. Energy

a. Use of substantial amounts of fuel or energy are not expected. On-site use of gasoline-powered generators and electric-powered lights and sound systems are not expected to be above normal use for supporting similar events or facilities. There is no national or state policy for energy conservation or development of clean and renewable energy resources. Until such a policy becomes widespread it is difficult to develop sustainable energy resources.

b. No substantial increase in demand for existing energy sources or need to develop new energy sources is expected.

## 16. Utilities and Service Systems

b. A temporary Communication System will be installed on-site to provide immediate transmission of information for event management, security and public safety purposes. (See Section L. Communications)

c. Existing on-site water supply and treatment facilities are capable of supporting the concert attendees for the 2-day event period. The site is served by an existing 25 gallon per minute well, a 500 gallon water storage and pressure tank, a filtration system, 1,440 feet of 1-1/2" PVC water main. The system is capable of generating 36,000 gallons per day. At 3.5 gallons per person per day this is adequate to serve the needs of the 10,000 concert attendees and support staff. (See See Figures 9.A.B.C. & D. Water Distribution System Plan and Appendix F. Letter from Laco Engineers on Water System Capacity.)

d. The provision of 100 portesans at 1 per 100 people and the monitoring and pumping program will provide adequate sanitary facilities for the concert population. Additionally, a gray water tank will store runoff from both hot and cold water hand and food washing facilities. These systems will be pumped as necessary by licensed contractors who will deliver the waste off-site to proper municipal treatment plant facilities. (See Section H. Sanitary Facilities & Water Supply.)

*Mitigation Measure #12-* The Sanitary Facilities & Water Supply Plan is expected to provide adequate sanitary facilities and a safe drinking water supply for conference attendees in accordance with County Health Standards. Licensed contractors will maintain and deliver waste to proper municipal facilities in accordance with government regulations.

f. Solid waste disposal will be provided by 2, 10-yard dumpsters, 1, 15-yard dumpster and a number of 2-yard dumpsters placed at each of Sanitary Facility Stations which include toilet facilities and drinking fountains. Additionally, 6, 2-yard dumpsters will be placed in high traffic areas around the concert grounds and 75 50-gallon barrels will be available within the concert grounds, along trails, in parking areas and along the river. 75 50-gallon recycling barrels will be provided by Southern Humboldt Recycling Center and will also be placed in the same areas. (See Figure 8. Sanitary Facilities & Solid Waste Disposal & Recycling)

All solid waste will be sorted for recyclable material by volunteers from the Mateel sanitation staff before disposal. The entire site will be cleaned up after the event to the condition it was in before the event. The Mateel's history of site clean up is exemplary.

## 5. Animal Life

a. No change in diversity of species or numbers of any species of animals is expected. The site and its immediate environs are not included in the legal description as a critical habitat area for any endangered species, especially the spotted owl. (See Appendix B. Federal Register Description of Spotted Owl Habitat. Also See California Department of Fish & Game Response letter on file with County Planning)

b. No reduction in number of any unique, rare or endangered species is expected. (See California Department of Fish & Game Response letter on file with County Planning)

d. No deterioration to existing fish or wildlife habitat is expected. (See California Department of Fish & Game Response letter on file with County Planning)

## 6. Noise

a. Temporary increase in noise levels is not expected to have a negative effect. The stage is directed easterly into a natural amphitheater and away from the residential population to the west.

b. Noise levels are not severe nor prolonged. There is no record of these noise levels being damaging to any concert attendees. Ambient noise levels of the 101 corridor are considerable with heavy trucks and cars breaking and gearing down along the highway.

*Mitigation Measure #4-* The concert music will end at 10:00 am on Saturday night and 7:00pm on Sunday night. This will mitigate late-night noise that will allow people residing around the concert site to get a "good night's sleep."

## 7. Light & Glare

All on-site lighting is per requirements by County for public safety and security purposes and has no negative effect. All-night lighting will be powered by 12 volt batteries.

## 8. Land Use

Proposed use of the site for tourism and recreation is well within current land use practices of the Highway 101 corridor, specifically the

complex of tourist/recreation facilities adjoining the site. The proposed use is consistent with the County General Plan and Zoning for the site.

#### 9. Natural Resources

There will be a temporary increase in use of well-water. The capacity of the well and distribution system is capable of supporting the event population for the 2-day event and will recharge itself once the event has ended. Past use of water for site preparation, dust control and fire hazard protection has not noticeably reduced the water table.

#### 10. Risk of Upset

b. No possible interference with an emergency response plan or an emergency evacuation plan is expected due to implementation of Traffic Control Plan.

*Mitigation #5* - The implementation of CHP approved Traffic Control Plan is expected to mitigate the affects of vehicular and pedestrian traffic both on site and off-site. (See Sections A. On-site Traffic Control and B. Off-site Traffic Control as well as Figure 4. On-site Traffic Control Plan and Appendix C. Off-site Traffic Control Plan.) This year's policy of "no in and outs" is expected to reduce the amount of vehicle and pedestrian traffic.

#### 11. Population

Location, distribution, and growth rate of human population are unaffected. Density changes are temporary and have no negative effect.

#### 13. Transportation/Circulation

a. Temporary generation of substantial additional vehicular movement is expected in the morning and evening hours on the days of the event as vehicles arrive and leave the concert site.

*Mitigation Measure #6* - The On-site Traffic Control Plan will allow vehicular traffic entering from Highway 101 to move into the site and parking areas rapidly thus reducing the possibility of traffic backing up on the highway. (See Figure 4. Traffic Control Plan) The traffic flow through the entrance and will call area will allow for a multiple lane checkpoint system for ticket verification. In addition, implementation of restricted "ins & outs" policy will substantially reduce traffic flow and congestion. Similarly, off-site traffic control along 101 will encompass a 5-mile

Solid waste disposal services will be provided by Empire Waste Management out of Ukiah. No glass bottles will be allowed into the concert area and soft drink booths have been redesigned to eliminate all cans and bottles thereby eliminating all can/bottle-related litter in the concert grounds.

There will be an on-site trash coordinator with a crew of 20 volunteers to monitor and maintain the solid waste disposal and recycling facilities.

*Mitigation Measure #13-* See Section J. Solid Waste Disposal & Recycling

#### 17. Human Health

a. The event does not create any health hazard or potential health hazard. The Operation Plan has evolved over the years to provide for a safe and functional environment in which to relax, have fun, and enjoy an outdoor music concert. In the eight years of performing at this site, there has been no record of food or water borne diseases afflicting any attendees, staff or performers. The few on-site related injuries have been responded to immediately by trained first aid crews. The music and "atmosphere" is not conducive to hazardous or destructive behavior. Many attendees report that the event provides them with a sense of wellbeing. Concert support systems from Communications on down to Parking, Security, First Aid and Fire Control are designed to enforce rules that pertain to health and safety.

b. People will not be exposed to potential health hazards. The Concert Operation Plan from Communications on down to Parking, Security, First Aid and Fire Control are designed to implement and enforce rules that pertain to public health and safety.

*Mitigation Measure #14-* The entire Operations Plan documents the procedures which will be followed to manage the site and event in a manner that is safe and healthy.

#### 18. Aesthetics

b. The event will not create an aesthetically offensive site open to public view. The event site is a non-descript river bar with no particular scenic values of its own. The aesthetics of the landscape surrounding the site is, in part, what makes the site a good place for an outdoor concert.

The aesthetics of the site during the event is much like a carnival or fiesta with lots of people, color, activity, and music.

19. Recreation - The event does not have an impact upon the quality or quantity of existing recreational opportunities. The event occurs within a popular tourist recreation corridor. People are attracted to the event because of its location and proximity to state parks and other camping and recreation opportunities. Long-term attendees know to reserve camping and lodging facilities far in advance as they return to the area and the concert on their vacations. Competition among facility users may increase slightly but this is hardly the fault of concert attendees who have the same rights and freedoms as non-event summer tourists.

Total capacity of campgrounds, motels and bed and breakfast inns in Southern Humboldt and Northern Mendocino is 9,766 people not counting the approximately 3,800 people camping on-site and the 1000 local volunteers who will stay at home with an estimated 1000 guests. The designation of Oak Flat at Richardson Grove as a concert attendee campground should minimize the disruption of non-concert attendees activities.

Additionally, the event contributes over \$250,000. to the local economy of the area.

## 20. Cultural Resources

a. The event will not result in the alteration or destruction of prehistoric or historic archaeological site as there are no known archeological sites on the site. Historically, the river, during flood stages, has likely removed any possible artifacts associated with indigenous peoples use of the river.

c. The event does not have the potential to cause a physical change which would affect unique ethnic cultural values. As pointed out above, no known archeological sites exist on the site.

## B. Summary of Mitigation Measures

Over the past 8 years, many improvements have been made to the concert site and grounds in support of the Reggae on the River fund-raising concert. It is estimated that approximately \$150,000. have been spent on specific on-site improvements. Additional on-going sums are expended on off-site mitigations for security, fire control, traffic control, etc. These improvements have been made in response to both public regulatory agency concerns and issues raised by members of the surrounding community. Much of the 1992 Operations Plan reflects many of these past improvements. Other measures have been taken to mitigate the effects of the concert on the environment and community, specifically reducing the attendance to a maximum of 7,500 people (approximately 10,000 including staff and volunteers guests, media, performers, etc.)

The following mitigation measures build on past mitigation measures already incorporated into the Operations Plan and respond to the Initial Study prepared for the project by Humboldt County Planning Staff. (See Section VI.A. Annotations to Environmental Checklist and Appendix G. Initial Study)

*Mitigation Measure #1*- The concert grounds and other areas subject to temporary compaction, dryness and dust will be watered and mowed and seeded prior to the event and seeded and maintained after the event to maintain grassy cover in good condition.

*Mitigation Measure #2*- Dirt roads will be watered by an on-site water truck provided by Round Mountain Water Truck Service as necessary or as directed by California Highway Patrol and staff.

*Mitigation Measure #3*- The banks of portasans as well as the gray water holding tank will be provided for human waste. The portasans will be distributed around the site in numbers comenserate with demand (See Figure 8. Sanitary Facilities & Solid Waste Disposal & Recycling.) Handicapped accessible portasans are also available. Access to portasans will facilitate easy monitoring and pumping as needed. Two on-site pump trucks are provided by Empire Waste Management and the waste is hauled off-site to the nearest available municipal sewage treatment facility after the event. Monitoring of portasans will be done on an hourly basis and "full" facilities closed until the pump truck arrives.

*Mitigation Measure #4-* The concert music will end at 10:00 pm (an hour earlier than 1991) on Saturday night and 7:00pm on Sunday night. This will mitigate late-night noise that will allow people residing around the concert site to get a "good night's sleep."

*Mitigation #5 -* The implementation of CHP approved Traffic Control Plan is expected to mitigate the affects of vehicular and pedestrian traffic both on site and off-site. (See Sections A. On-site Traffic Control and B. Off-site Traffic Control as well as Figure 4. On-site Traffic Control Plan and Appendix C. Off-site Traffic Control Plan.) This year's policy of "no in and outs" is expected to reduce the amount of vehicle and pedestrian traffic.

Similarly, the Public Safety & Security Plan & First Aid Plan are designed to minimize hazards to concert attendees. (See Sections C. Public Safety & Security and K. First Aid as well as Figures 5. Security Positions Plan and 10. Emergency Services.)

*Mitigation Measure #6-* The On-site Traffic Control Plan will allow vehicular traffic entering from Highway 101 to move into the site and parking areas rapidly thus reducing the possibility of traffic backing up on the highway. The traffic flow through the entrance and will call area will allow for a multiple lane checkpoint system for ticket verification. (See Figure 4. On-site Traffic Control Plan) In addition, implementation of restricted "ins & outs" policy will substantially reduce traffic flow and congestion. Similarly, off-site traffic control along 101 will encompass a 5-mile area both north and south of the event site. (See Appendix C. Off-site Traffic Control Plan)

*Mitigation Measure #7-* Implementation of the On-site Camping & Parking Plan is expected to minimize the effects of on-site parking. Capacity is available for parking approximately 2300 vehicles on-site. There are 9 separate parking areas P 1 - P9. (See Section E. On-site Parking and Figure 7. On-site Parking Plan). Campers at adjoining Oak Flat Campground of Richardson Grove State Park will be able to walk to the concert grounds on the back road thereby reducing the need for on-site parking and reducing pedestrian traffic along 101.



Similarly, campers at the adjoining KOA Campground and Hartsook Inn will be walking to the site further reducing vehicle traffic and the need to park additional vehicles. The Shuttle Service will pick-up many people from off-site staging areas. (See Sections F. Off-site Camping, Lodging and Parking and G. Shuttle Service and Appendix D. Off-site Camping & Lodging.)

*Mitigation Measure #8* - See Mitigation Measures #6 & #7.

*Mitigation Measure #9*- See Mitigation Measures #6 & #7 & #8.

*Mitigation Measure #10*- The Fire Protection Plan was designed with the help of local residents of the Piercy/Cook's Valley area. Additional coordination has occurred with California Department of Forestry and Fire Protection. Fire protection will be provided by the Piercy Volunteer Fire Department (PVFD) who will have one fire engine and one fully staffed Quick Response Unit on site on site Friday, Saturday, and Sunday during the show. Two additional Quick Response Units will be on site from Telegraph Ridge Fire Protection District. This is a total of 30 professional fire fighters on site. 200 additional staff are former or current members of volunteer fire departments. Additionally, on- and off-site security personnel will patrol the site and immediate environs enforcing the "no fire" policy.

*Mitigation Measure #11*- The Security Plan is designed to accomplish the following:

- minimize non-paying customer access
- provide information and assistance to public and law enforcement personnel
- provide instructions on all site activities (i.e., first aid, sanitary and water station locations, etc.)
- eliminate illicit sales
- eliminate the incidence of vandalism and break-ins.
- effectively respond to lost children, emergencies, injuries, etc. in cooperation with on-site medical team
- search all ice chests, backpacks, etc. to prevent alcohol, dogs, drugs, weapons, fireworks and glass from entering the site.

See Section C. Public Safety & Security and Figure 5. Security Position Plan.)

An on-site emergency first aid team will be provided by RockMed, a professional medical team out of San Francisco with experience in concert events ranging in size from 1000 - 300,000 people. The team will consist of 2 M.D.s, 4 RNs, 5 Psych-Techs, 3 Paramedics and 25 EMTs/CPRs. A First Aid Station will occupy an area inside the concert grounds. Another First Aid Station will be located by the River between Camping Areas C1 and C2. Two ambulances (staffed with 2 EMTs each) will be available on-site from Friday morning until the close of the concert. Additionally, a helicopter landing area will be provided for emergency evacuation. The helicopter evacuation service is provided by Airvac, the North Coast evacuation system. (See Figure 10. Emergency Services)

For emergency medical aid purposes, a gridded site map describes general locations on the site by x and y coordinates facilitating location and response to emergency medical situations. All medical staff have 2 way radio communicators enabling them to communicate immediately with security and other concert staff.

*Mitigation Measure #12-* The Sanitary Facilities, Solid Waste Disposal & Recycling Plan & Water Distribution Plan are expected to provide adequate sanitary facilities and safe drinking water supplies for conference attendees in accordance with County Health Standards. Licensed contractors will maintain and deliver waste to proper municipal facilities in accordance with government regulations.

*Mitigation Measure #13 -* The on-site septic system has no toilet facilities but is capable of storing 1600 gallons of human waste per day. This system will be supplemented by providing 100 portasans at a standard of 1 portasan per 100 people. The portasans will be monitored on an hourly basis and "full" facilities will be temporarily closed. Pumping will be done when necessary by two on-site pump trucks provided and staffed by Empire Waste Management from Ukiah. Waste will be delivered to the nearest municipal sewage treatment facility. Handicapped accessible portasans will also be provided near the handicapped camping and parking area. Additionally, a gray water tank will store runoff from both hot and cold water hand and food washing facilities. (See Figure 8. Sanitary Facilities & Solid Waste Disposal & Recycling)

No glass bottles will be allowed into the concert area and soft drink booths have been redesigned to eliminate all cans and bottles thereby eliminating all can/bottle-related litter.

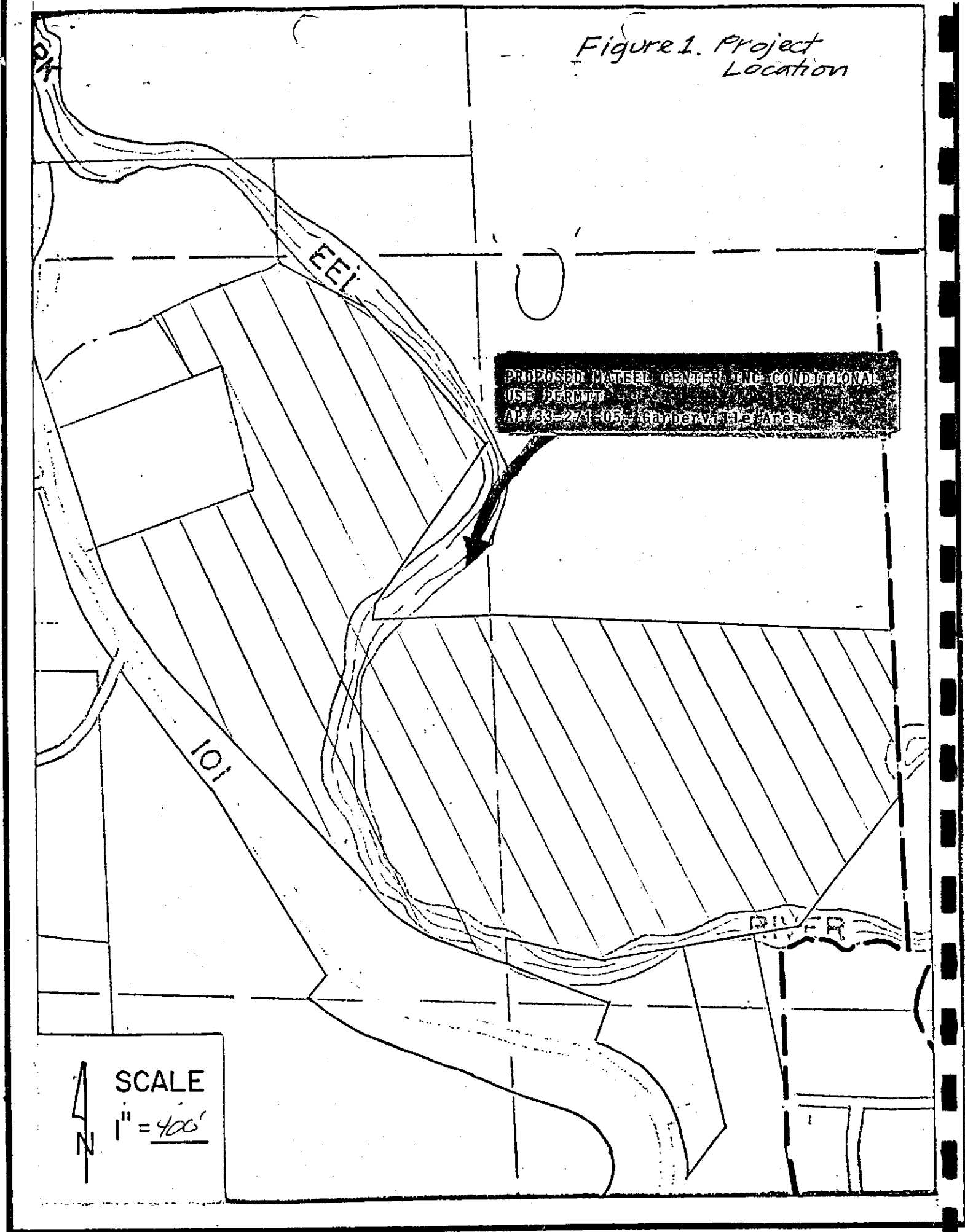
There will be an on-site trash coordinator with a crew of 20 volunteers to monitor and maintain the solid waste disposal and recycling facilities.

*Mitigation Measure #14-* The entire Operations Plan documents the procedures which will be followed to manage the site and event in a manner that is safe and healthy.

#### C. Mitigation Monitoring Plan

Each of the above mitigative measures in addition to those already incorporated into the Operations Plan will be carefully monitored by event coordinators and necessary changes or refinements noted. As in the past, a post-event evaluation will be compiled measuring the effectiveness of mitigation measures and recommending changes and improvements. These recommendations, changes and improvements will be incorporated into the next year's Operation Plan.

Figure 1. Project  
Location



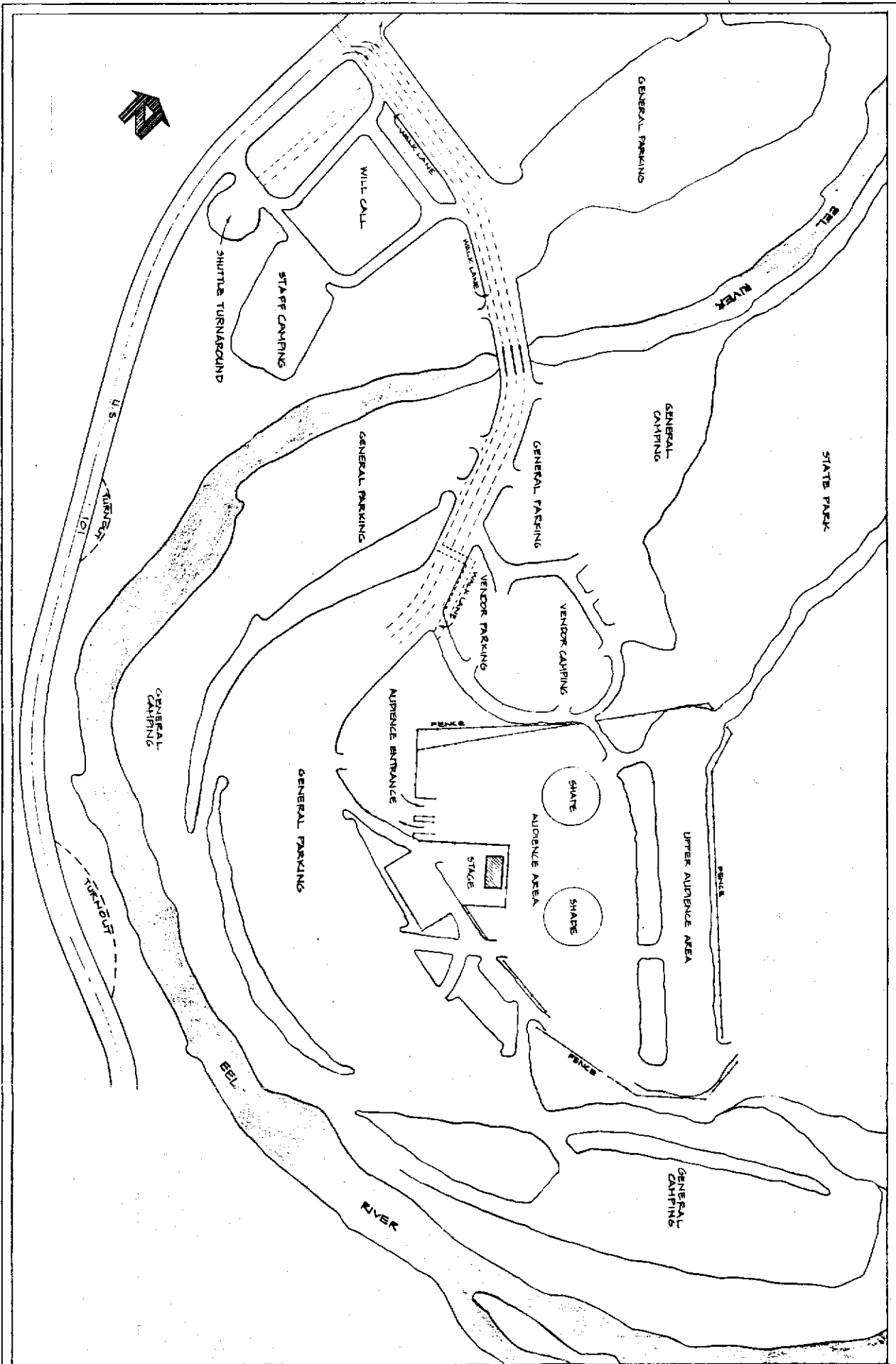


FIG. 101

SITE MAP

REGGAE ON THE RIVER @ FRENCH'S CAMP

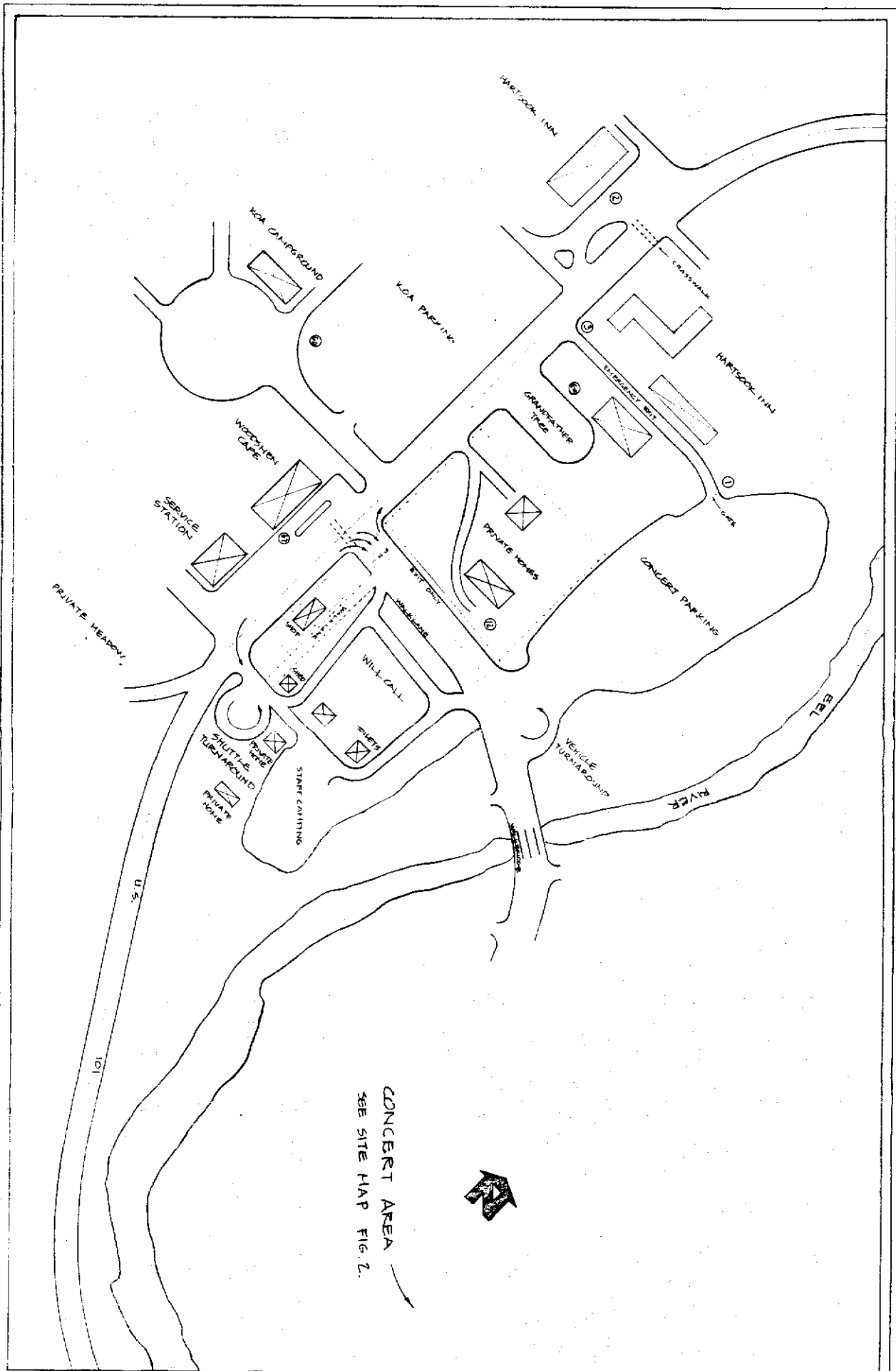


FIG. 3 FRENCH'S CAMP / 101 ENTRANCE SECURITY POSITIONS

REGGAE OF THE RIVER & FRENCH'S CAMP

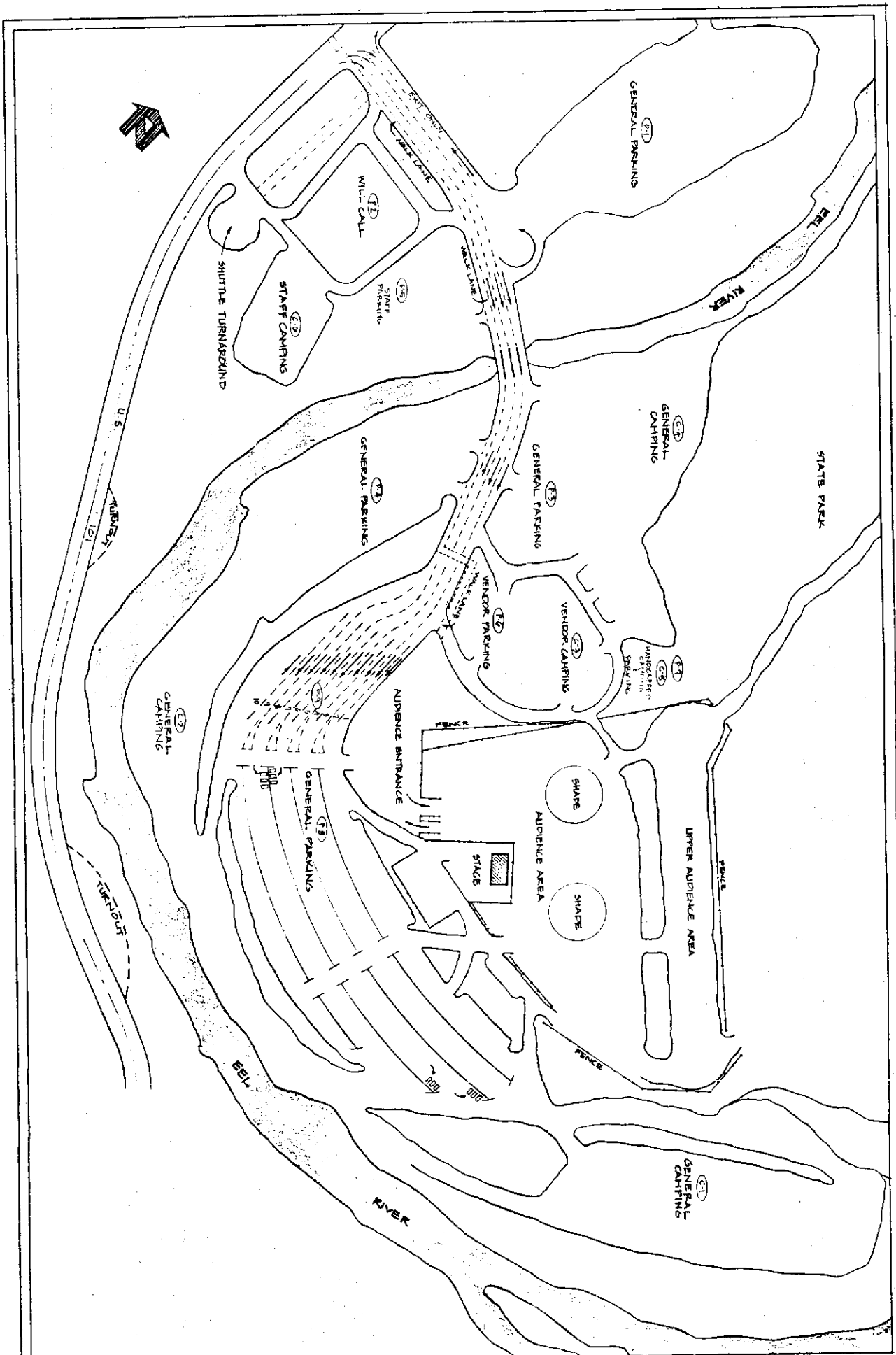


FIG 2

ON SITE TRAFFIC FLOW PLAN

REGGAE ON THE RIVER ©  
FRENCH'S CAMP

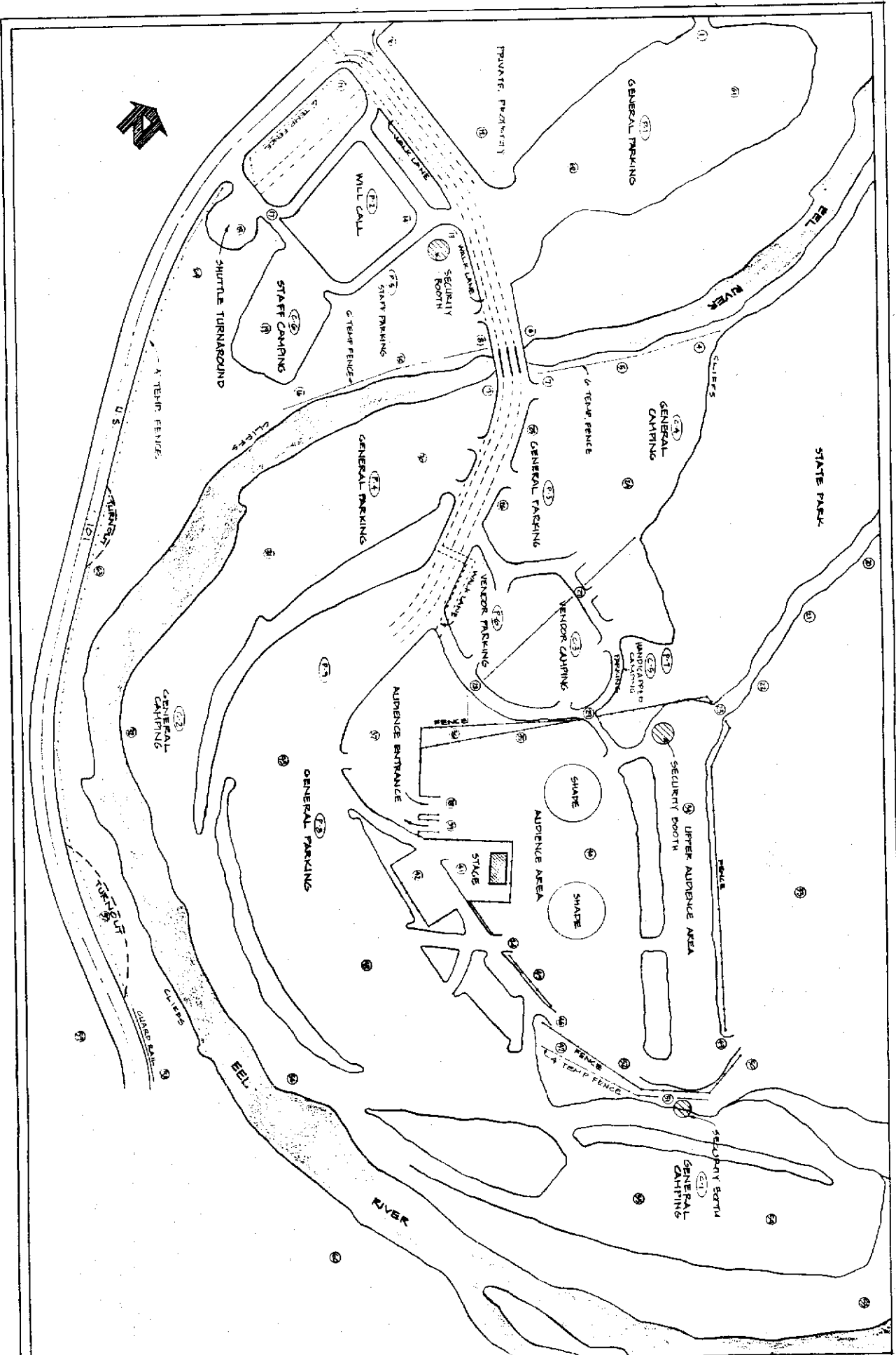


FIG 5 SECURITY POSITIONS

REGGAE @ THE RIVER @ FRENCH'S CAMP



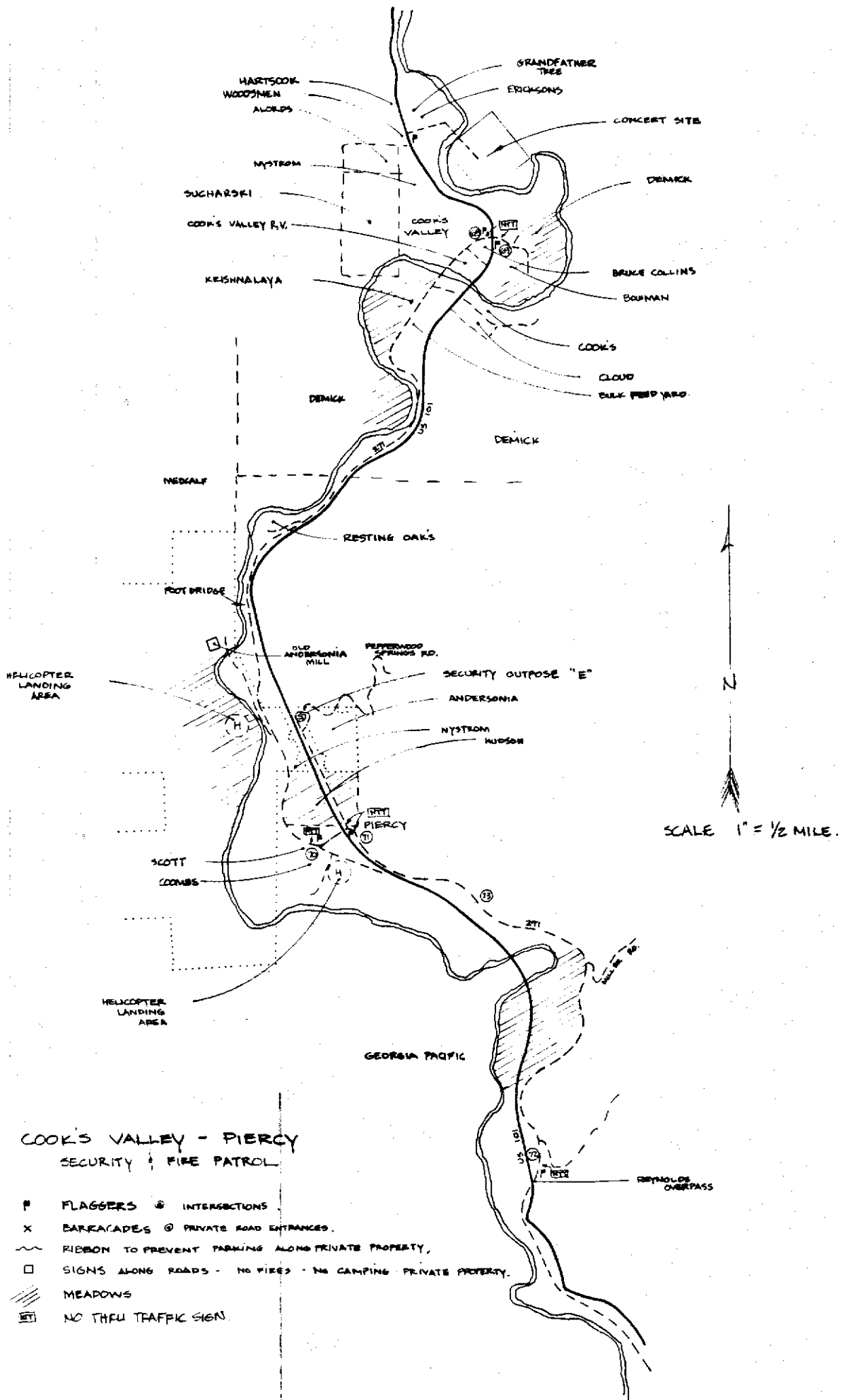
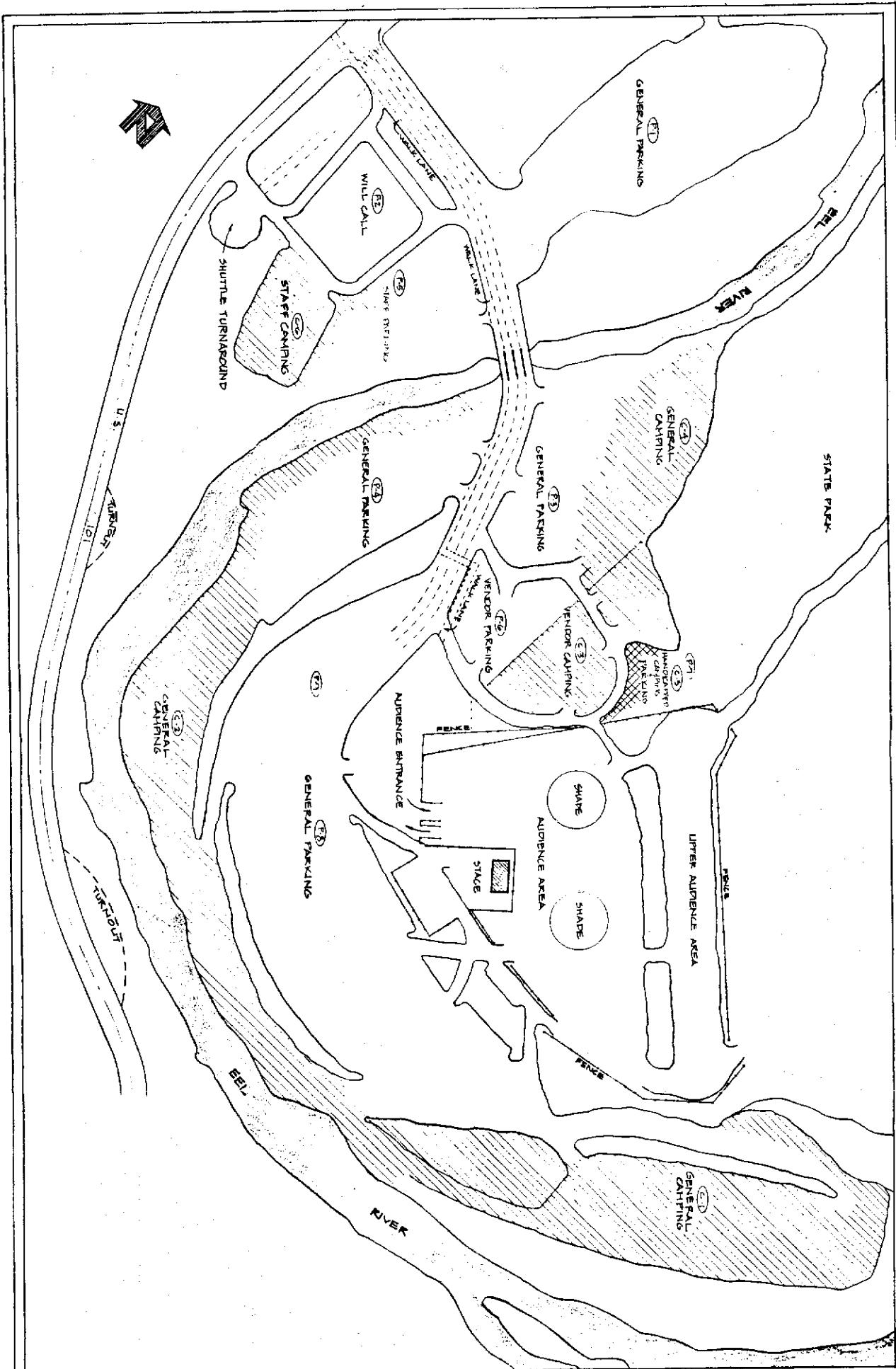


FIG. 2A



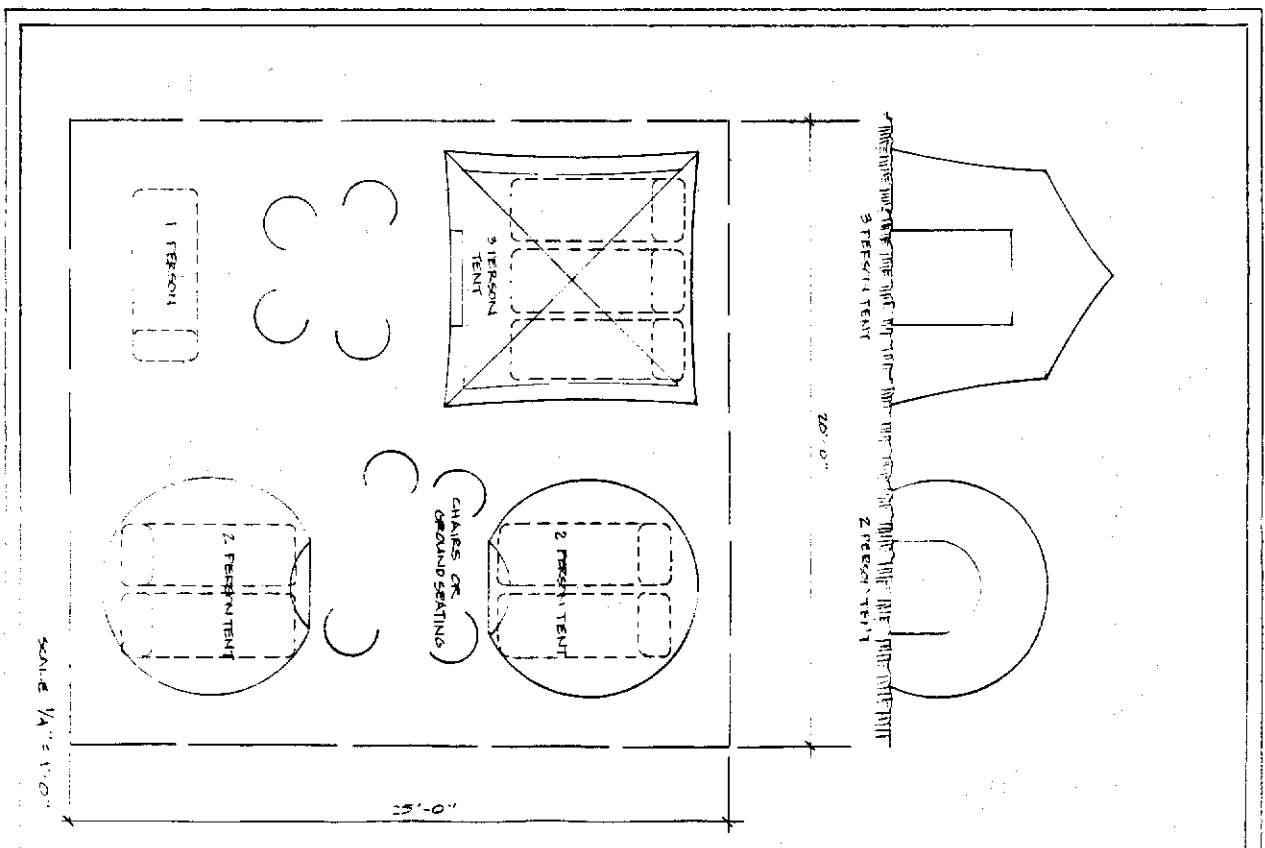


FIG. 5A TYPICAL CAMPSITE

REGGAE ON THE RIVER ©  
FRENCH'S CAMP

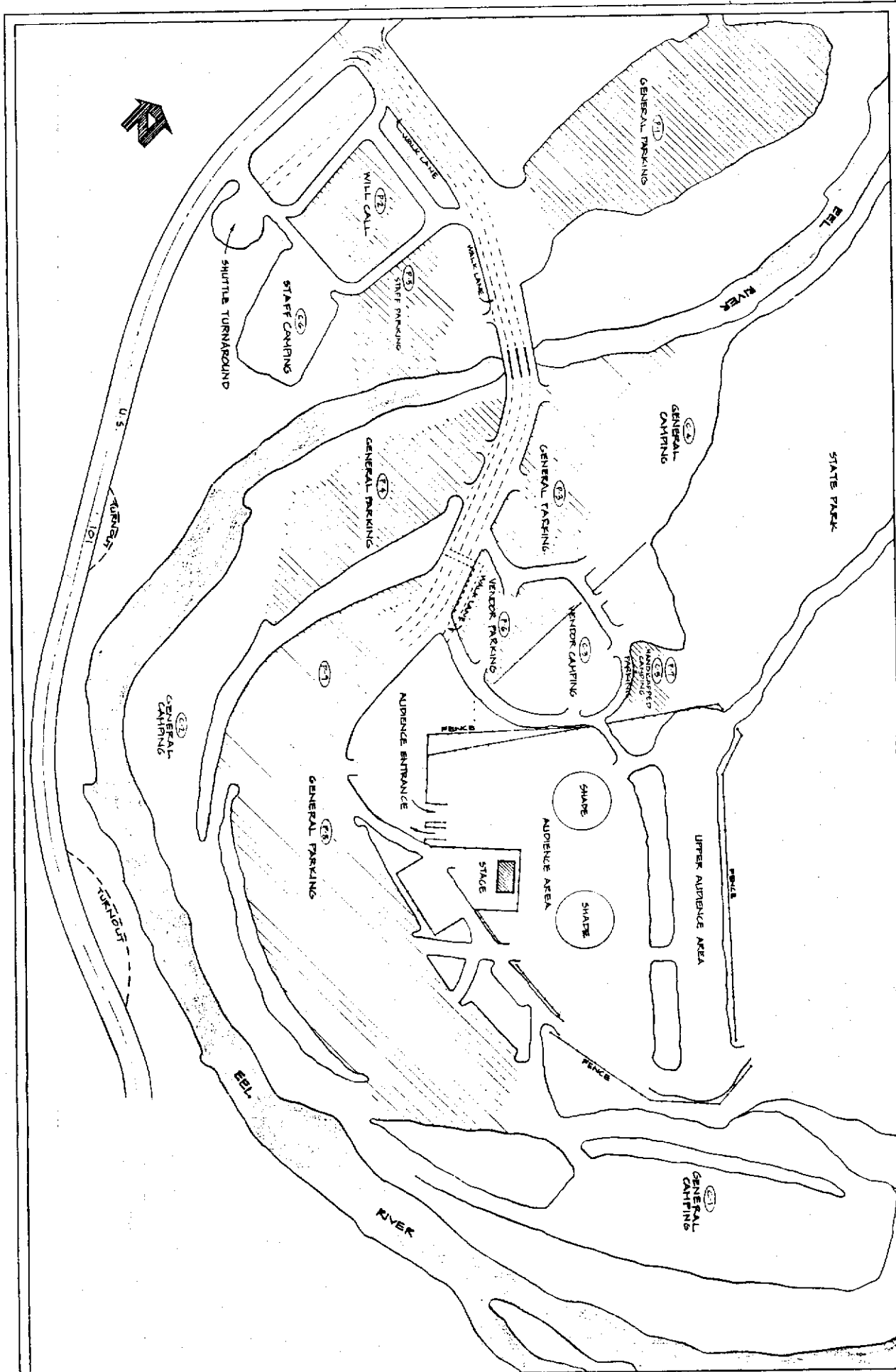


FIG. 7 ON-SITE PARKING PLAN

REGGAE OF THE RIVER ©  
FRENCH'S CAMP

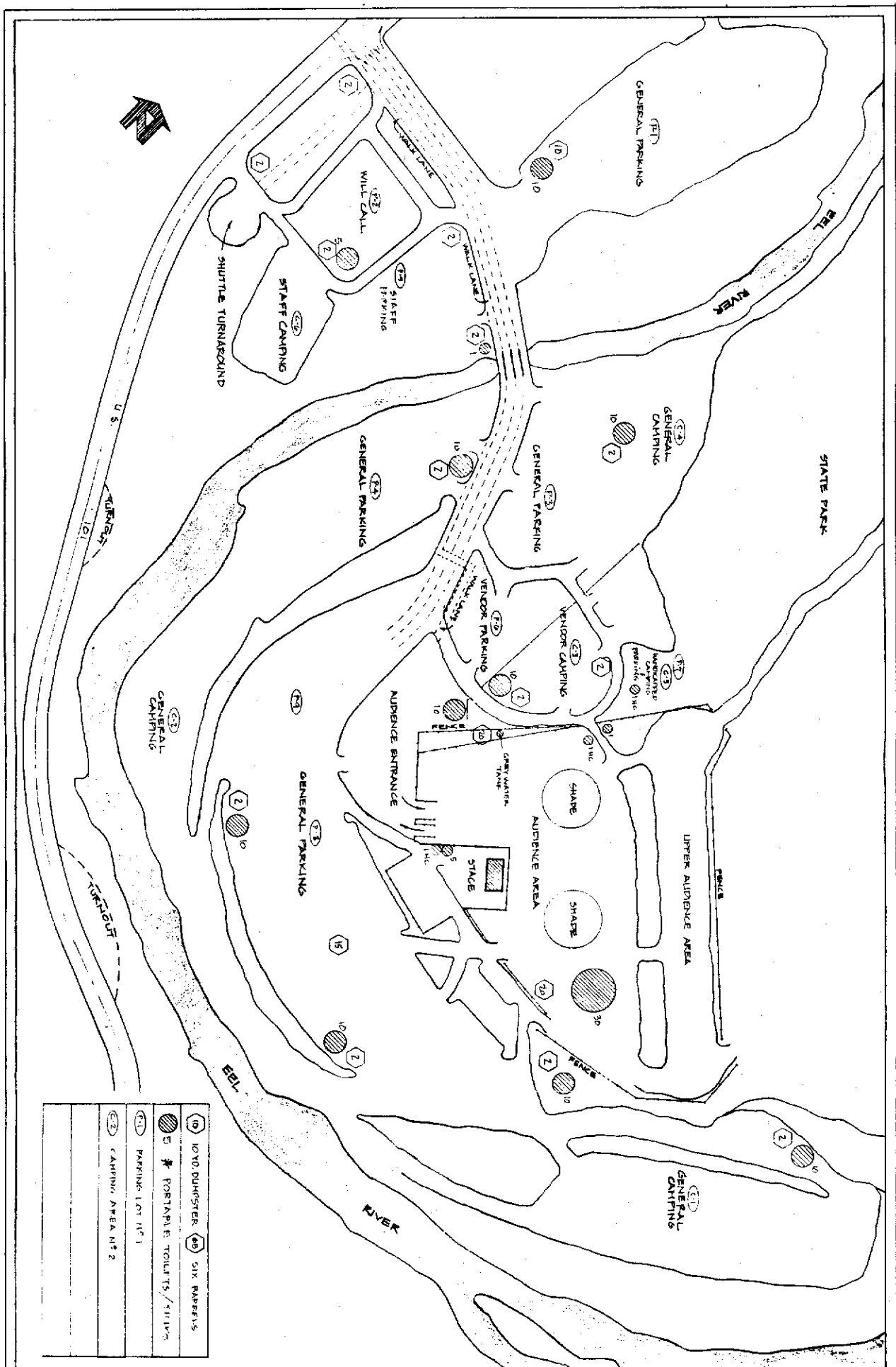


FIG. 1 SANITARY FACILITIES & WASTE WASTE DISPOSAL & RECYCLING REGGAE ON THE RIVER © FRENCH'S CAMP

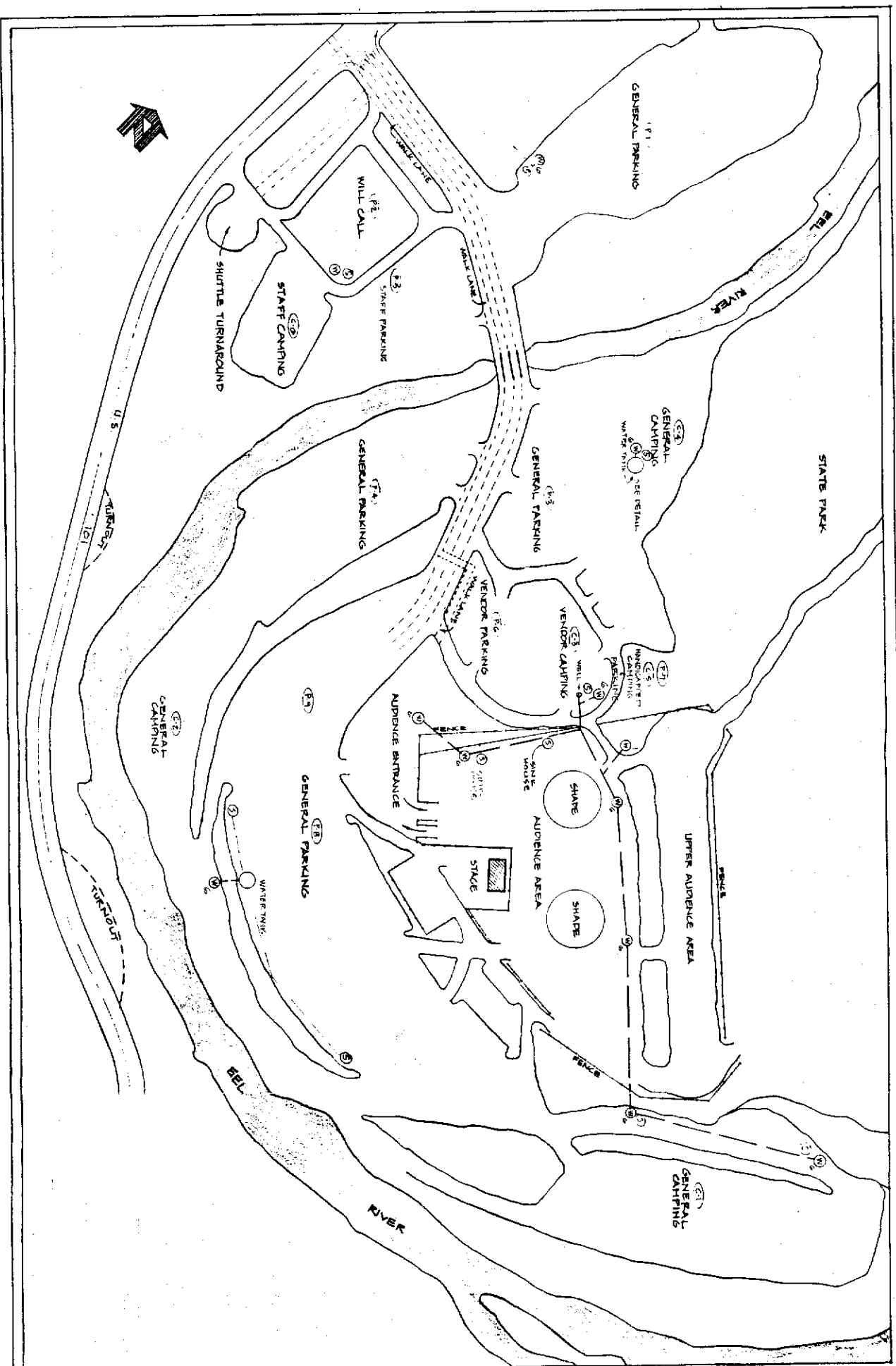
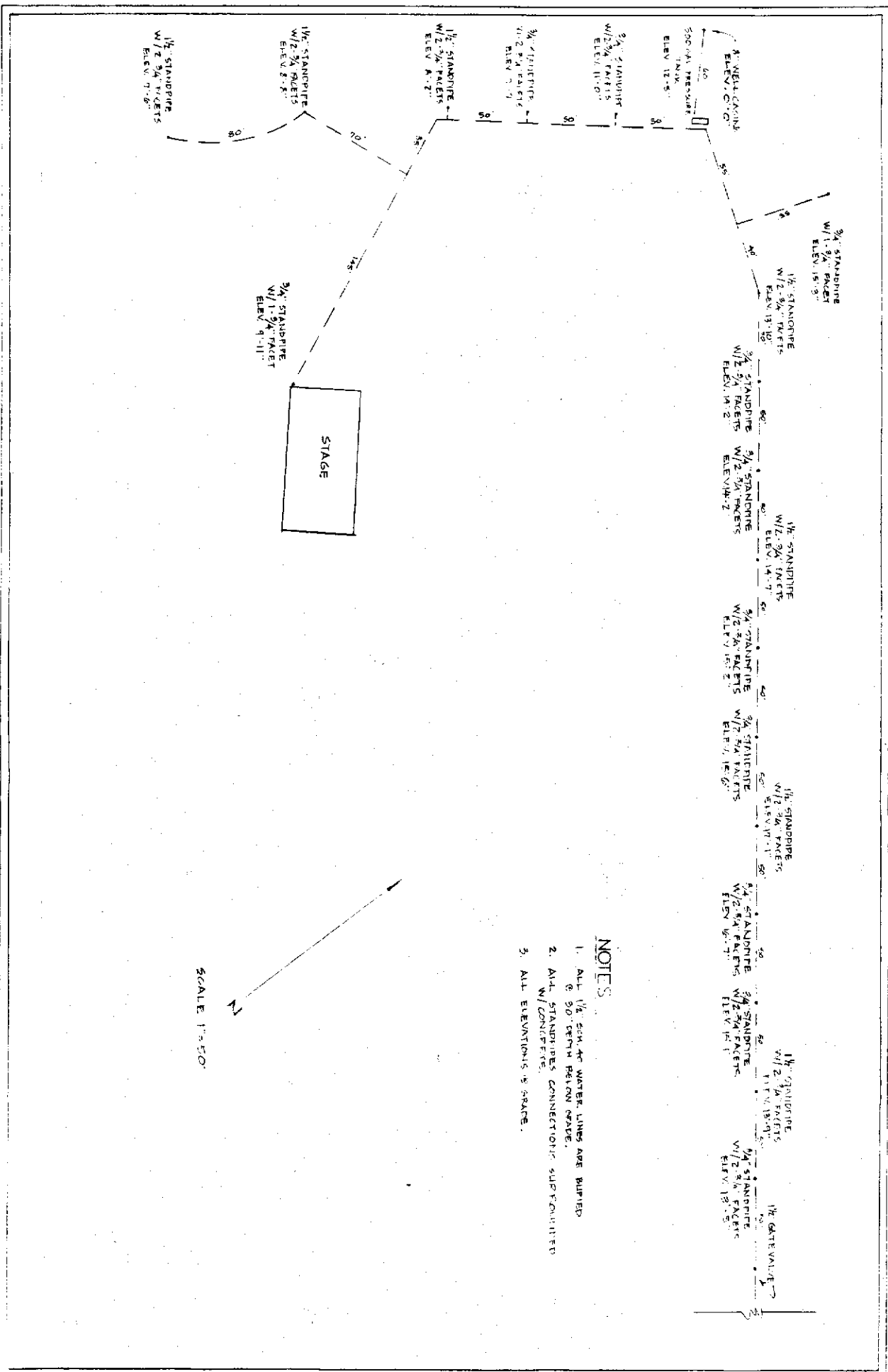


FIG. 1A WATER DISTRIBUTION SYSTEM

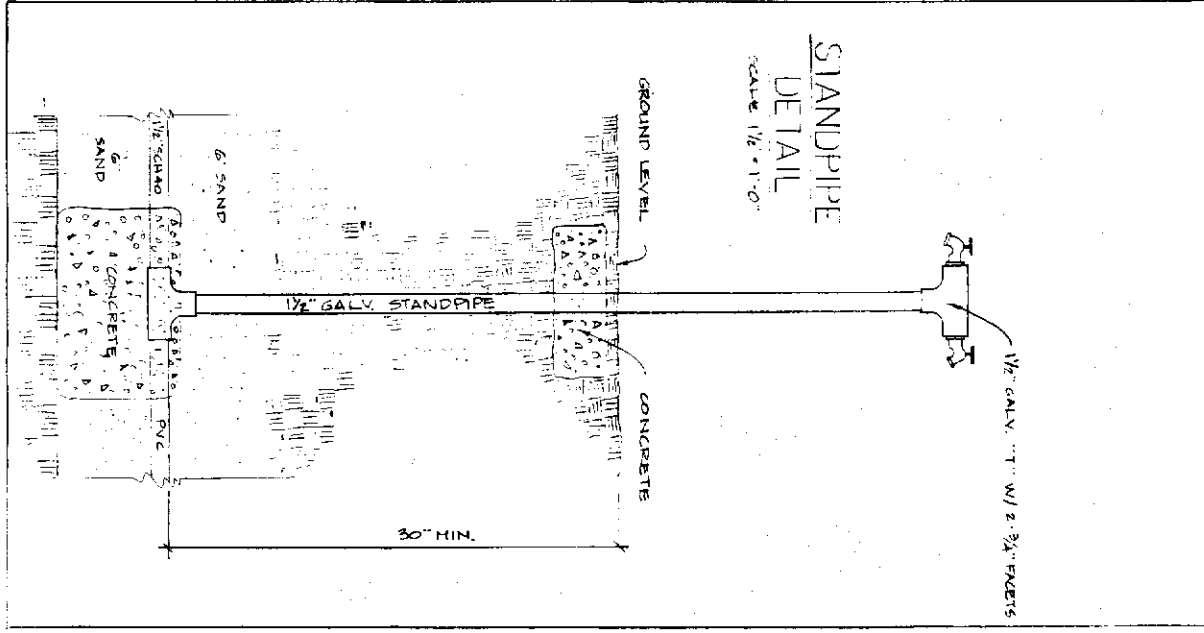
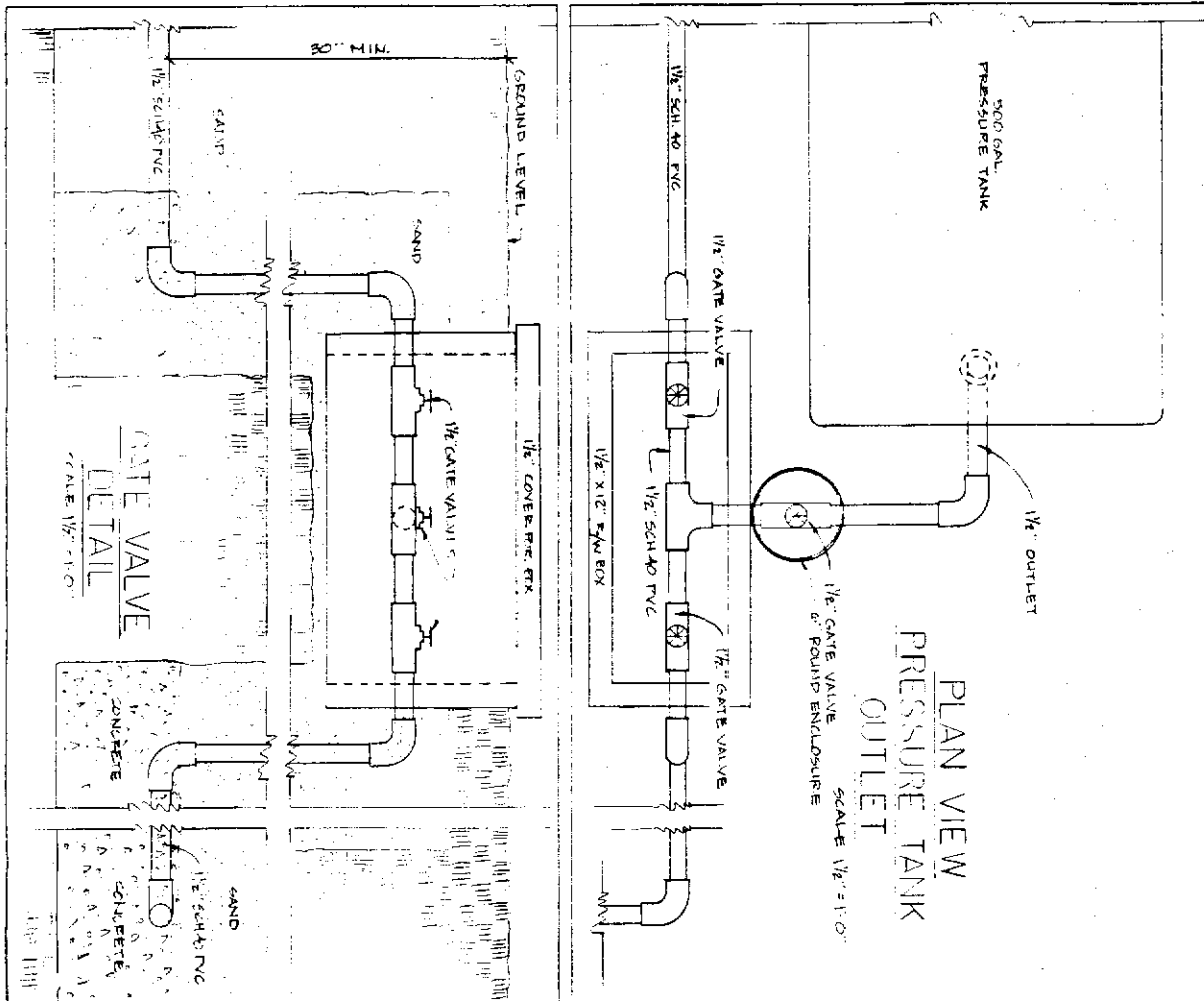
REGGAE OF THE RIVER @ FRENCH'S CAMP



**NOTES**

1. ALL 1/2" & 3/4" WATER LINES ARE BURIED @ 30" DEPTH BELOW GRADE.
2. ALL STANDPIPE CONNECTIONS SUPPLEMENTED W/CONNECTOR.
3. ALL ELEVATIONS IN GRADE.

FIG. 5B WATER DISTRIBUTION SYSTEM REGGAE ON THE RIVER & FRENCH'S CAMP





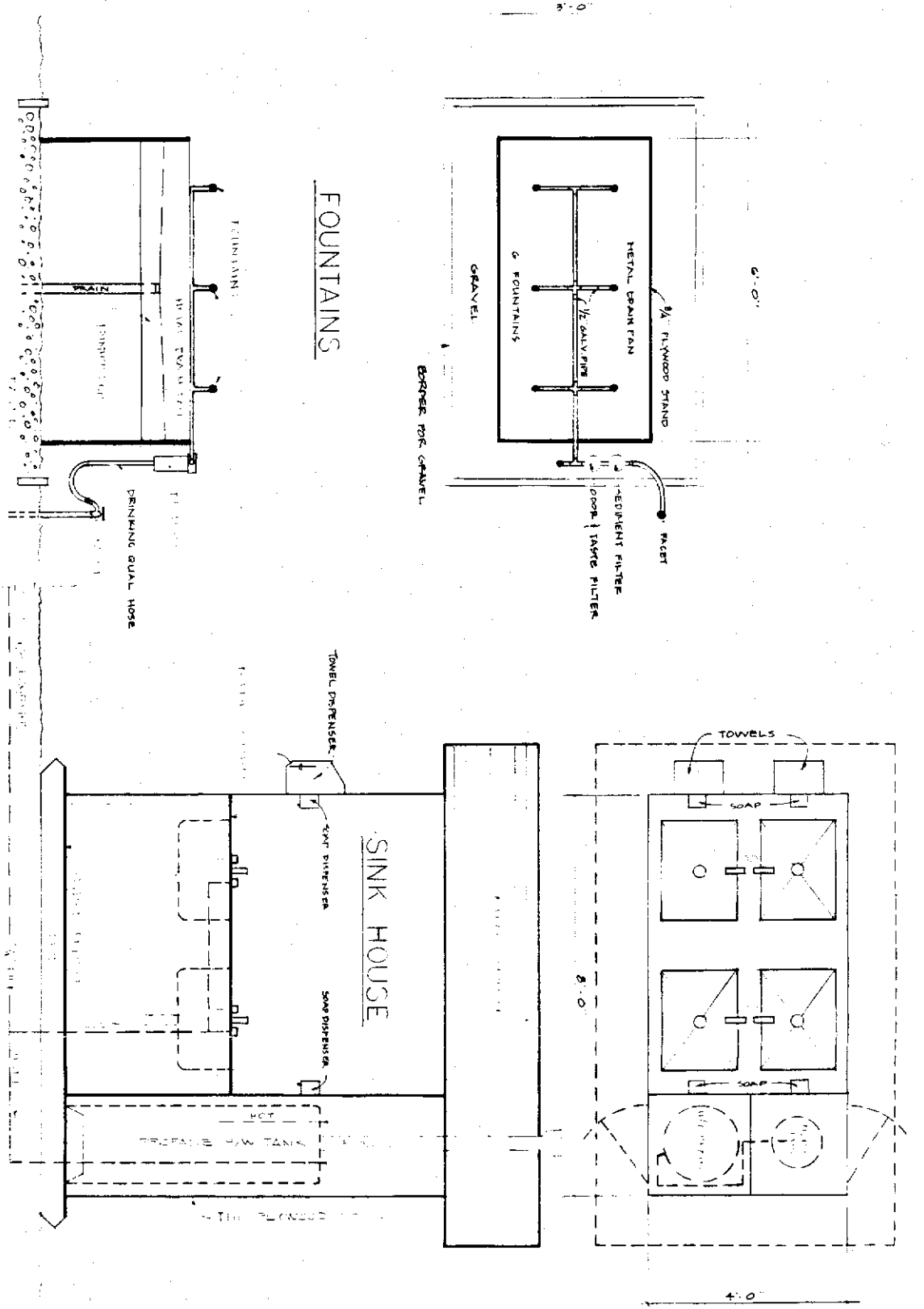
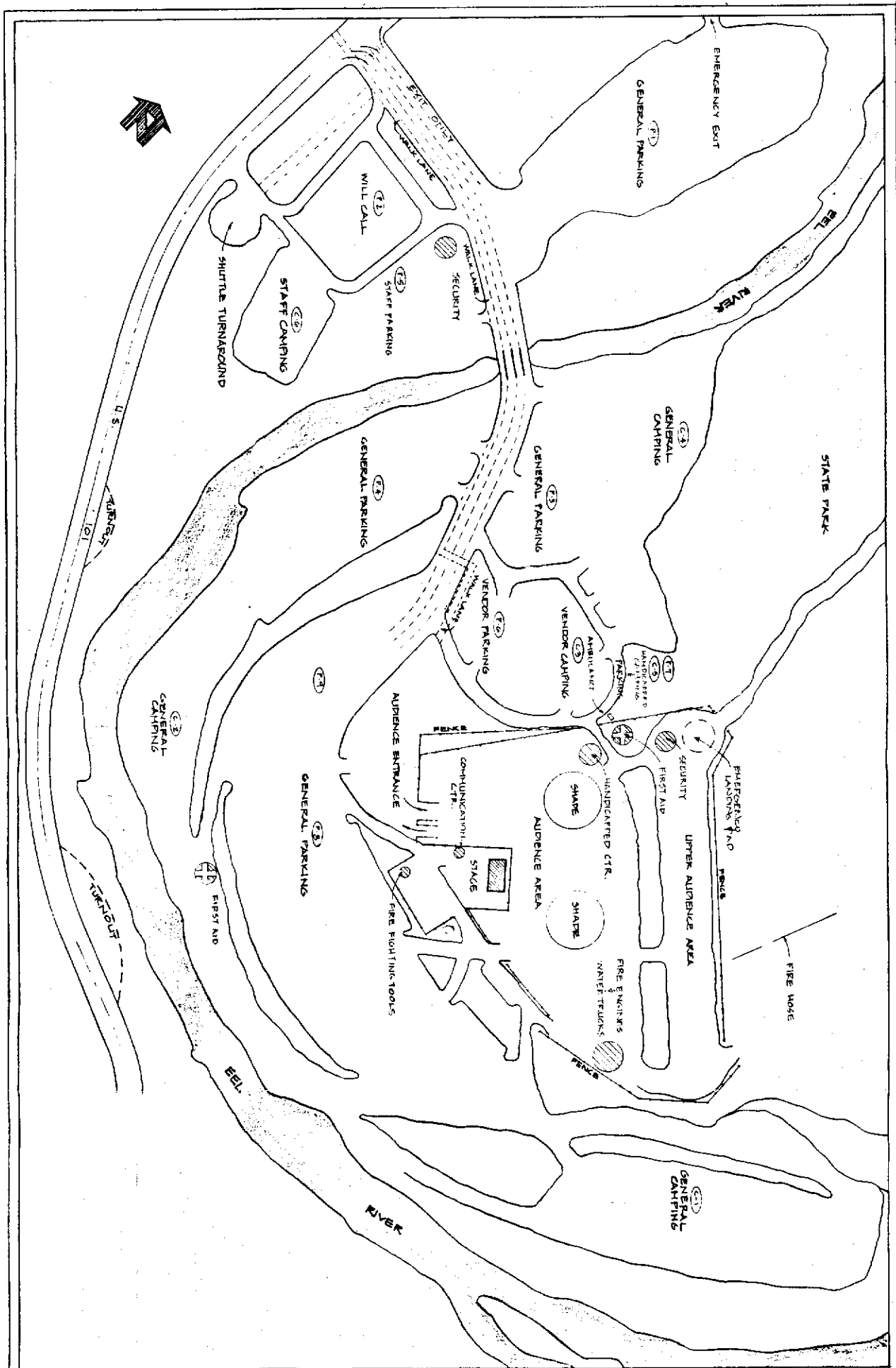


FIG. 9D FOUNTAIN DETAIL  
SINK HOUSE DETAIL



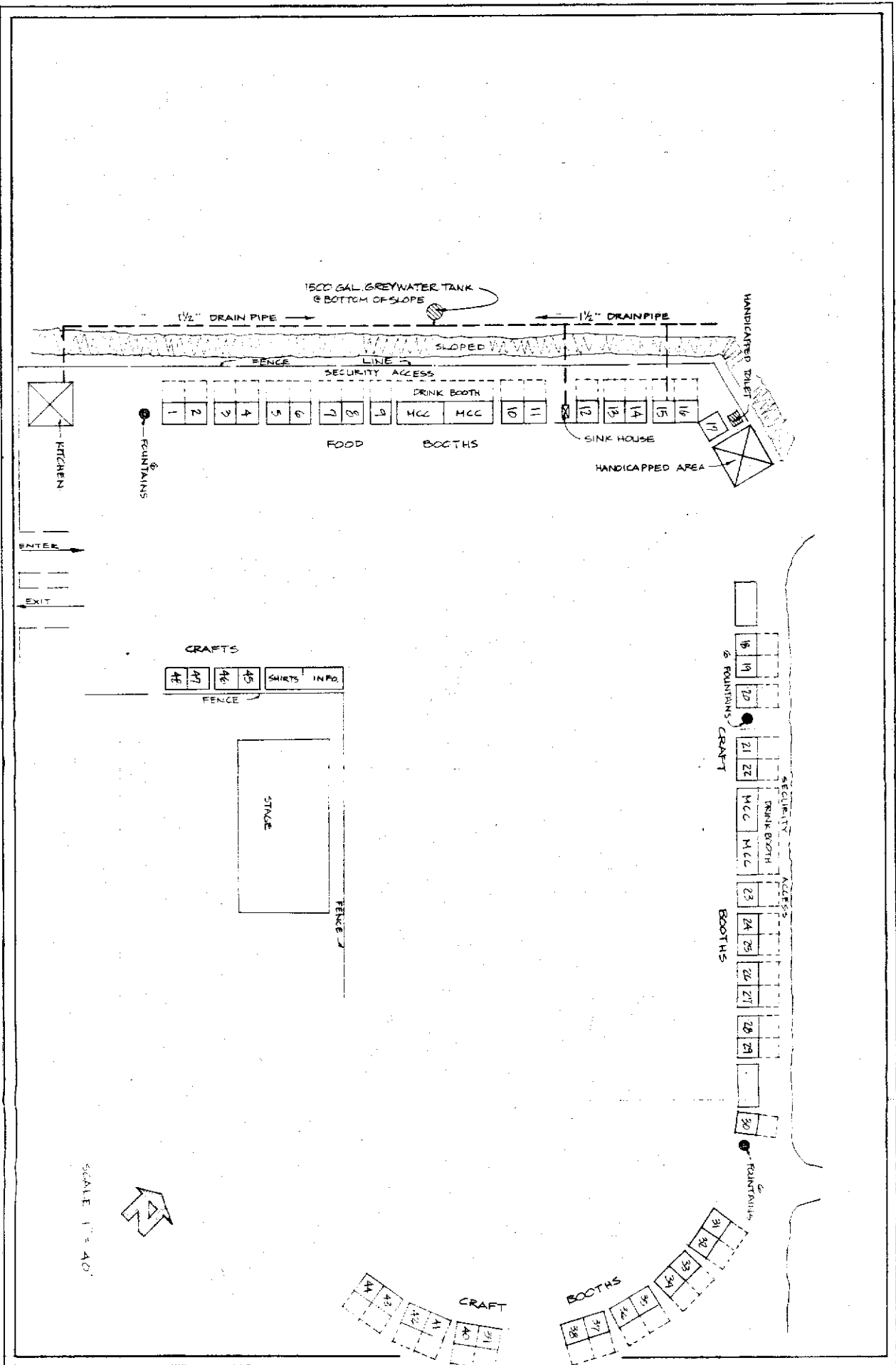
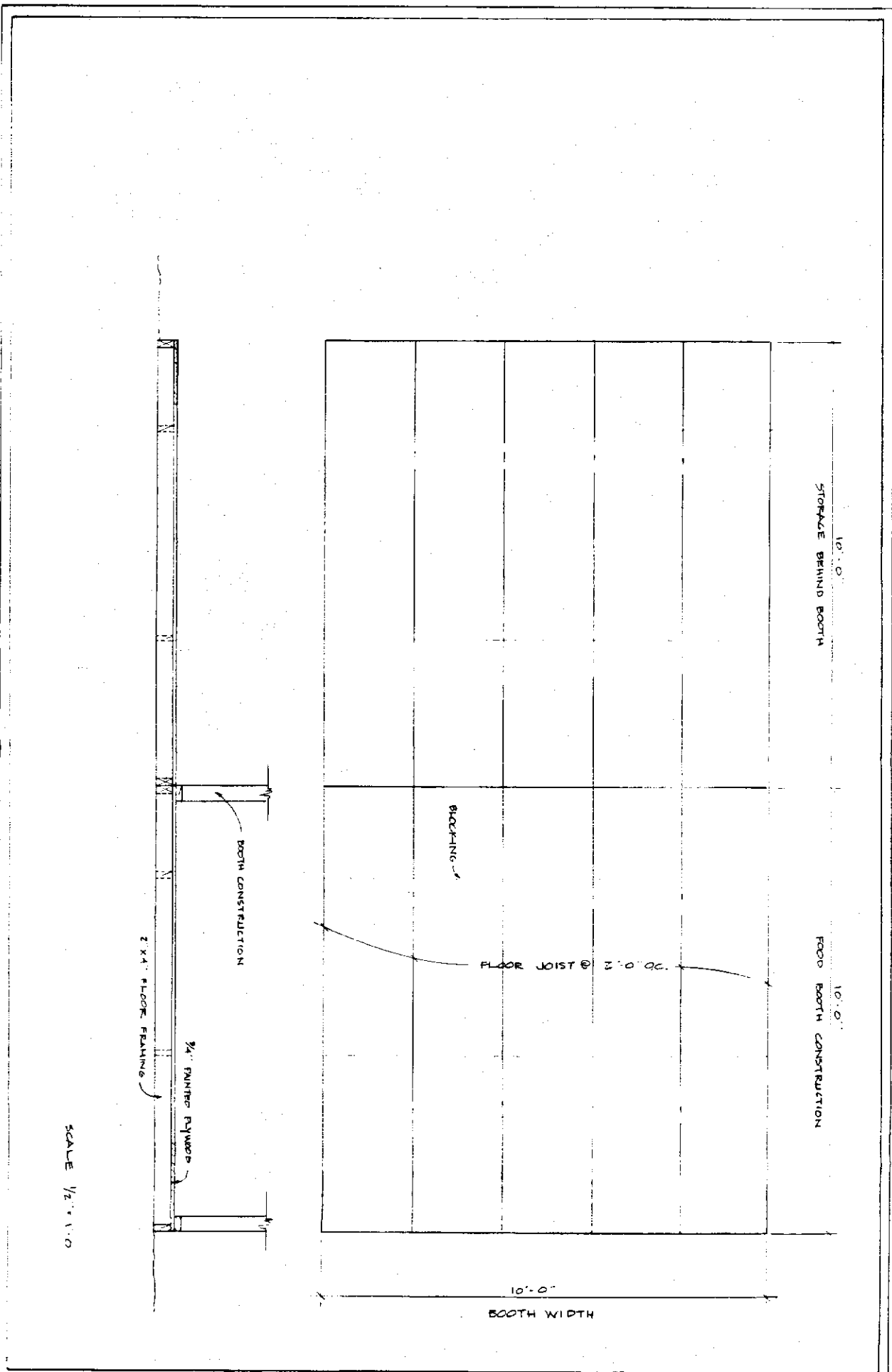


FIG. 11A BOOTH LAYOUT

REGGAE ON THE RIVER @ FRENCH'S CAMP

SCALE 1" = 40'

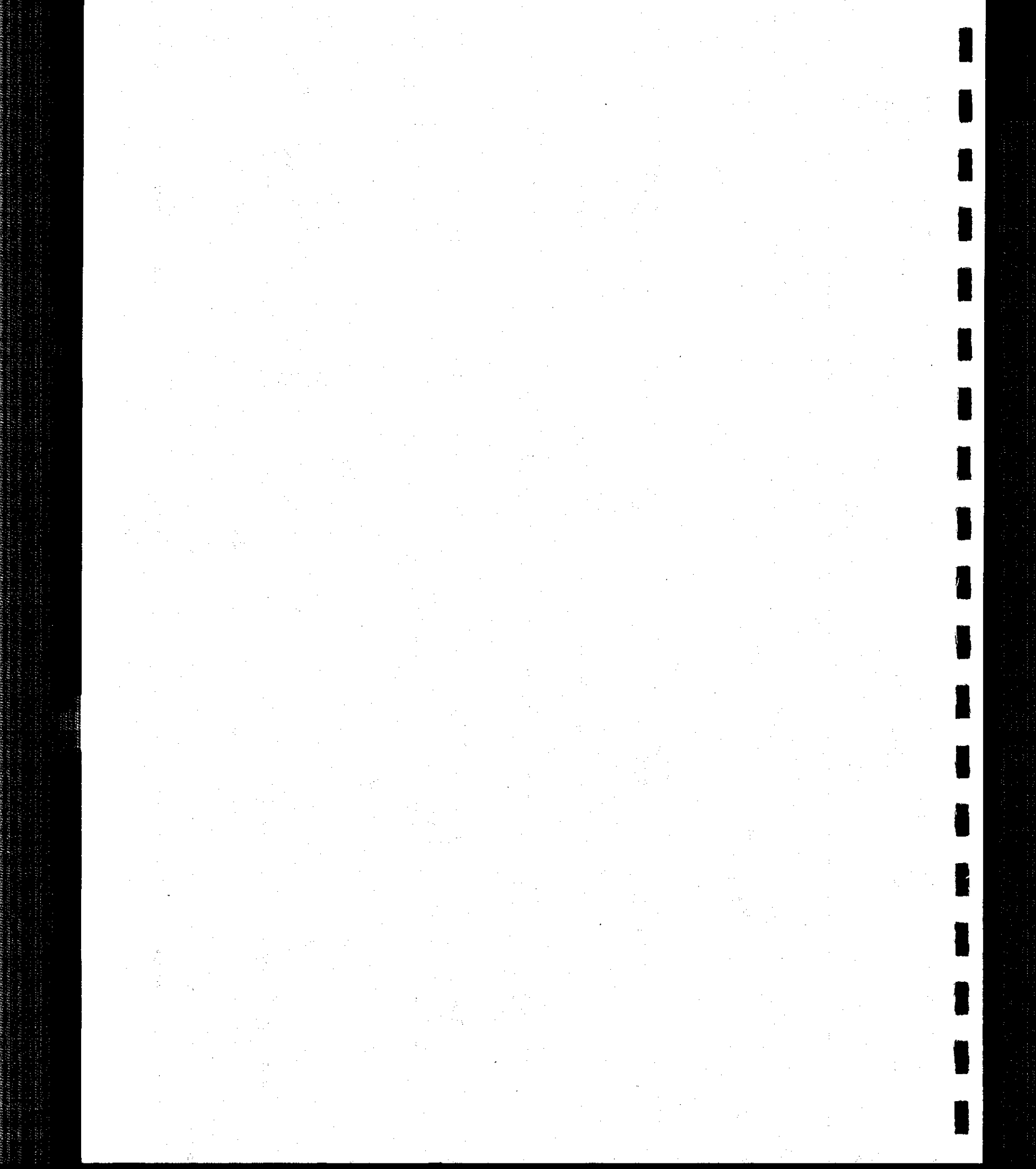


11B

TYPICAL FOOD BOOTH FLOOR (DETAIL)

REGGAE ON THE RIVER @ FRENCH'S CAMP

**Appendix A.**  
**Economic Costs & Benefits**





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ECONOMIC IMPACT  
OF  
REGGAE ON THE RIVER

This locally produced fund-raiser is the singular greatest, most positive event in Southern Humboldt's economic year. Aside from the almost quarter of a million dollars (see Appendix #2), The Mateel Community Center spends locally producing the show, and the \$90,000.00 earned by local non-profit organizations (see Appendix #3), twenty local crafts people earn a total of over a hundred thousand dollars.

The 10,000 people who work and attend Reggae on the River spend locally, on the average, \$100.00 per person, above and beyond what they spend for admission and food and crafts on site. This is a very conservative estimate. The value of this one and a half million dollar infusion into Southern Humboldt's struggling economy, in a matter of a few days, is unequalled by any other event or business. The trickle-down effect states that money is spent seven times before it leaves the community.

Succinctly put, there is no event or industry in Humboldt County that puts as much money into the local economy, over a few days, as Reggae on the River.

ORIGINAL

# FILE COPY

REGGAE ON THE RIVER 1991

## COSTS INCURRED THROUGH AGENCIES AND NEIGHBORHOOD REQUESTS

SITE EXPENSES TOTAL \$51,350.00

WATER SYSTEM, ROAD WIDENING, PARKING  
LOT REDESIGNING, ELECTRICAL SYSTEM,  
HAND WASHING FACILITIES, DRINKING  
FOUNTAINS, EXPANDED SANITATION, FOOD  
SERVICE FACILITIES EXPANDED

SERVICES TOTAL \$11,263.97

PIERCY FIRE DEPARTMENT (FIRE PROTECTION)	\$ 2000.00
GARBERVILLE AMBULANCE (24 HOUR ON SITE)	3142.00
SHUTTLE BUSES (INSTEAD OF 271 OFF-SITE PARKING)	3529.00
GARBERVILLE RADIO CLUB	500.00
SALMON CREEK COMMUNITY SCHOOL (RIVER DRINKS)	340.00
ANCIENT FORESTS INT. (WILL. CALL DRINKS BOOTH)	102.97
(\$200.00 Hall Rental Credit In Addition)	
MATEEL WOMEN'S MUSIC NETWORK (CAMPING)	1650.00

SECURITY TOTAL \$22,326.78

PIERCY NEIGHBORHOOD (HIRED BGP)	1728.00
GRANDFATHER TREE	500.00
WOODSMAN CAFE	100.00
HARTSOOK INN (HIRED BGP)	616.00
CLOUD BUHLER	320.00
PARKS DEPT EXTRA STAFFING	1428.62
KOA CAMPGROUND (EXTRA TOILETS REQUESTED INSTEAD)	412.00
MEALS, T-SHIRTS FOR PIERCY VOLUNTEERS AND HIRED	750.00

PIERCY AREA TOTAL \$5,854.62



ADDITIONAL SECURITY EXPENSES

BSP HIRED SECURITY ON CONCERT SITE	13022.16
SHERIFF'S COUNTERS	1450.00
MEALS, T-SHIRTS FOR HIRED CONCERT SECURITY	2000.00

TOTAL \$16472.16

SALARIES

TOTAL \$20459.16

MATEEL STAFF HRS SPENT WITH PERMIT PROCESS	8966.77
SITE STAFF ON IMPROVEMENTS	11492.39

TRAFFIC CONTROL

TOTAL \$21105.10

TRAFFIC PLAN	3948.10
HIGHWAY PATROL SERVICES	17157.00

WRISTRANDS, STICKERS

TOTAL \$ 1400.00

CAMPING BANDS (HEALTH DEPT. WANTED TOTAL)	650.00
CAMPING STICKERS	750.00

GRAND TOTAL MATEEL COSTS 1991 RELATED TO AGENCY REQUESTS AND PIERCY  
NEIGHBORHOOD REQUESTS

TOTAL \$127905.01

IN ADDITION TO THE ABOVE COSTS, WE WERE ALSO BILLED BY THE HUMBOLDT  
COUNTY SHERIFF'S DEPARTMENT \$ 11000.00

THIS BILL WOULD BRING OUR TOTAL EXPENDITURES UP TO \$138905.01

#17



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MONEY SPENT LOCALLY PRODUCING REGGAE ON THE RIVER

Two Street Music .....	70.00
Arts and Entertainment Magazine.....	180.00
Willits News.....	70.00
Randalls Sand and Gravel.....	453.13
City Garbage.....	1399.17
Mendocino Commentary.....	112.00
Jeff Barth.....	100.00
Humboldt Beacon.....	79.43
KOZT Radio.....	196.00
Stephen's Glass.....	2190.00
Pierson's Building Center.....	2929.73
United Grocers.....	1892.30
Compton Electric.....	2923.39
Murrish Food Center.....	4090.98
Grandfather Tree.....	500.00
Life and Times.....	273.00
Northcoast Journal.....	280.00
North Coast View.....	737.14
Southern Humboldt Builders Supply.....	11422.50
Robert Arragon.....	455.00
Laco and Associates.....	2858.29
American Express/Astral Travel.....	6063.00
McKeag Backhoe.....	3000.00
Piercy Volunteer Fire Department.....	2000.00
Chinmaya West.....	925.00
Bay West Supply.....	2985.00
Humboldt County Health Department.....	115.00
Rancho Motel.....	2226.96
Humboldt Beer.....	2848.00
Eel River Dept. Parks and Recreation.....	1468.62
Farmers Fruit Express.....	563.00
North Coast News.....	82.00
Contel.....	424.57
Bertains Laundry.....	111.57
John's Automotive.....	93.41
Art Newman.....	1433.00
Doug Cox.....	50.00
KMUD Radio.....	400.00
Jack Arthur.....	5563.00

KIEM T.V.....	710.00
KHSU FM.....	472.00
Garberville Ambulance.....	3142.00
Humboldt Transit Service.....	3529.00
Mendocino Country Magazine.....	163.50
North Coast Mercantile.....	46.50
Mendocino Observer.....	35.75
Redwood Record.....	327.17
Riverside Farm Dairy.....	159.04
Southern Humboldt Recycling Center.....	159.85
Dennis Wallen.....	8890.00
Salmon Creek School.....	340.00
Ryder Truck Rental/Rotbergs.....	1330.86
Sunburst Bakery.....	614.60
Mateel Women's Music Network.....	1500.00
Rita Weyhmille/Mowing.....	704.00
Luna Sea Photographics.....	600.00
Dave Duda.....	323.65
John Sucharski.....	3745.00
KFMI Radio.....	350.00
KLLK Radio.....	317.00
Paper Mill.....	257.00
Don's Rent All.....	3232.00
Gypsy Moon Graphics.....	16714.00
Sonia Baur.....	324.00
Ancient Forest's International.....	102.97
Garberville Amateur Radio Club.....	500.00
Sunshine Juice.....	1280.00
Woodsman Cafe/Truck Rents.....	545.00
Sally Whitton/Postering.....	40.00
Q92 Radio.....	280.00
Parkinson's Building Materials.....	1271.00
Cloud's Towing.....	320.00
Ramones Bakery.....	1373.41
Mateel Cafe.....	9846.00
Bug Press.....	2472.00
Whole Food Express.....	2542.00
Eureka Ice.....	1182.82
Heartwood Institute.....	600.00
Humboldt Folklife Society.....	200.00
Grateful Flowers.....	350.00
Hartsook Inn.....	14636.75
Pepsi Company.....	4085.00
Country Store.....	361.70
John Skelly.....	268.00
Eureka Boiler Works.....	165.48
North Star News.....	78.00
Platt Electric.....	1004.96
KWNE Radio.....	150.00

Mercer Frazer.....	722.00
Platypus Press.....	35.33
Wright's Backhoe.....	2322.00
Salaries and Contractual Labor.....	45777.88
California Highway Patrol.....	17000.00
	-----
	\$220,262.63

# 15

Mateel Community Center  
Income Statement - Reggae On The River, 1991  
For the period December 1, 1991 to December 31, 1991

	Current Period	Year To Date
Income		
300-4010-000	Advance Ticket Sales (\$100.00)	\$369,630.44
300-4017-000	Ticket Refunds .00	200.00
300-4020-000	Booth Rentals .00	19,298.00
300-4030-000	Soft Drink Sales .00	15,533.69
300-4040-000	Kitchen Sales .00	(444.79)
300-4045-000	T Shirt Sales .00	16,482.09
300-4060-000	Recycling Income .00	1,038.70
300-4065-000	Camping Income .00	12,374.72
300-4080-000	Other Income .00	225.00
	-----	-----
Total Income	(\$100.00)	\$433,937.85
Cost Of Events		
300-5010-000	Advertising Expense \$ .00	\$8,381.99
300-5020-000	Art Work .00	394.40
300-5030-000	Backstage Expense .00	14,739.43
300-5030-100	Backstage Expense - Labor .00	505.09
300-5030-200	Backstage Expense - Material .00	1,954.82
300-5040-000	Band Fees .00	81,800.00
300-5045-000	Band Meals .00	3,112.01
300-5050-000	Band Lodging .00	10,835.58
300-5065-000	Cash Over/(Short) .00	68.19
300-5070-000	Clean Up Expenses .00	230.00
300-5073-100	Communications - Labor .00	770.00
300-5073-200	Communications - Equipment .00	1,347.76
300-5075-000	Contract Services .00	15,179.04
300-5080-000	Crew Meals .00	9,792.24
300-5085-000	Staff Lodging .00	1,052.14
300-5087-000	DJs/Stage Manager .00	1,663.86
300-5095-000	Drink Booth Staffing .00	1,802.97
300-5110-000	Equipment Rental 300.00	8,251.18
300-5115-000	Equipment Repair .00	933.61
300-5120-000	Event Site Rental .00	3,300.00
300-5125-000	First Aid .00	3,187.47
300-5125-100	First Aid - Labor .00	600.00
300-5125-200	First Aid - Materials .00	1,534.65
300-5127-000	Flowers .00	350.00
300-5130-000	Food Purchases .00	2,050.35
300-5150-000	Lighting 1,050.00	2,330.00

Mateel Community Center  
 Income Statement - Reggae On The River, 1991  
 For the period December 1, 1991 to December 31, 1991

	Current Period	Year To Date	
300-5155-000	Mileage	67.00	1,531.62
300-5160-000	Miscellaneous Expense	.00	912.82
300-5170-000	Paper Product Purchases	.00	239.78
300-5175-000	Parking	.00	887.46
300-5175-100	Parking - Labor	.00	500.00
300-5190-000	Permits, Fees & Licenses	.00	697.80
300-5210-000	Photography	.00	690.00
300-5215-000	Portable Toilets	.00	5,035.00
300-5225-000	Postering	.00	367.52
300-5230-000	Printing Expenses	.00	2,526.67
300-5243-000	Supplies	.00	519.10
300-5245-000	Sales Commissions	.00	7,855.60
300-5250-000	Security	.00	1,790.00
300-5250-100	Security - Labor	.00	16,936.16
300-5255-000	Site Expense	(65.00)	23,261.51
300-5255-100	Site Expense - Labor	250.00	13,445.42
300-5255-200	Site Expense - Materials	.00	15,235.34
300-5257-000	Small Equipment	.00	499.21
300-5260-000	Soft Drink Purchases	.00	8,633.50
300-5265-000	Sound	.00	7,354.65
300-5280-000	T Shirt Booth Staffing	.00	350.00
300-5285-000	Thank You Party	.00	137.28
300-5290-000	Ticket Expenses	.00	648.35
300-5293-000	Traffic	668.55	25,349.14
300-5295-000	Trash Removal	.00	3,233.12
300-5310-000	Video	.00	1,433.00
300-5313-000	Volunteer Expenses	.00	700.00
300-5313-100	Volunteer Expenses - Food	.00	1,216.69
300-5315-000	Water Expenses	.00	765.00
300-5325-000	Wristband Expenses	.00	2,678.60
300-5325-100	Wristband Expense - Labor	.00	694.50
	Total Cost Of Events	\$2,270.55	\$322,291.62
	Gross Profit	(\$2,370.55)	\$111,646.23
	 General And Admin Expenses		
300-6040-000	Insurance, Events	\$.00	\$75.00
300-6070-000	Office Expense	.00	150.00
300-6073-000	Office Management Expenses	.00	500.00
300-6075-000	Office Supplies	.00	68.40
300-6180-000	Payroll Expense	.00	26,019.98
300-6185-000	Payroll Tax Expense	529.77	2,520.29

Mateel Community Center  
 Income Statement - Reggae On The River, 1991  
 For the period December 1, 1991 to December 31, 1991

		Current Period	Year To Date
300-6220-000	Postage	.00	1,217.31
300-6243-000	Supplies	.00	26.97
300-6280-000	Telephone	.00	916.50
300-6320-000	Workers Compensation	.00	2,057.63
		-----	-----
	Total Gen And Admin Expenses	\$529.77	\$33,552.08
	Net Income/(Loss)	(\$2,900.32)	\$78,094.15
		=====	=====

#18



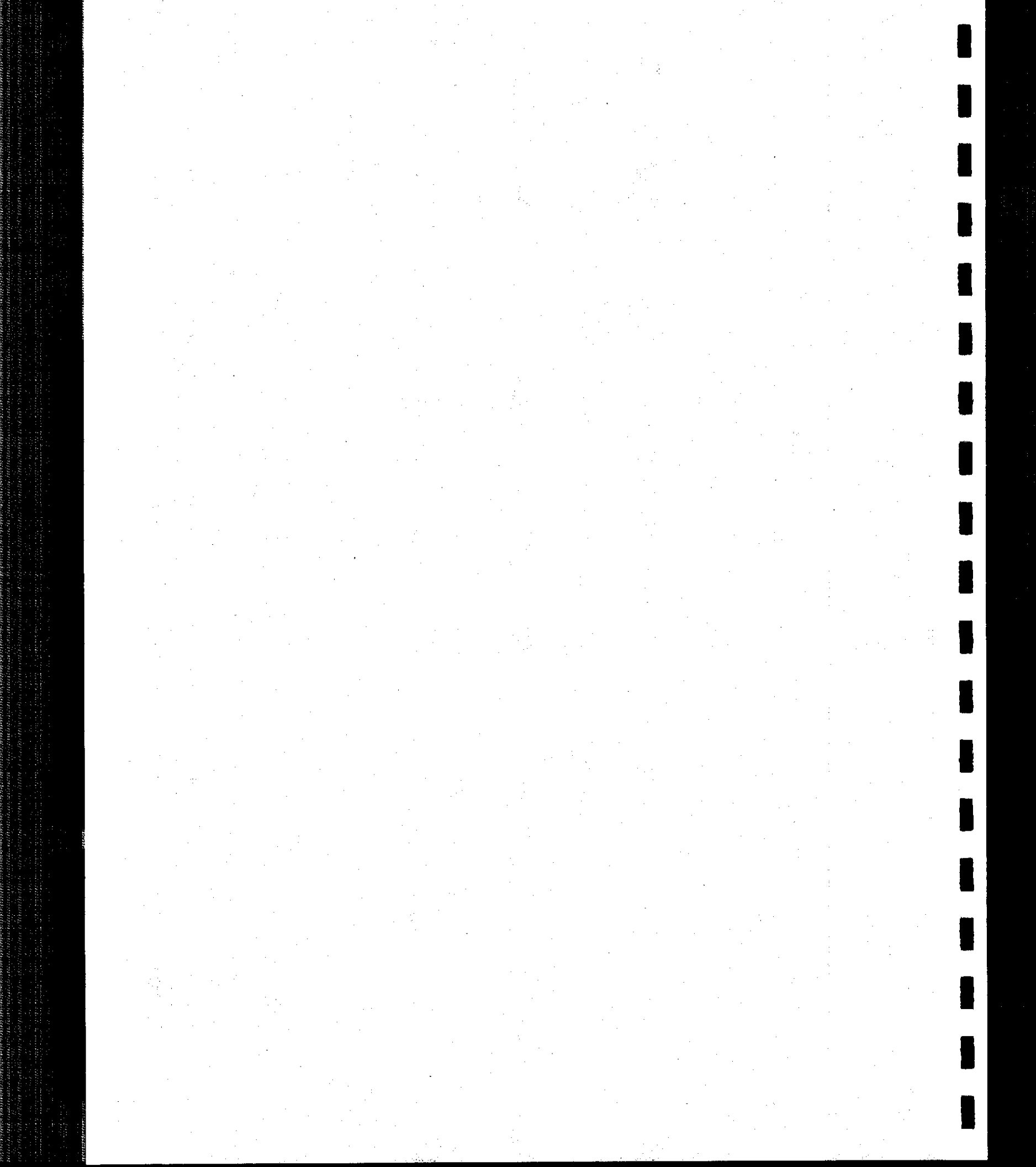
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1. Ancient Forests International
2. Humboldt Folklife Society
3. Mateel Aikido
4. Redwood AIDS Information Network
5. Humboldt County Dairy Goat Club
6. Uhuru Reparations
7. KMUD Community Radio
8. Petrolia High School
9. Fruitland Ridge Volunteer Fire Department
10. Rotary Club Of Garberville
11. Beginnings Tae Kwon Do
12. Leggett Valley PTA
13. Palo Verde Volunteer Fire Department
14. Ettersburg Community PTA/ Ettersburg School
15. Skyfish School
16. VFW Post 6354
17. Soroptmists of the Redwoods
18. Long Valley Health Center
19. Humane Society of the Redwoods
20. Honeydew Volunteer Fire Department
21. Wellspring Education Collective
22. Native Americans United.

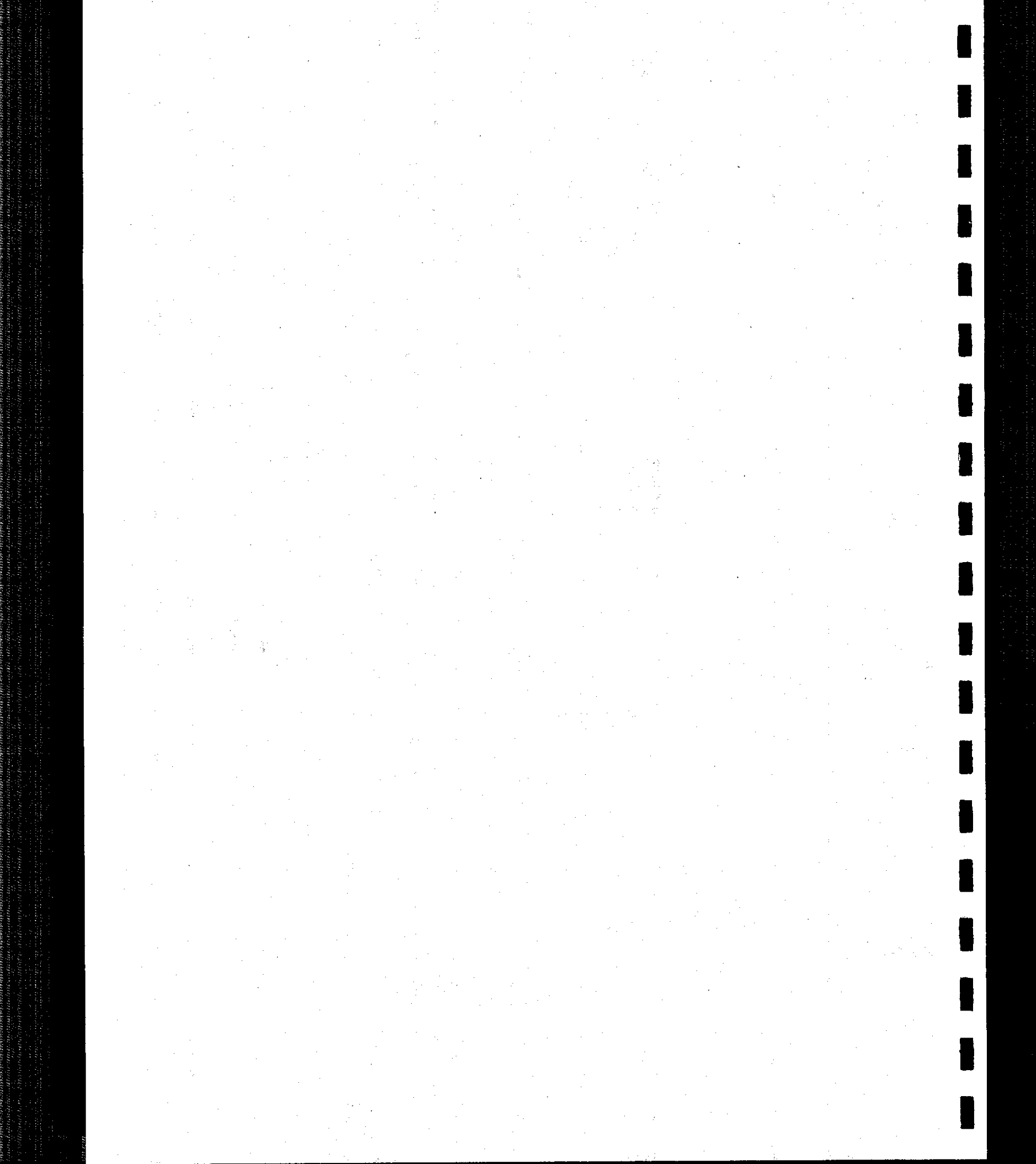


23. Coyote Butte School
24. Feet First Dance Company
25. Salmon Creek Community School
26. Sprowl Creek Fire Department
27. Whale Gulch School

The total collective earnings for the above mentioned Food Booths as reported to us was in excess of \$90,000.00.



**Appencix B.  
Federal Register Description  
of Spotted Owl Habitat**



F.Y.I.

#2

Monday  
May 6, 1991

Endangered and Threatened  
Wildlife and Plants

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**Part II**

**Department of the  
Interior**

---

**Fish and Wildlife Service**

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**50 CFR Part 17  
Endangered and Threatened Wildlife and  
Plants; Proposed Determination of  
Critical Habitat for the Northern Spotted  
Owl; Proposed Rule**

## DEPARTMENT OF THE INTERIOR

## Fish and Wildlife Service

## 50 CFR Part 17

RIN 1018-AB32

## Endangered and Threatened Wildlife and Plants; Proposed Determination of Critical Habitat for the Northern Spotted Owl

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

**SUMMARY:** The Service proposes to designate critical habitat for the northern spotted owl (*Strix occidentalis caurina*), a subspecies federally listed as threatened under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act). The northern spotted owl, referred to herein as spotted owl or owl, is a medium-sized owl with dark eyes, dark-to-chestnut brown coloring, whitish spots on the head and neck, and white mottling on the abdomen and breast. The current range of the northern spotted owl extends from southwestern British Columbia through western Washington, western Oregon, and the Coast Ranges area of northwestern California south to San Francisco Bay. Located primarily on Federal land, and to a lesser extent on State and private lands, this proposed critical habitat designation would result in additional protection requirements under section 7 of the Act with regard to activities that require Federal agency action. Section 4 of the Endangered Species Act requires the Service to consider economic costs and benefits prior to making a final decision on the size and scope of critical habitat. The Service solicits data and comments from the public on all aspects of this proposal, including additional data on the economic impacts of the designation and a valuation technique for determining benefits.

**DATES:** Comments will be accepted until June 5, 1991. The Service intends to publish a revised critical habitat proposal 60 days thereafter and will request public comments for 60 days on the revised proposal. During the initial 30 day comment period, a public hearing will be conducted at each of the following locations: Arcata, California; Olympia, Washington; Springfield, Oregon; and Portland, Oregon. Times, dates, and exact locations of the public meetings will be published in a subsequent Federal Register notice.

**ADDRESSES:** The complete file for this rule is available for inspection by appointment, during normal business

hours at the U.S. Fish and Wildlife Service, Fish and Wildlife Enhancement, 911 Northeast 11th Street, Portland, Oregon 97232.

**FOR FURTHER INFORMATION CONTACT:** Mr. Dale Hall, Assistant Regional Director for Fish and Wildlife Enhancement, at the above address (503/231-6159 or FTS 429-6159).

**SUPPLEMENTARY INFORMATION:****Background**

The northern spotted owl (*Strix occidentalis caurina*) is one of three subspecies of spotted owls recognized by the American Ornithologist's Union (1957). Two other subspecies are recognized: the California spotted owl (*S. o. occidentalis*), and the Mexican spotted owl (*S. o. lucida*). Its darker brown color and smaller white spots and markings separate the northern spotted owl from other subspecies. Juvenile plumage is similar to adult plumage except for the tail feathers of the juvenile, which are retained until the bird is about 27 months old, and the downy tips of which become ragged with wear.

The spotted owl is known from most of the major types of coniferous forests in the Pacific Northwest (June 26, 1990, Final Rule (55 FR 26114)). The current range of the northern spotted owl is from southwestern British Columbia, through western Washington, western Oregon, and northern California south to San Francisco Bay where forested habitat still exists. The southeastern boundary of its range, separating this subspecies from the California spotted owl, is the Pit River area of Shasta County, California.

Management practices have resulted in fragmented patches of older forests, separated by a preponderance of very young forests that have yet to develop characteristics used by owls. This management results in an unnaturally skewed distribution of forest structure across the landscape. To provide for conservation of the owl, an adequate distribution of appropriate forest structure is necessary so that as older forest stands are lost (due to logging or natural causes) they are replaced by mature stands within a relatively short period of time. This distribution would allow for the perpetuation of high quality owl habitat for nesting, roosting, and foraging.

Northern spotted owls have been observed over a wide range of elevations, although they seem to avoid higher elevation, subalpine forests (USDA 1988). The range of elevation in which spotted owls occur extends from 70 feet above sea level in the Olympic

Peninsula of Washington to 6,000 feet above sea level in California (55 FR 26114).

Populations are not evenly distributed throughout the owl's present range. The majority of spotted owls are found in the Cascades of Oregon and northwestern California (55 FR 26114). The owl has been extirpated or is uncommon in certain areas (in intermingled ownership lands in southwestern Washington and in northwestern Oregon) due to habitat modification; thus, its distribution is now discontinuous over its range (Dawson *et al.* 1986; Forsman 1986, as cited in 55 FR 26114).

Spotted owls most commonly use Douglas-fir (*Pseudotsuga menziesii*) mixed-conifer forest types in California, but have also been reported in northwestern California in coastal redwood (*Sequoia sempervirens*), and Bishop pine (*Pinus muricata*) forests, and in stands dominated by ponderosa pine (*Pinus ponderosa*) (55 FR 26114). Preferred habitat for the northern spotted owl, particularly in California, is not continuous, but occurs naturally in a mosaic pattern, especially in the southern portions of the bird's range (55 FR 26114).

The spotted owl is found in forests dominated by Douglas-fir and western hemlock (*Tsuga heterophylla*) in Washington's coastal forest. At high elevations in western Washington, Pacific silver fir (*Abies amabilis*) is commonly used by owls, whereas on the east side of the Cascades, Douglas-fir and grand fir (*Abies grandis*) are used (Postovit 1977, as cited in 55 FR 26114).

A change in habitat conditions within the owl's range, as one moves southward, is evident as habitat in southern Oregon begins to change to a drier Douglas-fir/mixed conifer habitat with a corresponding change in the predominant prey base; from northern flying squirrels (*Glaucomys sabrinus*) to woodrats (*Neotoma* spp.) (55 FR 26114). Availability of forest-types within a region may be responsible for the observed differences in use among types (Gutierrez 1985; Meslow *et al.* 1986, as cited in 55 FR 26114).

Historical logging practices in the mixed conifer zone of southern Oregon and along the east side of the Cascades in Oregon and Washington consisted of more selective timber harvesting than other areas, leaving remnant patches of old-growth or stands of varying ages with old-growth characteristics. However, the age of a forest is not as important a factor in determining habitat suitability as are vegetational and structural elements. Components of northern spotted owl nesting habitat

Moderate to high canopy closure (60 to 80 percent); a multi-layered, multi-species canopy dominated by large (> 30 inches diameter-at-breast-height (dbh)) overstory trees; a high incidence of large trees with various deformities (e.g., large cavities, broken tops, mistletoe infections, and other evidence of decadence); numerous large snags; large accumulations of fallen trees and other woody debris on the ground; and sufficient open space below the canopy for owls to fly (Thomas *et al.* 1990). Old-growth or mixed stands of old-growth and mature trees typically require 150 to 200 years to attain these aforementioned attributes (Thomas *et al.* 1990). Breeding sites used by spotted owls have been observed throughout the range of the owl where the components of suitable spotted owl habitat are present in relatively young forests (60 or more years of age) (Thomas *et al.* 1990). Attributes of breeding and roosting habitat are sometimes found in younger forests, especially those with significant remnants of earlier stands that were influenced by fire, wind storms, inefficient logging operations, or highgrading (removal of the most economically valuable trees). However, nearly all nest and major roost sites are located in the portions of these stands containing the oldest components (Thomas *et al.* 1990).

At several sites in California, Pious (1989, as cited in 55 FR 26114) observed spotted owls nesting in coastal redwood stands that had acquired suitable habitat conditions in as little as 40-60 years. Redwood-dominated forest stands in coastal northern California, which comprise about 7 percent of the owl's overall range, are believed to develop suitable habitat characteristics more rapidly than other types because of unique conditions: A fast growing, stump-sprouting species, good soil conditions, high precipitation levels, coastal fog, a long growing season, an understory of other conifers and hardwoods, and an abundant prey base (Thomas *et al.* 1990).

Age classes of coniferous forest within the range of the owl are defined as follows: young-growth forest is generally defined as less than 100 years of age, mature forest as stands from 100 to 200 years old, and old-growth as forest more than 200 years old. Owl survey data indicate that northern spotted owls are dramatically and disproportionately found in association with older forests (55 FR 26114).

In the Oregon Coast Ranges, Oregon Cascades, Washington Cascades and Olympic Peninsula, and Klamath Province, owls use old forests more than

expected for foraging (i.e., it is a "preferred" habitat) (55 FR 26114). Owls having an array of habitat types within their home ranges select for older forest, use mature forest in relation to its availability, and tend to avoid younger forest or use it in relation to its availability (USDI 1990). Roost sites are also strongly associated with older forests (55 FR 26114).

Paired northern spotted owls have relatively large home ranges and require large tracts of land containing significant acreage of older forest to meet their biological needs (e.g., foraging and breeding) (USDI 1990). Thomas *et al.* (1990) indicated median annual pair home range sizes varied from a high of 8,930 acres for the Olympic Peninsula to a low of 2,955 acres for the Oregon Cascades. Actual annual pair home range size varied from 1,035 acres in the Klamath Province to 30,961 acres in the Washington Cascades (USDI 1990).

Spotted owls on the Olympic Peninsula and Oregon Coast Ranges consistently occupy larger home ranges than owls in the other provinces. Forests within the Olympic Peninsula, Oregon Coast Ranges, and the Washington Cascades (west side) provinces are highly fragmented and have the least amount of older forest remaining within the range of the owl. As the quality and quantity of preferred habitat declines, owl home range sizes increase (USDI 1989).

On April 4, 1990, The Interagency Scientific Committee (ISC), established under an agreement among the Service, the U.S. Forest Service (FS), the U.S. Bureau of Land Management (BLM), and the National Park Service, released a *Conservation Strategy for the Northern Spotted Owl* (Plan). This Plan was based on the best biological information on the species available at the time, and was intended to ensure long-term viability for the owl in well-distributed numbers throughout its range while limiting, to the extent possible, adverse effects on human activities. The ISC developed a management strategy that focused on FS and BLM lands. By applying the principles of conservation biology, population modeling, and current spotted owl research data, the ISC developed a scientifically credible conservation strategy which combines a system of Habitat Conservation Areas (HCAs) capable of supporting multiple pairs of spotted owls with a management standard for the remaining forest matrix to provide dispersal between the HCAs (50-11-40 rule). This rule intended to provide for dispersal by requiring that 50 percent of the forest

matrix outside of the large reserve areas (HCAs) be maintained in stands with trees averaging 11 inches or more in dbh and with at least 40 percent canopy closure. Neither part of the plan was designed to stand alone, and the Plan also recommends an adaptive management strategy and further research on the owl's biology and management (Thomas *et al.* 1990).

The ISC plan predicted, in a worst-case scenario, a 50 to 60 percent decline in the spotted owl population. This projected decline was based on the loss of all owl pairs outside of HCAs. The surrounding forest matrix would still offer marginal foraging opportunities for dispersing owls, so that genetic exchange among the HCAs would take place. The ISC plan was prepared before the owl was listed and did not explicitly address "recovery," "critical habitat," or any other aspect of the Endangered Species Act.

On August 6, 1990, the BLM released its management plan entitled *Northern Spotted Owl: The Jamison Plan Detailed Management Strategy* (Jamison Plan). This plan incorporates parts of the ISC Plan, but emphasizes BLM's requirements under the Federal Land Policy Management Act and the National Environmental Policy Act. The Jamison Plan provides interim guidance prior to the development of Resource Management Plans that are expected to be completed by fiscal year 1993. The Jamison Plan was designed to minimize economic impacts, protect northern spotted owls, and still provide for a maximum number of options during the interim planning period. The Jamison Plan incorporates the HCAs and considers the 50-11-40 rule where possible.

Critical habitat delineates areas that contain resources known to be essential to the conservation of a species. Conservation is defined in the Act to include actions necessary to ensure the recovery of a listed species. A recovery plan has not yet been developed for this species. Nevertheless, as required by the Act, the Service has based its proposal on the presence of constituent elements of habitat believed to be capable of supporting the survival and recovery of the northern spotted owl. The Service believes that this critical habitat proposal will contribute towards the species' recovery.

The proposal includes HCAs as well as other areas that contain habitat elements upon which owls depend and that are similarly in need of special management considerations or protection. The designation of critical habitat, however, does not prescribe any

particular management regime in the areas so designated. Rather, it identifies areas within which interagency consultation under section 7 of the Act will address any potential loss of resources that could appreciably diminish the capability of that habitat to contribute to the survival and recovery of the species. Identification of HCAs is one element of the ISC strategy, which proposes not only a management prescription for the HCAs, but an overall management standard (the 50-11-40 rule) for forests outside the HCAs. Because the HCAs and the areas proposed as critical habitat are defined according to different criteria and serve different purposes, they should not be expected to coincide exactly. Nevertheless, the HCAs include large contiguous blocks of current and potential owl habitat and contain constituent elements essential to the conservation of the owl. Consequently, the Service used the HCA network as a basis for identifying critical habitat.

#### Previous Federal Actions

On January 28, 1987 and August 4, 1987, the Service received petitions requesting that the northern spotted owl be listed pursuant to the Act. On December 17, 1987, the Service made a finding that listing the northern spotted owl was not warranted at that time. Notice of this finding was published in the *Federal Register* on December 23, 1987 (52 FR 48552).

On May 5, 1988, several environmental organizations filed suit challenging the Service's finding that listing was not warranted. In an order issued on November 17, 1988, the Court concluded that the Service's petition finding was arbitrary and capricious, and ordered the Service to reanalyze the evidence and issue a revised petition finding.

On April 25, 1989, the Service issued a revised finding indicating that listing the northern spotted owl as a threatened species throughout its entire range was warranted.

On June 23, 1989 (54 FR 26606), the Service published a proposal to list the northern spotted owl as a threatened species. After a review of all comments received in response to the proposed rule, the Service published a final rule to list the northern spotted owl as a threatened species on June 26, 1990 (55 FR 26114), and thereby activated the protections applicable to listed species. The Service did not propose to designate critical habitat for the northern spotted owl within the proposed or the final listing rule because the Service found that critical habitat was not determinable at those times. The Service

subsequently proceeded to commence work on a critical habitat proposal.

Plaintiffs filed an additional motion in *Northern Spotted Owl v. Hodel*, seeking to compel the Service to immediately propose critical habitat. On February 28, 1991, the Court ruled that the Service had violated the Act in failing to designate critical habitat concurrently with listing the owl. The Court ordered the Service to propose a rule on critical habitat by April 23, 1991, and to publish a final rule at the earliest possible time permitted under the appropriate regulations.

#### Biological Considerations of Critical Habitat

Critical habitat, as defined by section 3 of the Act, means: "(1) the specific areas within the geographic area occupied by a species . . . on which are found those physical and biological features (i) essential to the conservation of the species, and (ii) that may require special management considerations or protection; and (II) specific areas outside the geographical area occupied by a species at the time it is listed, upon determination that such areas are essential for the conservation of the species." The term "conservation," as defined in section 3(3) of the Act, means "to use and the use of all methods and procedures necessary to bring a listed species to the point at which protection under the Act is no longer necessary." Thus, the Service generally considers the needs of a species in terms of recovery from endangered or threatened status in its designation of critical habitat. Critical habitat may be proposed for species that are already listed as endangered or threatened.

The Service is required to base critical habitat proposals upon the best scientific data available (50 CFR 424.12). In determining what areas are to be proposed as critical habitat based on biology, the Service considers those physical and biological attributes that are essential to the conservation of the species and that may require special management considerations or protection. Such requirements, as stated in 50 CFR 424.12, include, but are not limited to, the following:

- (1) Space for individual and population growth, and for normal behavior;
- (2) Food, water, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, rearing of offspring, and generally;
- (5) Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

In considering the biological basis for proposing critical habitat, the Service focuses on the primary physical and biological constituent elements that are essential to the conservation of the species, without consideration of land ownership. Primary constituent elements may include, but are not limited to, roost sites, nesting areas, feeding areas, and vegetation types (50 CFR 424.12(b)). The Service is required to list the known primary constituent elements together with a description of any critical habitat that is proposed.

In the case of the northern spotted owl, coniferous and mixed coniferous/hardwood forests within the range of the subspecies that provide for nesting, roosting, and foraging constitute the primary constituent elements of its critical habitat. Such habitat also permits successful movement by owls. Northern spotted owls generally find suitable nesting, roosting, and foraging habitat in forests which exhibit: moderate to high canopy closure; a multi-species, multi-layered canopy dominated by large overstory trees; a high incidence of large trees with deformities; numerous large snags; large accumulations of fallen trees and other woody debris on the ground; and sufficient open space below the canopy for owls to fly (Thomas *et al.* 1990). Large tracts of land containing significant acreage of forest with these structural components are generally required to satisfy the biological needs of spotted owls (e.g., nesting, roosting, and foraging) (55 FR 26114). Marginal foraging and dispersal habitat may be comprised of younger aged (<100 years) forests that provide protection from avian predators and support an adequate prey base.

The extensive range of the spotted owl within Washington, Oregon, and California encompasses over 7 million acres of forested habitat suitable for nesting and an undetermined amount of other forest types that are also of significance to the survival and recovery of the subspecies. Logging and other activities have reduced much of this habitat to small, fragmented, and isolated stands that are not expected to support the few remaining pairs over time.

Numerous attempts have been made in recent years by the BLM and FS to map suitable spotted owl nesting habitat on their lands. However, the FS and BLM used different definitions to identify nesting habitat, and the definitions varied among National Forests and have changed from year to year as more data have been collected on spotted owl occurrences. For



example, the BLM has only mapped habitat greater than 80 years of age while the FS included a wide range of forest types and conditions, from young forests with inclusions of old growth to very old, multi-layered stands. Other attempts have also been made to map habitat. The Audubon Society, using FS and BLM data, produced maps that depict older forest groves greater than 200 acres in size. Although the Wilderness Society has not attempted to map owl habitat, it has published maps that identify remaining old growth habitat in the western forests of Oregon, Washington, and northern California.

The detail and scale of these maps, and the amount of first-hand information available from experts, were highly variable throughout the range of the species. The fragmented distribution of owl habitat also affected the delineation of critical habitat areas. Because of these factors, it was not possible for the Service to identify as critical habitat all areas containing the primary constituent elements listed above. The spotted owl requires relatively large contiguous areas of habitat to meet its life requisites; small, isolated, and highly fragmented stands are less valuable and may not necessarily be essential to the conservation of the species. Small, isolated, or fragmented stands were proposed as critical habitat, however, when they were needed to maintain the integrity of and promote future development of large contiguous habitat areas.

The Service relied substantially upon the ISC strategy for the spotted owl in formulating this proposed designation of critical habitat. This management plan includes management guidelines for the entire forest matrix on Federal lands within the range of the owl and a series of reserves labeled as HCAs. The ISC suggested that the same provisions that apply to BLM and FS lands apply to all other lands as well. Thus, the ISC plan essentially encompasses the entire range of the northern spotted owl; the western portions of California, Oregon, and Washington from north of San Francisco Bay to southern British Columbia, Canada.

In designating critical habitat, the Service does not necessarily delineate the entire range of a species. Often, portions of the range are selected, and these portions may contain areas that are not always occupied by the species. In the case of the northern spotted owl, the Service selected a network of areas within the range of the owl to propose as critical habitat, and used the HCAs identified in the ISC plan as the basis of

its proposed designation of critical habitat. However, due to differences between the HCA network and the regulatory requirements for critical habitat, these two designations do not overlap exactly.

The differences between the identification of HCAs and a designation of critical habitat under the Endangered Species Act should be recognized. Although critical habitat boundaries must be legally described and accurately mapped, the HCA boundaries did not correspond with legally definable boundaries. The Service, in many cases, redrew HCA boundaries in conformance to section lines to allow the boundary to be legally described as critical habitat.

Because HCAs were used as a base for critical habitat, the unsuitable habitat within the HCAs was also included in the proposed critical habitat to facilitate the development of large blocks of habitat. While the HCAs contain significant contiguous blocks of currently suitable owl habitat, they also contain many areas that presently are unsuitable as habitat. The ISC presumed that this habitat would reach its full potential in the future and with protection would become suitable for nesting and foraging within a 100-year management period. The proposed designation of critical habitat outside of the HCAs is based on the presence of habitat that is currently suitable and sometimes contain larger more contiguous blocks of habitat than the original HCAs. Some smaller patches of land that cannot support any of the primary constituent elements were incidentally incorporated into the proposed critical habitat boundaries, primarily because of the difficulty of providing legal descriptions in sufficient detail to exclude them. Where possible (within the requirements imposed by legal descriptions, etc.), sites that cannot support suitable habitat characteristics (e.g., alpine areas, and lava flows) were excluded from the critical habitat designation.

A further difference between the HCA network and the proposed critical habitat is that the HCAs were deliberately structured around 1.9 million acres of existing reserved lands, particularly wilderness areas and National Parks, and in some cases excluded larger, less fragmented blocks of owl habitat. This incorporation of reserved areas was a significant element of the overall ISC strategy. In contrast, the Act requires the Service to focus on areas within the owl's range that contain the biological elements essential to the conservation of the species and

that require special management attention. In fact, the Service has not proposed any wilderness areas or National Parks as critical habitat because the statutory protection afforded wilderness areas obviates the need for special management considerations or protection. The Service does recognize, however the contribution of those wilderness areas to the conservation of the owl even though they are not part of the proposed critical habitat.

In the 1989 Status Review Supplement (USDI 1989), the Service identified areas of concern within checkerboard Federal and non-Federal ownership where habitat linkage within and between physiographic provinces is at risk. The Service proposes to designate critical habitat within those areas of concern because preserving these habitat linkages is essential to the conservation of the owl. The four areas of concern, identified due to potential demographic isolation, occur both between and within physiographic provinces and are caused by habitat fragmentation associated with areas of intermingled (checkerboard) land ownership. The Interstate 90 area of concern, within the Washington Cascades province, and the Santiam Pass area of concern, within the Oregon Cascades, are two areas the Service focuses on because of isolation within provinces. The Interstate 5 area of concern in southern Oregon consists of three inter-provincial linkage areas: The Southern Willamette-North Umpqua and Southern Umpqua-North Rogue, which link the Coast Ranges and Cascades provinces, and South Ashland, which links the Klamath province with the Cascades. The Columbia Gorge is an inter-provincial area of concern due to the extensive non-forested zone between the Oregon and Washington Cascades provinces. Habitat conditions that allow owls to move successfully across these areas of concern cannot be assured given existing land management practices and habitat conditions in areas of intermingled ownership. The need to provide linkages across these areas of concern on both public and private lands will become increasingly more important if habitat conditions continue to decline elsewhere. Critical habitat designation within areas of concern is intended to help maintain these essential linkages by promoting habitat conditions suitable for owl passage.

Owls must be able to move through these areas of concern to provide for genetic exchange between subpopulations, to recolonize formerly-occupied portions of the subspecies range, and for juvenile owls to disperse

from their natal areas, especially between physiographic provinces. The quality of travel habitat is based on stand density and size, tree size, and percent overstory closure to allow for protection from avian predators during juvenile and adult movement periods. Such habitat also provides marginal foraging opportunities. Because spotted owls tend to disperse in random directions, Thomas *et al.* (1990) concluded it is unlikely that special

dispersal corridors would successfully lead traveling owls from one suitable habitat block to another. Instead, they suggested that the general forest landscape should be maintained in a condition that will allow successful owl movement. Based on their examination of both owl dispersal characteristics and general harvest practices, the ISC developed the "50-11-40" rule. According to the ISC, this configuration provides marginal foraging habitat for

dispersing owls. Owls can move through such younger coniferous forest stands that provide protection from avian predators and offer marginal foraging opportunities.

#### Proposed Critical Habitat Designation

The Service has identified 190 critical habitat areas totaling 11,638,195 acres in California, Oregon, and Washington. The approximate acreage of proposed critical habitat areas by land ownership and State is shown in Table 1.

TABLE 1. APPROXIMATE ACREAGE OF PROPOSED CRITICAL HABITAT AREAS (CHAs) FOR THE NORTHERN SPOTTED OWL

	Oregon	California	Washington	Total
USFS	2,664,791	1,491,175	2,319,070	6,465,036
BLM	1,099,685	286,275	320	1,386,280
Tribal <sup>1</sup>	8,970	5,100	62,260	74,330
State	164,850	101,155	344,620	610,625
COE <sup>2</sup>	3,020	0	0	3,020
Military	0	240	78,136	78,376
Private	1,168,864	1,374,000	476,665	3,020,529
<b>Total</b>	<b>5,099,190</b>	<b>3,257,945</b>	<b>3,281,070</b>	<b>11,638,195</b>
No. of CHAs	66	78	48	192

<sup>1</sup> The Service notes that the proposed rule includes lands subject to Indian sovereignty claims.  
<sup>2</sup> Army Corps of Engineers.

#### Effects of Critical Habitat Designation

Section 4(b)(8) of the Act requires, for any proposed or final regulation that designates critical habitat, a brief description and evaluation of those activities (public or private) that may adversely modify such habitat or may be affected by such designation. Regulations found at 50 CFR 402.02 define destruction or adverse modification of critical habitat as a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

When evaluating proposed activities within critical habitat through section 7 analyses, the Service would use biological assessments provided by the action agency and focus on the likely effects of a project on the constituent elements (i.e. nesting, roosting and foraging habitat, and habitat that facilitates movement of owls between and within physiographic provinces) contained in a particular area of critical habitat before determining whether a project is likely to destroy or adversely modify critical habitat. These activities may include actions that would reduce the canopy closure of a timber stand; reduce the average dbh of the trees in

the stand; reduce the multi-layered stand structure; reduce the availability of nesting structures and roost sites; reduce the suitability of the landscape to provide for safe movement; or reduce the abundance or availability of prey species.

Proposed Federal actions are evaluated on a case-by-case basis to determine if they would be likely to destroy or adversely modify critical habitat. In order to make that determination, the Service considers the effect of the proposed project on the primary constituent elements in the proposed project location and the reasons why the specific area was designated. An activity cannot cause adverse modification in an area within designated critical habitat that does not contain such elements. Some such areas were incidentally included in the proposed designation to facilitate the process of completing legal descriptions. Furthermore, some activities would not be restricted due to critical habitat designation because they would have no effect on the primary constituent elements. Many of the recreation and "personal use" commodity production activities listed below would very likely fall in that category. Note, however, Federal projects that may not adversely modify critical habitat may still affect spotted owls (e.g., through disturbance) and, therefore, be subject to review

under the jeopardy standard of section 7 of the Act.

Some activities could be considered to be of benefit to spotted owl habitat and therefore, would not be expected to adversely modify critical habitat. Examples of activities that could benefit critical habitat include some protective measures such as fire suppression or forest-pest eradication, as well as silvicultural treatments that the Service determines would improve spotted owl habitat.

Areas proposed for designation as critical habitat support a number of commercial and noncommercial activities. Commercial activities that may be proposed within critical habitat include timber harvests, other wood fiber utilization (paper, firewood, etc.), Christmas tree farming, livestock grazing, mining, activities associated with oil and gas leases, construction and operation of hydroelectric facilities, geothermal development, construction of alpine ski areas, and various site-specific activities such as scenic tours and cavern exploration. Non-commercial activities are largely associated with recreation and include hiking, camping, fishing, hunting, cross country skiing, off-highway vehicle use, organized moto-crosses, and various activities associated with nature appreciation. Additional activities include "personal use" commodity production such as firewood gathering

mushroom and plant gathering, Christmas tree cutting, rock collecting, etc. Activities associated with land management by involved agencies include fire suppression, controlled burning, erosion control, campground construction and maintenance, trail construction and maintenance, road construction and maintenance, military maneuvers, and silvicultural activities such as tree planting, brush control, pre-commercial thinning, and forest pest management (insects, rodents, mistletoe, etc.).

As stated previously, each proposed project would be examined in relation to its site-specific impacts. Thus, projects such as commercial thinning of timber stands and other selective harvest prescriptions may or may not destroy or adversely modify critical habitat, depending on the type of harvest and the pre-project condition of the area in relation to spotted owl habitat needs.

In evaluating projects within critical habitat the Service will focus on the primary constituent elements contained at the specific site and the reasons why that particular area was proposed to be critical habitat. The involved Federal agencies can assist the Service in its evaluation of proposed actions by providing detailed information on the habitat configuration of a project area, habitat conditions of surrounding areas, and information on known locations of spotted owls. The Service would focus on the specific primary constituent element in its evaluation of any proposed action. Thus in an area of concern, where linkage habitat is important, the Service may not consider a proposed harvest to constitute adverse modification if the surrounding forest matrix would still permit movement opportunities for owls. However, a proposed action that would result in further fragmentation or loss of nesting habitat might be considered adverse modification if it appreciably reduced the value of the habitat. To the maximum extent possible, the Service is required under section 7 of the Act to include reasonable and prudent alternatives to any proposed action that would result in adverse modification of critical habitat. By definition, reasonable and prudent alternatives refer to alternative actions identified during section 7 consultation that can be implemented in a manner consistent with the intended purposes of the action consistent with the scope of the Federal agency's legal authority and jurisdiction, and thus would allow the intended purpose of the action to go forward.

The northern spotted owl was listed as threatened primarily because of

widespread habitat loss and fragmentation from logging operations. The main timber harvest prescription that has resulted in this fragmentation has been the clear cut. For the most part, the Service has proposed areas that contain large contiguous blocks of older forest habitat as critical habitat. One purpose of this effort has been to reduce fragmentation. Throughout the range of the owl, nesting pairs are occasionally found in younger forests, although the center of activity is the older remnant patches of forest.

In addition to the larger contiguous blocks of older forest habitat selected by the Service for its proposal of critical habitat, the Service has proposed several areas of linkage habitat within the range of the owl. These linkage sites are in the areas of concern addressed above. These areas can provide marginal foraging opportunities for dispersing owls if they conform to the 50-11-40 rule described by the ISC plan.

Although designating critical habitat for the northern spotted owl will affect primarily activities on Federal lands, there may be significant impacts on private and other non-Federal lands. Over 30 percent of the acreage proposed for critical habitat designation is non-Federally owned. In addition, although critical habitat designation affects Federal agencies directly because of their conservation and consultation responsibilities under section 7 of the Act, private activities requiring Federal permits or funding can also be affected. An example is a right-of-way permit required from the BLM in order to allow timber harvest on an area of private land. Use of existing roads alone does not constitute access. Moreover, there may be State or local requirements that are triggered by the presence of Federally designated critical habitat. An example might be a State requirement for more exacting environmental reviews of proposed activities within critical habitat.

#### Summary of Economic Analysis

Section 4(b)(2) of the Act requires the Service to designate critical habitat on the basis of the best scientific data available and after consideration of the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical

habitat will result in the extinction of the species concerned.

The Act thus requires the Service to evaluate those economic and other impacts likely to take place due to the designation of critical habitat. Effects attributable to listing of the owl as a threatened species, increasing automation in the timber industry, and reduction in available timber to harvest are not analyzed as effects of the designation of critical habitat. Due to the complex interplay of economic forces involved, this task of examining impacts associated solely with the designation of critical habitat is often difficult.

Following the receipt of additional economic cost and benefit information, the Service will evaluate proposed critical habitat boundaries on a case by case basis. If specific areas are identified where the economic costs are high, the Service will evaluate the biological needs of the northern spotted owl within that particular area. Following this two-staged evaluation, the Service may revise proposed critical habitat boundaries.

For the purposes of its initial economic analysis the Service has used the current economic situation within the timber industry as the baseline for predicting the economic effects that would result from designating critical habitat for the owl. This baseline incorporates the intention of the Forest Service to be not inconsistent with the ISC Plan and the Bureau of Land Management implementation of the Jamison Plan. In assessing the economic impacts from designating critical habitat, the Service attempts to predict the most likely changes in planned land uses, over and above existing land use restrictions. This requires an assessment of current land management strategies with respect to the northern spotted owl. The two major Federal managers involved, the FS and BLM, have indicated their intent to implement most of the ISC strategy. By Federal Register notice (55 FR 40412), the FS stated it would conduct timber harvest activities in a manner to not be inconsistent with the ISC Plan. Although the FS action is the subject of current litigation, as of the date of this notice the FS indicated that it does not plan to cut within the HCAs or to depart from the 50-11-40 rule. The BLM indicated it would protect the HCAs from harvest, and that it intended to implement the 50-11-40 rule as much as possible given current conditions. The BLM likewise has not indicated any intention to depart from these practices. Although these decisions represent policy decisions, and could be changed,

the ISC plan is the most likely planning framework of which the Service is aware for FS and BLM lands. Therefore, for the purposes of its initial economic analysis, the Service has used implementation of the ISC plan as part of the baseline for determining the economic effects of critical habitat over and above existing conditions.

Federal lands are the main areas affected by the proposed designation of critical habitat. State and private lands are directly affected only where Federal involvement occurs (i.e., activities funded, authorized, or carried out by a Federal agency). The Service does recognize, however, the potential indirect effects on non-Federal lands that employ Federal actions as a basis for State or local requirements. The FS and BLM are the primary agencies affected by the proposed critical habitat designation. The Bureau of Indian Affairs, Corps of Engineers, and certain Army installations also oversee lands within the proposed critical habitat. The BLM, FS, Corps of Engineers, Fish and Wildlife Service, and Federal Energy Regulatory Commission have permitting responsibilities that may affect State or private activities.

For purposes of the initial economic analysis, the Service has included several assumptions in its identification of a baseline existing without designation of critical habitat: (1) The FS and BLM would not harvest timber within the HCAs, (2) the 50-11-40 rule would be followed on all FS lands (ISC plan), and (3) the 50-11-40 rule would be followed on 80 percent of BLM lands (Jamison strategy).

Assumptions relating to probable allowable activities within the proposed critical habitat areas include the following: (1) That up to 50 percent of the timber could be removed from areas that are additions to HCAs for the purpose of simplifying the definition of legal boundaries (line additions), (2) that as little as no timber harvesting would be allowed on proposed critical habitat areas that are essential additions to the HCAs, and (3) that proposed critical habitat in areas of concern could be subject to timber harvesting and would conform only to the 50-11-40 rule. We seek public comment on what the expected impacts on the economic baseline will be as a result of critical habitat designation.

The initial economic analysis was conducted using FS and BLM data to estimate some of the economic impacts associated with timber harvest activities administered by those agencies. Those impacts may not reflect all possible impacts on timber harvest on these lands. Many other activities that may

take place within critical habitat may be affected resulting in economic impacts. Impacts on non-timber related Federal agency actions (e.g. energy and mineral exploration and development, tourism and recreational developments, etc.) and impacts of the effects of critical habitat designation on private, tribal, and State lands, related to both timber and nontimber uses, must be evaluated and considered.

The Act requires the Service to consider the benefits of designating critical habitat. The aforementioned estimated annualized costs do not include the substantial benefits which are expected, though unquantified, from the designation of critical habitat for the northern spotted owl. Such benefits include, but are not limited to, watershed protection, Native American heritage values, archaeological resource protection, non-consumptive uses or recreation, protection of biological diversity, protection of sport and commercial fisheries, and protection of the older forest ecosystem. The techniques used to calculate values for these essentially non-market commodities are in the infancy of development, and rather cumbersome to employ. Studies that have been completed for these non-market commodities have consistently shown that they can be of extremely high value. The research methods used to quantify recreation and other use values require specific data that are not currently available for the areas designated as critical habitat. However, the benefits of designating critical habitat may be substantial.

As a result of the time constraints under which the proposed critical habitat designation was prepared and the magnitude of the issues and area under consideration, the Service's initial economic analysis does not adequately analyze the full range of the economic impacts, both positive and negative, of the proposed designation. To allow for completion of the analysis and the fullest possible public comment on the economic effects of the proposed designation, the Service is requesting public comment concerning several specific economic issues. See discussion under "Public Comments Solicited," below. Based upon public comments submitted by May 31, 1991, and other relevant information, the Service will prepare and publish for further public comment a revised proposed critical habitat designation. The Service will also prepare a complete draft economic analysis and will identify on a proposed basis any areas of proposed critical habitat that may be excluded pursuant to section 4(b)(2) of the Act because the

benefits of exclusion outweigh the benefits of specifying the areas as critical habitat. The Service intends to publish the revised proposed critical habitat designation within 60 days after the initial 30 day comment period closes. The Service will request public comments for 60 days on the revised proposal and will issue a final decision at the earliest possible time thereafter.

#### Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices.

Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies with respect to a federally listed species' designated critical habitat and the prohibitions against taking are discussed below.

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is listed as endangered or threatened, and with respect to its proposed critical habitat. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act and 50 CFR 402.10 of the regulations, require Federal agencies to confer informally with the Service on any action that is likely to result in destruction or adverse modification of proposed critical habitat. If critical habitat is subsequently designated, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to destroy or adversely modify critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with the Service. In the case of the northern spotted owl, the Service will confer on projects within proposed critical habitat when so requested by the action agency. The Service expects to confer on some projects for which biological opinions on the effects of Federal agency actions on the spotted owl have already been issued. As necessary, the Service will prepare conference reports addressing effects of these actions on proposed critical habitat. The Service will issue combined consultation/conference documents for any requests received

subsequent to publication of the proposed rule.

A number of Federal agencies or departments fund, authorize, or carry out actions on lands that the Service proposes to designate as critical habitat. These agencies are the BLM, the FS, the Bureau of Indian Affairs, Department of Defense, Corps of Engineers, Bureau of Reclamation, Federal Energy Regulatory Commission, and Federal Highway Administration.

When the Service issues an opinion concluding that a project is likely to result in the destruction or adverse modification of critical habitat, the Service also provides reasonable and prudent alternatives to the project, if any are identifiable. Reasonable and prudent alternatives are defined at 50 CFR 402.02 as alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the Director believes would avoid resulting in the destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

The Service is aware of a number of ongoing section 7 consultations which may be affected by the designation of critical habitat as it is proposed. Table 2 lists, by State, those informal and formal section 7 consultations in progress within the range of the spotted owl.

TABLE 2. FORMAL AND INFORMAL SECTION 7 CONSULTATIONS IN PROGRESS ADDRESSING PROJECTS PROPOSED WITHIN THE RANGE OF THE NORTHERN SPOTTED OWL.

Proposed Project	Location	Agency <sup>1</sup>
<b>OREGON:</b>		
Land Exchange	Siskiyou NF	FS
FY91 Timber Program.	Oregon & Washington.	FS
FY91 Timber Program.	State of Oregon.	BLM
Snowmobile Trail	Deschutes NF	FS
Gopher Baiting	Umpqua NF	FS
Mining Claim	Siskiyou NF	FS
Campground Renovation.	Siskiyou NF	FS
Mill Town Hill Dam.	Elkhead	BR
Grande Ronde Reservation Timber Program.	Grande Ronde Indian Reservation.	BIA

TABLE 2. FORMAL AND INFORMAL SECTION 7 CONSULTATIONS IN PROGRESS ADDRESSING PROJECTS PROPOSED WITHIN THE RANGE OF THE NORTHERN SPOTTED OWL.—Continued

Proposed Project	Location	Agency <sup>1</sup>
Hydroelectric Project.	Mt. Hood NF	FS
County Road Widening.	Dorena Reservoir.	COE
Land Exchange	Eugene District.	BLM
Mt. Ashland Ski Area.	Rogue River NF.	FS
Mt. Hood Meadows Expansion.	Mt. Hood NF	FS
Land Exchange	Cooe Bay District.	BLM
<b>WASHINGTON:</b>		
Early Winters Resort.	Okanagan NF	FS
White Pass Ski Expansion.	Wenatchee NF.	FS
Big Bend Road Project.	Wenatchee NF.	FS
Fort Lewis Timber Program.	Ft. Lewis Military Installation.	DOD
Curly Creek Road Const.	Gifford Pinchot NF.	FS
Deadhorse Creek Hydroelectric Project.	Mt. Baker-Snoqualmie National Forest.	FHWA
Cushman Hydro. Project.	Olympic NF	FERC
Wynoochee Hydro. Project.	Olympic NF	FERC
Prescott Creek Hydroelectric Project.	Mt. Baker-Snoqualmie National Forest.	FERC
Cumberland Creek Hydroelectric Project.	Mt. Baker-Snoqualmie National Forest.	FERC
O'Toole Creek Hydroelectric Project.	Mt. Baker-Snoqualmie National Forest.	FERC
Windfall Salvage Supplement.	Olympic NF	FS
Southshore Hazard Tree and Personal Use Firewood.	Olympic NF	FS
Pre-commercial Thinning and Aerial Fertilization.	Olympic NF	FS
<b>CALIFORNIA:</b>		
FY91 Timber Program.	N. California	FS

<sup>1</sup> FS=Forest Service, NF=National Forest, BLM=Bureau of Land Management, BR=Bureau of Reclamation, BIA=Bureau of Indian Affairs (Tribal Lands), COE=Corps of Engineers, FERC=Federal Energy Regulatory Commission, FHWA=Federal Highway Administration, DOD=Department of Defense

**Public Comments Solicited**

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, Indian Nations, the scientific

community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) The reasons why any habitat (either proposed critical habitat or additional areas) should or should not be determined to be critical habitat as provided by section 4 of the Act;

(2) Information regarding actions that should be considered necessary to achieve recovery of the northern spotted owl and the conditions that might allow it to be removed from the list of threatened wildlife;

(3) Current or planned activities in the subject area and their possible impacts on proposed critical habitat;

(4) Any foreseeable economic and other impacts resulting from the proposed designation of critical habitat;

(5) Economic values associated with benefits of designating critical habitat for the northern spotted owl. Such benefits include those derived from non-consumptive uses (hiking, camping, bird watching, etc.), and "existence values";

(6) The methodology the Service might use, under section 4(b)(2) of the Act, in determining whether the benefits of excluding an area from critical habitat outweigh the benefits of specifying the area as critical habitat;

(7) Timber harvest activities anticipated on Federal lands, or affected by Federal agencies, other than FS and BLM lands;

(8) The percentage of lands within the proposed critical habitat boundaries that are available for timber harvest;

(9) Non-timber related Federal activities (including federally permitted, authorized, or carried out on State and private lands) and economic costs associated with any alternatives being considered; and

(10) Alternative methods to ensure linkage habitat in the areas of concern, including implementation of the 50-11-40 rule, or other means.

(11) The treatment that should be afforded tribal lands, especially with respect to Indian sovereignty issues.

As stated previously under "Summary of Economic Analysis," comments received during the initial 30 day comment period will be used to prepare a revised critical habitat designation which will be published for further public comment. The eventual final decision on this proposed designation of critical habitat will take into consideration the comments and any additional information received by the Service.

The Service intends to hold public hearings in Olympia, Washington;

Portland, Oregon; Springfield, Oregon; and Arcata, California. Specific dates, locations, and times will be announced in a future Federal Register notice.

#### National Environmental Policy Act

The Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Act. A notice outlining the Service's reasons for this determination was published in the Federal Register on October 25, 1983 (48 FR 49244).

#### Regulatory Flexibility Act and Executive Order 12291

The Department of the Interior has determined that designation of critical habitat for this species will not constitute a major rule under Executive Order 12291 and certifies that this designation will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Based on the information discussed in this rule concerning public projects and private activities within critical habitat areas, it is not clear whether that significant economic impacts will result from the critical habitat designation. In addition, there are a limited number of actions on private land that have Federal involvement through funds or permits that would affect or be affected by the critical habitat designation; the potential economic impact of the critical habitat designation on these actions will be evaluated. Also, no direct costs, enforcement costs, information collection, or recordkeeping requirements are imposed on small entities by this designation. Further, the rule contains no recordkeeping requirements as defined by the Paperwork Reduction Act of 1990.

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U.S. Department of the Interior. 1990. 1990 Status review: northern spotted owl; *Strix occidentalis caurina*. Report to the Fish and Wildlife Service. Portland, Oregon.

#### Authors

The primary authors of this rule are Karla Kramer, U.S. Fish and Wildlife Service, Fish and Wildlife Enhancement (see ADDRESSES section); Steve Spangle, U.S. Fish and Wildlife Service, Sacramento Field Station; Mike Tehan, U.S. Fish and Wildlife Service, Olympia Field Station; and Randy Tweten, U.S. Fish and Wildlife Service, Portland Field Station.

#### List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

#### Proposed Regulations Promulgation

#### PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500, unless otherwise noted.

#### § 17.11 [Amended]

2. It is proposed to amend § 17.11(h) by revising the "critical habitat" entry for "Owl, northern spotted", under BIRDS, to read 17.95(b).

3. It is proposed to amend § 17.95(b) by adding critical habitat of the northern spotted owl (*Strix occidentalis caurina*), in the same alphabetical order as the species occurs in 17.11(h).

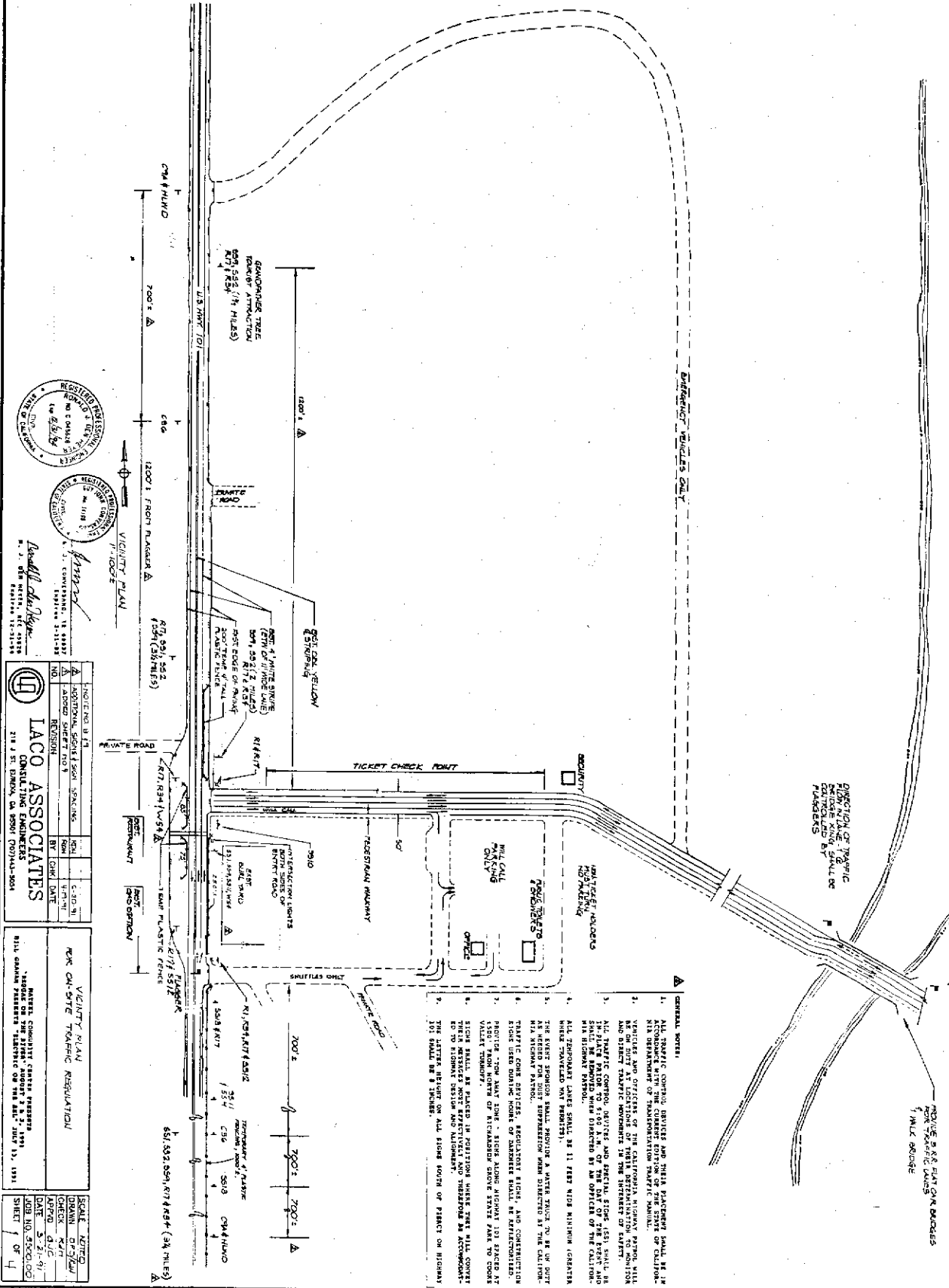
#### § 17.95 Critical habitat—fish and wildlife.

• • • • •  
(b) • • • • •  
• • • • •

**Appendix C.  
Off-site Traffic Control Plan**



SOUTH FORK EEL RIVER



- GENERAL NOTE:**
1. ALL TRAFFIC CONTROL, SIGNS AND OTHER PLACEMENT SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION TRAFFIC MANUAL.
  2. VEHICLES AND OFFICERS OF THE CALIFORNIA HIGHWAY PATROL WILL BE PERMITTED TO STOP AND DETAIN ANY VEHICLE FOR VIOLATIONS OF TRAFFIC LAWS AND DIRECT TRAFFIC MOVEMENT IN THE INTEREST OF SAFETY.
  3. ALL TRAFFIC CONTROL DEVICES AND SPECIAL SIGNS (S3) SHALL BE IN PLACE PRIOR TO 5:00 A.M. OF THE DAY OF THE EVENT AND REMOVED IMMEDIATELY THEREAFTER BY THE OFFICERS OF THE CALIFORNIA HIGHWAY PATROL.
  4. ALL TEMPORARY LINES SHALL BE 11 FEET HIGH MINIMUM (CONCRETE OR METAL).
  5. THE EVENT SPONSOR SHALL PROVIDE A WATER TROUGH TO BE ON DUTY AT ALL TIMES TO BE USED BY THE CALIFORNIA HIGHWAY PATROL OFFICERS.
  6. TRAFFIC CONTROL DEVICES, REGULATORY SIGNS, AND CONSTRUCTION SIGNS USED DURING HOURS OF DARKNESS SHALL BE ILLUMINATED.
  7. PEOPLE FROM ANY JUNE 1 SIGNS ALONG HIGHWAY 101 SIGNED AT 1500' FROM NORTH OF RICHMOND ABOVE STATE PARK TO CROSS UNDER HIGHWAY 101 SHALL BE ILLUMINATED.
  8. THESE SIGNS SHALL BE PLACED IN THE MIDDLE OF THE ROAD AND TO BE REMOVED IMMEDIATELY AFTER THE EVENT.
  9. THE LETTER HEIGHT ON ALL SIGNS NORTH OF PARKING OR HIGHWAY 101 SHALL BE 8 INCHES.

**REGISTERED PROFESSIONAL ENGINEER**  
 CIVIL ENGINEERING  
 STATE OF CALIFORNIA  
 No. 1118  
 EXPIRES 12-31-1982

**REGISTERED PROFESSIONAL ENGINEER**  
 CIVIL ENGINEERING  
 STATE OF CALIFORNIA  
 No. 1118  
 EXPIRES 12-31-1982

*David J. DeWitt*  
 M. J. 688 NORTH, STE. 2100  
 SAN JOSE, CALIF. 95128

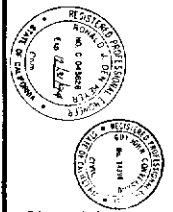
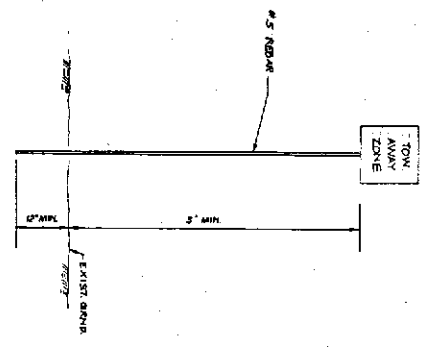
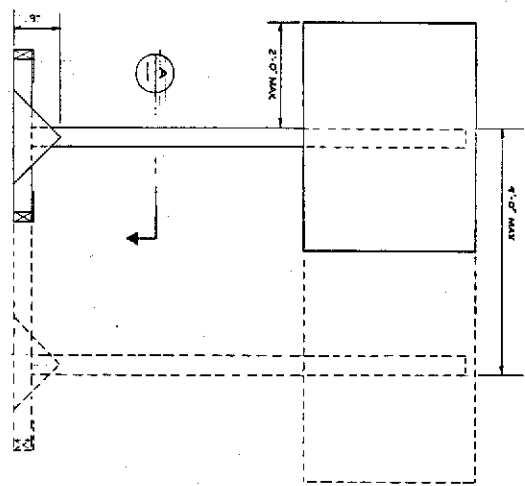
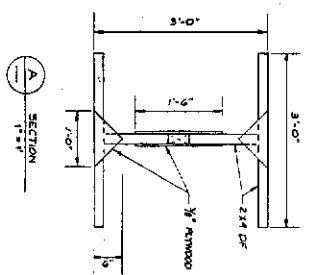
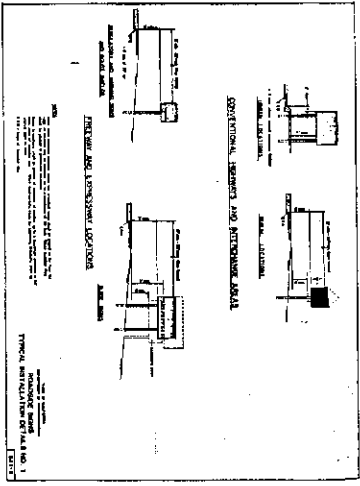
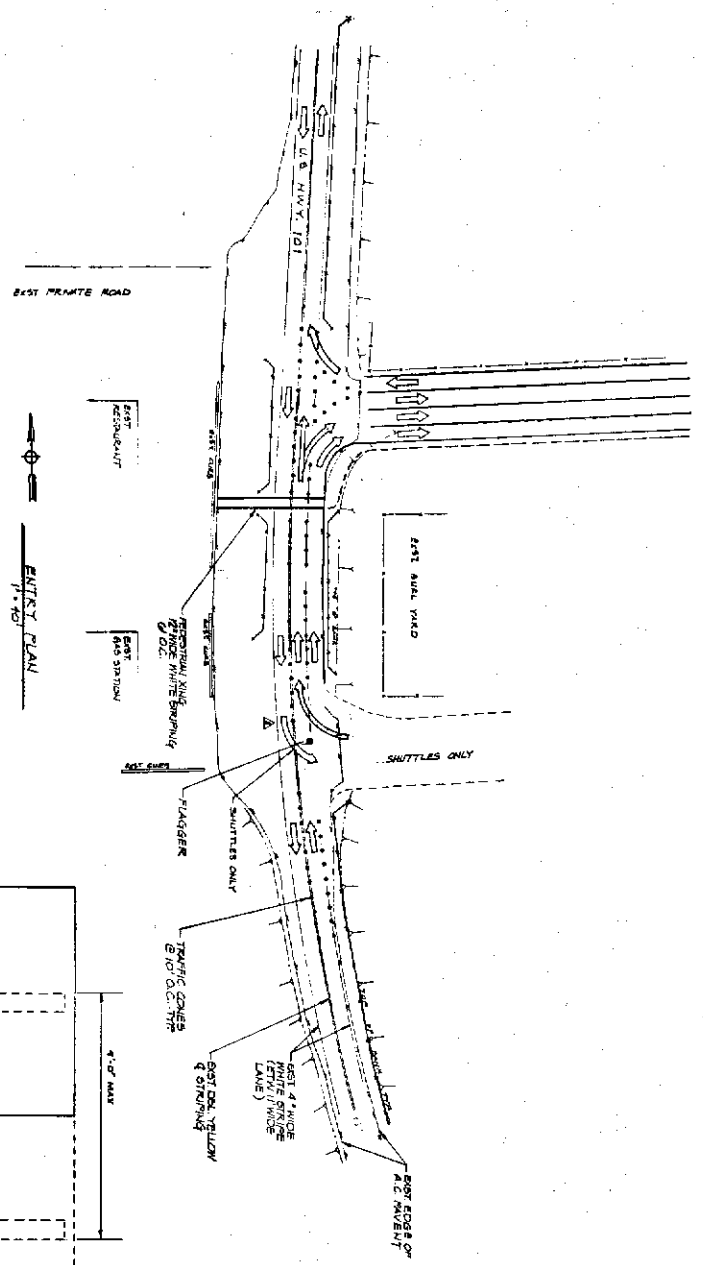
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2	BY DATE	

**LACO ASSOCIATES**  
 CONSULTANTS  
 218 J ST. BERKELEY, CA 94704-3504

**VEINITY PLAN**  
 TRAFFIC REGULATION

DATE: 5-21-81  
 SHEET 1 OF 4



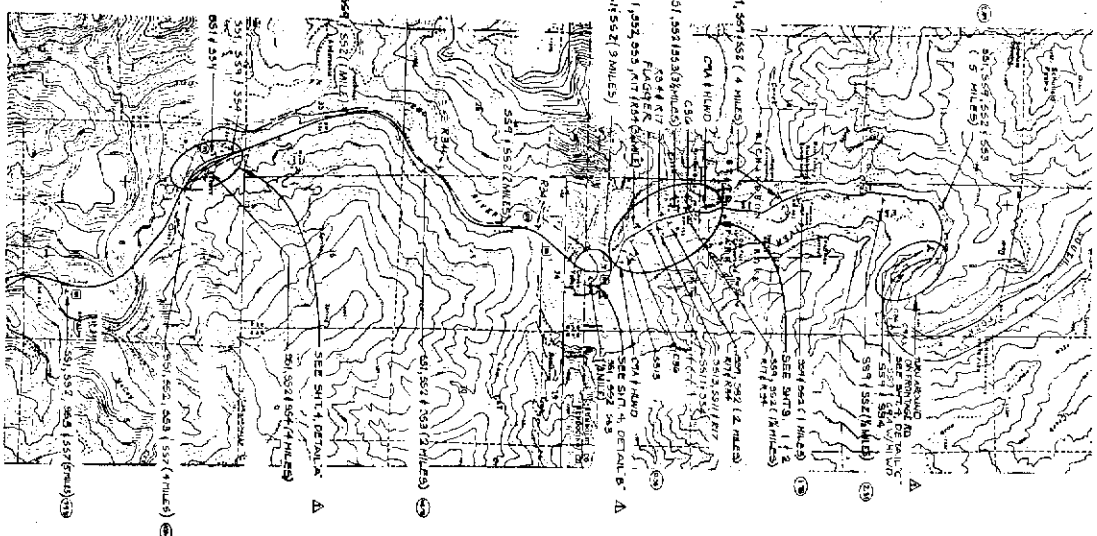


*James J. ...*  
 JAMES J. ...  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL ENGINEERING  
 STATE OF CALIFORNIA  
 LICENSE NO. 15184  
 EXPIRES 12-31-1994

NO.	REVISION	BY	DATE
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2	...	RJM	5-17-90

**LACO ASSOCIATES**  
 CONSULTING ENGINEERS  
 318 S. ST. BURBA, CA 95001 (707) 431-5941

SCALE: AS SHOWN  
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 SHEET 2 OF 4



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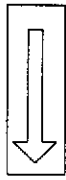
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MILES

S52 5" HIGH BLACK CHARACTERS WHITE BACKGROUND-TYPICAL

SOLD OUT

S53



S54

TOW AWAY ZONE

S55

NO THRU TRAFFIC

S56

NO ON-SITE PARKING WITHOUT A TICKET

S57

▲ SIGN LEGEND

S51	TITLE BAR REG.
S52	5" HIGH BLACK CHARACTERS WHITE BACKGROUND-TYPICAL
S53	5" HIGH WHITE CHARACTERS GREEN BACKGROUND
S54	WHITE ARROW
S55	TOW AWAY ZONE
S56	NO THRU TRAFFIC
S57	NO ON-SITE PARKING WITHOUT A TICKET
S58	TICKET HOLDERS AND WILL CALL
S59	TURN AROUND
S60	EXIT ENTER FORM 3 LANES
S61	WILL CALL USE RIGHT LANE
S62	SHUTTLE EXEMPT
S63	THRU TRAFFIC USE LEFT LANE

TICKET HOLDERS AND WILL CALL

S58

TURN AROUND

S59

EXIT ENTER FORM 3 LANES

S60

WILL CALL USE RIGHT LANE

S61

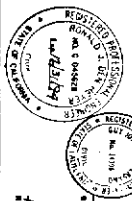
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S62

THRU TRAFFIC USE LEFT LANE

S63

SPECIAL SIGN DETAILS 17-1-01



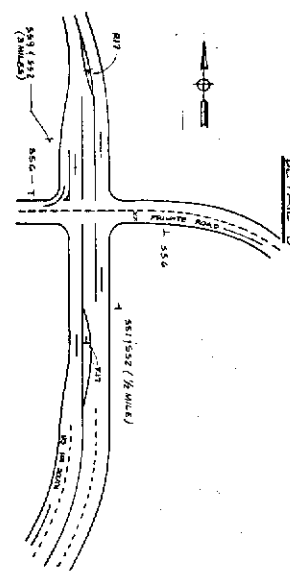
David L. Glick  
 Registered Professional Engineer  
 License No. 12-31-58

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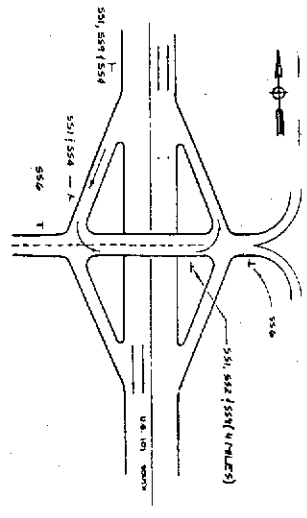
LACO ASSOCIATES  
 CONSULTING ENGINEERS  
 318 J. W. BARNES, JR. BLVD. (704) 443-5004

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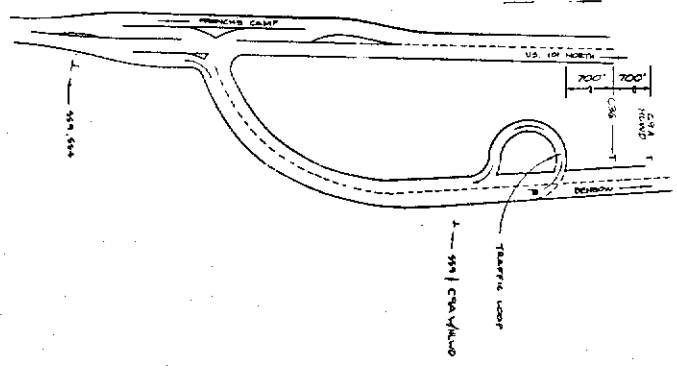
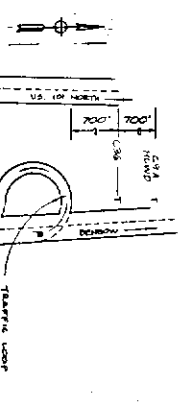
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DETAIL 'S'



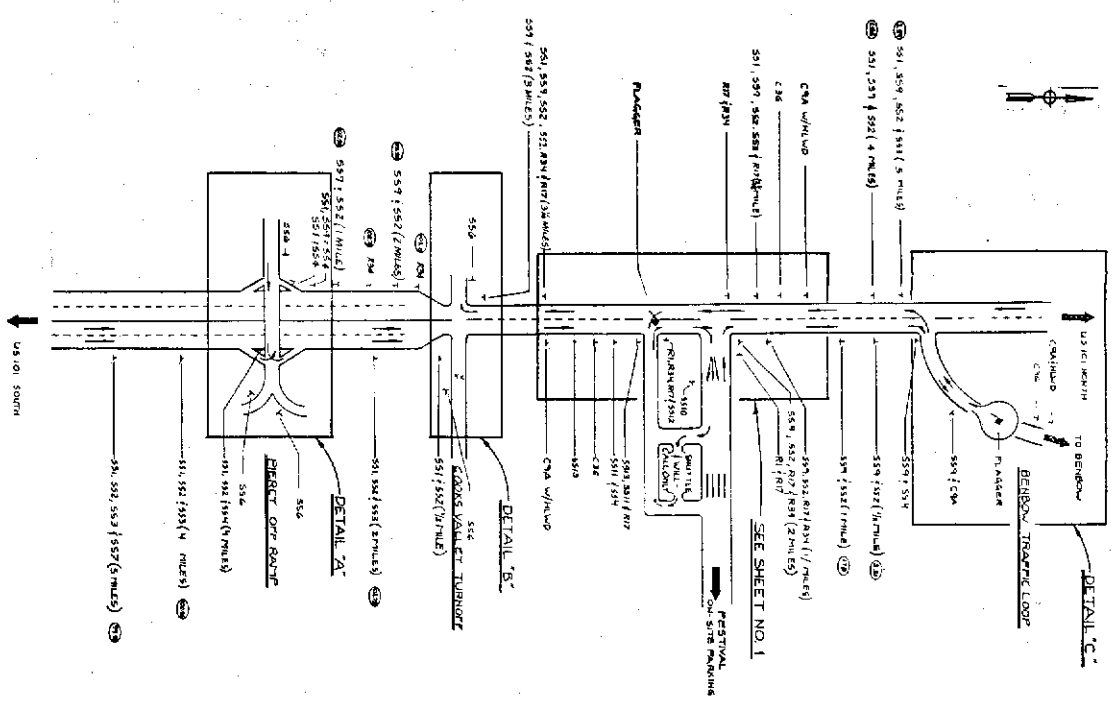
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DETAIL 'A'



BENDOW TRAFFIC LOOP - A  
DETAIL 'C'



TRAFFIC FLOW DIAGRAM - A



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10				
<p><b>LACO ASSOCIATES</b> CONSULTING ENGINEERS 178 - ST. GORDON, CA 95801 (202)43-1585</p>				

<p>TRAFFIC FLOW DIAGRAM AND INTERSECTION DETAILS</p>
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<p>SCALE: NO SCALE</p>
<p>DATE: 10/13/93</p>
<p>SHEET: 4 OF 4</p>

**Appendix D.  
Off-site Camping & Lodging**

## POPULATION IMPACT ANALYSIS

### REGGAE ON THE RIVER 1991

The number of tickets sold out of the area though BASS in 1991 was 5500. The other 2000 ticketed attendees purchased their tickets at local outlets from Ukiah (90 miles south) to Arcata (70 miles north). Statistics provided by the Chambers of Commerce from Garberville (9 miles north) and Willits (49 miles south) show that Southern Humboldt and Northern Mendocino easily have the capacity to handle those attending Reggae on the River from outside the area. The local capacity of almost 10,000 people (see Appendix 1) in motels and parks is adequate. Since the event is in its 9th year, people make their reservations well in advance.

At least a thousand local people are involved in putting the show on. Most all of them have friends from out of the area that stay with them. A very conservative estimate of those attendees staying with friends is a thousand, further reducing the impact on public facilities.

If, in addition to the above facts, we add the fact that we camp 3000 people on site, Southern Humboldt and Northern Mendocino can well handle this show's impact. In 1991, the sense of impact was greater due to an event being scheduled the week following ours. We did not produce the event. We did not schedule the event. But all of us learned a lesson.

The concept of Southern Humboldt being the center for the presentation of performing arts in Northern California is still young but obviously with great beneficial potential both economically (see Appendices 2 and 3) and in terms of how we are perceived by those who live outside our area. The press and reputation of Reggae on the River from San Francisco, Los Angeles and internationally is unanimously positive. The growing summer series at Benbow, from Shakespeare to Jazz, and the combination of the arts and our spectacular natural setting is unique in the world of tourism. We would be neglectful of our duties to our children's future if we did not nurture these assets with all our hearts and mindful talents.

APPENDIX #1

NORTHERN MENDOCINO

	Sites or Rooms	Capacity
<b>Campgrounds</b>		
Quail (459-6006)	128 @ 5 each	640
KOA (459-6179)	178 @ 5 each	890
4 others @ 75 each (Willits C of C)	300 @ 5 each	1500
<b>Motels</b>		
Willits (9 w/ 22 rm avg)	199 @ 3 each	597
Leggett (2)	44 @ 3 each	132
Laytonville (5)	110 @ 3 each	330
Covelo (1)	22 @ 3 each	66
Various B & Bs	20 @ 2 each	40
	<b>Total Capacity</b>	<b>4195</b>

Chambers of Commerce: Leggett 925-6385  
 Laytonville By Mail Only  
 Willits 459-7910

SOUTHERN HUMBOLDT

<b>Campgrounds</b>		
State and Private	858 @ 5 each	4290
<b>Motels and B &amp; Bs</b>	427 @ 3 each	1281
	<b>Total Capacity</b>	<b>5571*</b>

\*Numbers provided by Garberville Chamber of Commerce

LODGING AND CAMPGROUNDS NEAR REGGAE ON THE RIVER CONCERT SITE

MOTELS arranged in order of proximity to concert site

Benbow Inn

1 mi. So. of Garberville  
(707)923-2125

Best Western

Humboldt House Inn  
701 Redwood Dr. Garberville  
(707)923-2771

Johnston's Motel

839 Redwood Dr. Garberville  
(707)923-3327

Lone Pine Motel

912 Redwood Dr. Garberville  
(707)923-3520

Rancho Motel

987 Redwood Dr. Garberville  
(707)923-2451

Garberville Motel

Redwood Dr. Garberville  
(707)923-2422

Sherwood Forest Motel

814 Redwood Dr. Garberville  
(707)923-2721

Brass Rail Inn

3233 Redwood Dr. Redway  
(707)923-3931

Redway Motor Inn

Redwood Dr. Redway  
(707)923-2660

Dean Creek Motel and Campground

Redwood Dr. Redway  
(707)923-2555

Bell Glen River Inn and Youth Hostel

70400 Hwy 101 Leggett  
(707)925-6425 or 925-6469

Bolton's Cabana Holiday

Hwy 101 Leggett  
(707)925-6249

**Leggett Motel**  
Hwy 101 Leggett  
(707)925-6266

**The Settlement**  
Leggett  
(707)925-6212

**Big Bend Lodge**  
P.O. 111 Leggett  
(707)984-6321

**Czech Lodge**  
Hwy101 Cummings  
(707)984-8291

**Mad Creek Inn**  
Hwy 101 Cummings  
(707)984-6202

**Laytonville Inn**  
44590 Hwy 101 Laytonville  
(707)984-8213

**Cottage Motel**  
Laytonville  
(707)984-6480

**Ranch Motel**  
Laytonville  
(707)984-8456

**Whispering Pines Motel**  
Ave. of the Giants, Miranda  
1-800-626-6835 or (707)943-3182.

**Madrona Motel**  
Ave. of the Giants, Phillipville  
(707)943-3553

**Miranda Gardens Motel**  
Ave. of the Giants, Miranda  
(707)943-3011

PRIVATE CAMPGROUNDS AND RV SITES arranged in order of proximity to  
concert

**KOA campground**  
750 Hwy 101 Piercy  
(707)247-3380

**Hidden Valley Campground**  
29901 Hwy 101 Willits

707-459-2521



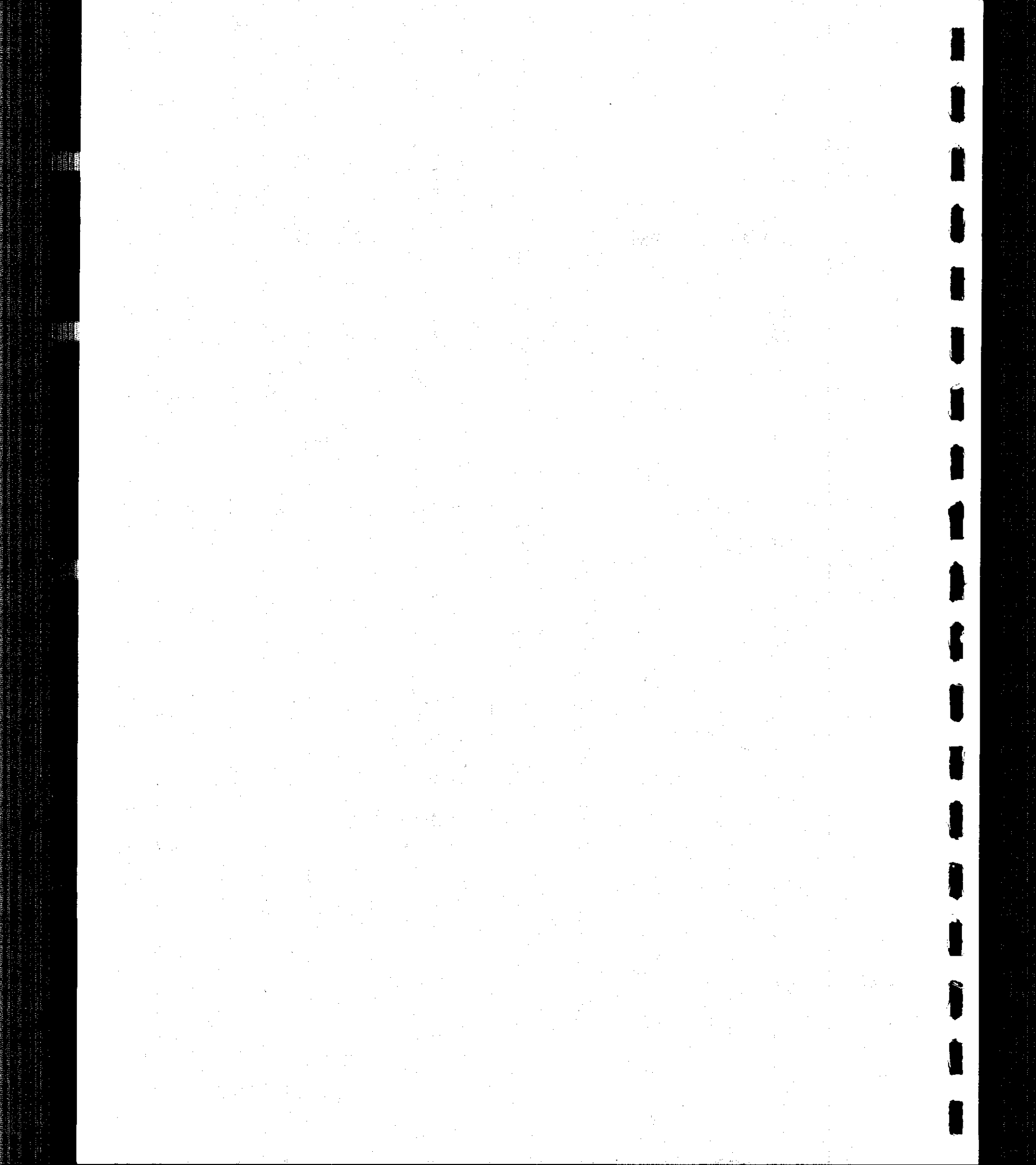
Deer Horn RV  
2714 Ave. of the Giants  
Phillipsville  
(707) 943-3553

Giant Redwoods RV and Camp  
455 Boy Scout Rd. Myers Flat  
(707)943-3198

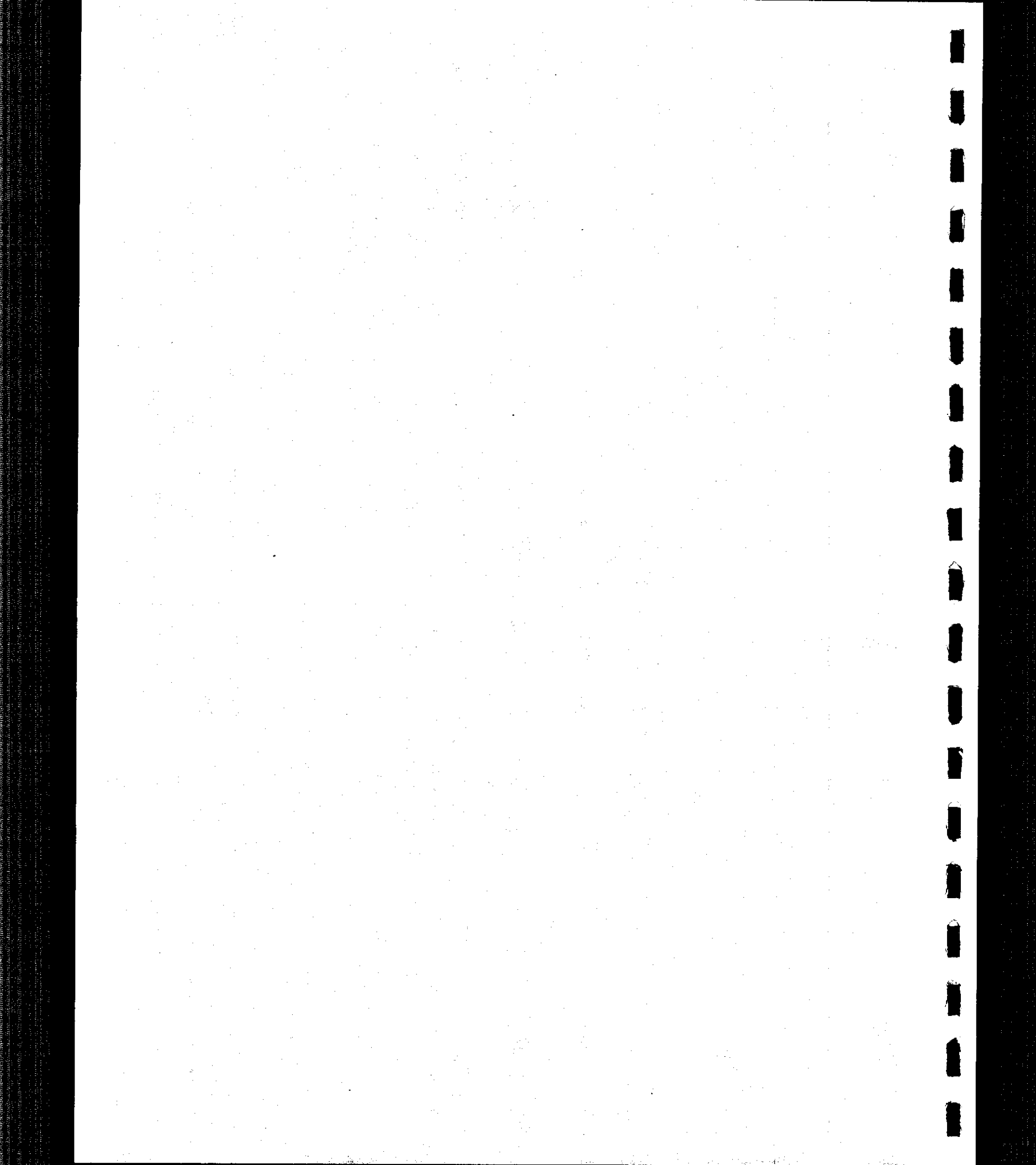
STATE PARK CAMPGROUNDS arranged in order of proximity to concert  
For reservations call: 1-800-444-7275

Ask for:

Richardson's Grove State Park  
Benbow Lake State Park  
Standish Hickey State Park  
Hidden Springs State Park  
Burlington State Park



**Appendix E.  
Shuttle Bus Stops**

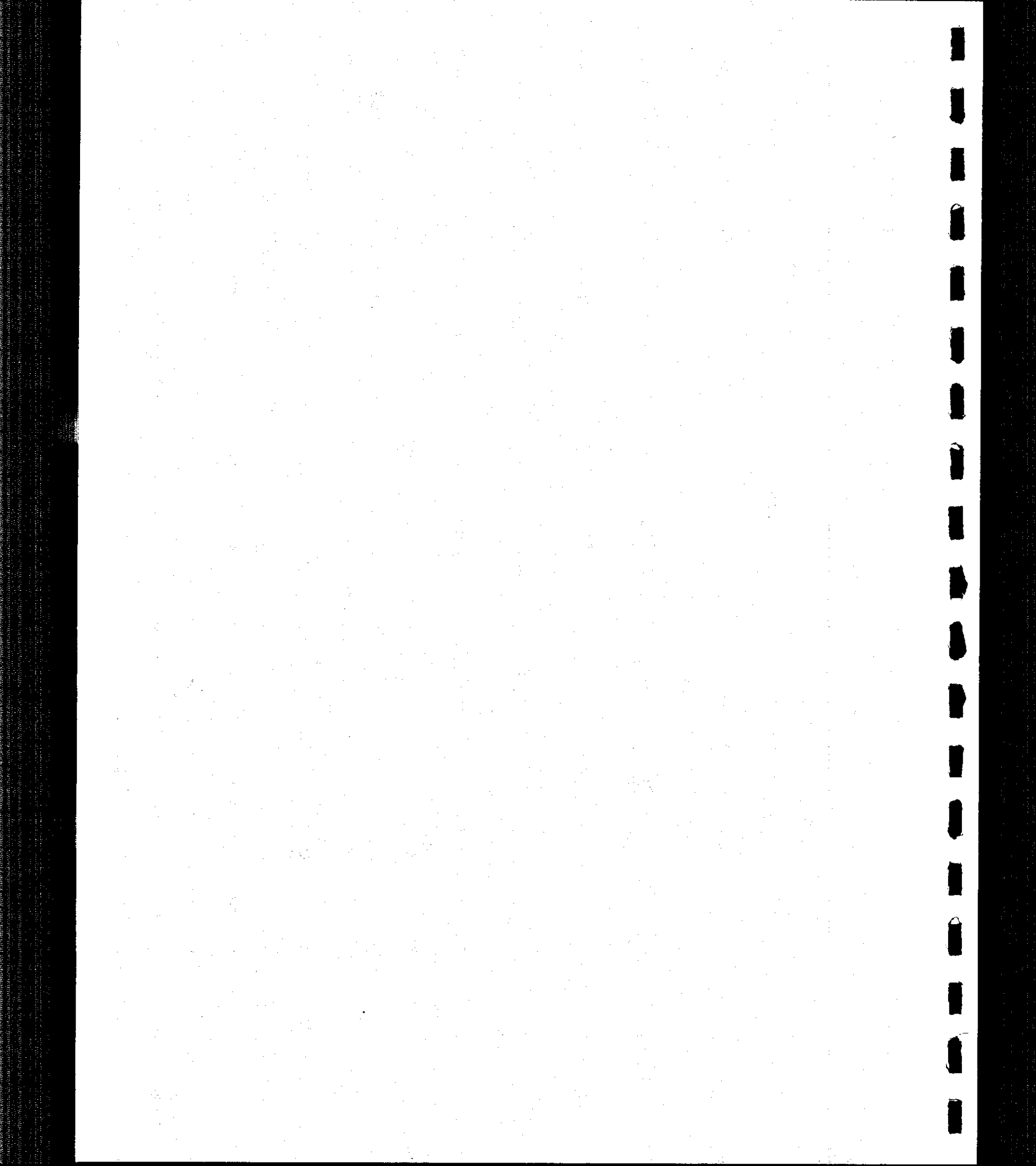


REGGAE ON THE RIVER SHUTTLE BUS STOPS

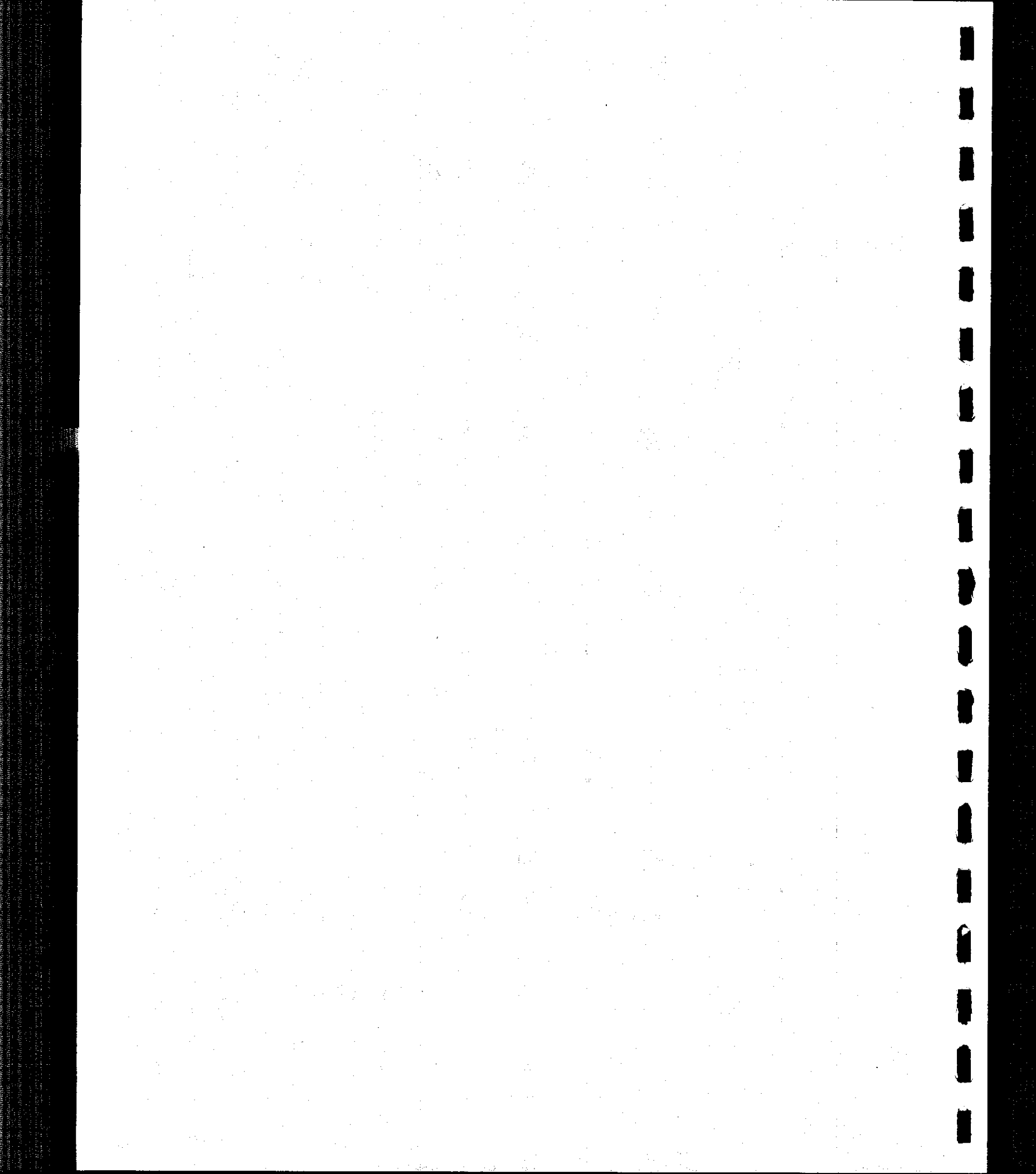
- Dean Creek Motel and Campground..... (N. of Redway 1 mile.)  
Mateel Community Center..... (Rusk Ln. Redway)  
Brass Rail Inn..... (Redway)  
(Redway Inn pick up here)
- Sherwood Forest Hotel..... (Garberville)  
(Jonston's Motel pick up here)
- Rancho Motel..... (Garberville)  
(Lone Pine Motel & Garberville Motel pick up here)
- Best Western..... (Garberville)
- Benbow Lake State Park..... (Fish Creek Rd. Benbow)  
Reggae on the River..... (French's Camp HWY 101)

STANDISH HICKEY STATE PARK . . . . (LEGGET)

+ 2 non-residential - non-business  
distribution



**Appendix F.  
Letter from Laco  
Engineers on Water System  
Capacity**







**LACO ASSOCIATES**  
**consulting engineers**

216 J Street, Eureka, CA 95501 • P.O. 1020 • (707) 443-6064 • FAX (707) 443-0663

GUY J. CONVERSANO • CE 14396

CHARLES W. GALLATY • CE 20181

HOWARD W. GARDNER • ME 21300/CHE 4063

April 20, 1992

3722

The Mateel Community Center  
69 Rusk Lane  
Redway, California 95560

Attention: Jerry M. Sevier

Subject: Reggae on the River; Water Distribution System

Dear Mr. Sevier:

As requested, this is our preliminary evaluation of the existing water distribution system located at French's Camp which is the site for the Reggae on the River festival. Material provided by the client consists of a schematic of the existing water distribution system that was installed for the 1991 event.

The water distribution system consists of a well capable of supplying 25 gallons per minute, 500 gallon pressure tank, filtration, 1,440 feet of 1-1/2" PVC main, 34 faucets and 5 water fountain stations. Each water fountain station consists of 6 fountain heads for a total of 30 fountain heads.

The water is pumped from the well into the 500 gallon pressure tank where the water is distributed at 25 psi. From the tank the water is distributed to two mains consisting of 1-1/2" schedule 40 PVC aligned as shown on the plans. Preliminary calculations indicates the main lines are capable of distributing 25 gallons per minute without significant losses.

The well is capable of producing a total of 36,000 gallons per day. Based on a total of 10,000 people on-site, this equates to 3.6 gallons per person per day.

Water fountains are usually capable of supplying 1/2 gallon per minute and are adjustable to maintain this flow rate over a wide range water pressure. Assuming at peak demand 50 percent of fountain use and 25 percent faucet use. The faucets should supply approximately 2 gallons per minute.

Filtration consists of pleated sediment cartridges for suspended solids and granular carbon cartridges for odor and taste. Filters are situated at each fountain station and faucet standpipe. The filters are monitored by the staff and are replaced every 2 hours or as required. Sediment cartridges are housed in a clear container allowing visual

Mateel Community Center; Job No. 3722  
Reggae on the River; Water Distribution System  
April 20, 1992; Page Two

monitoring. Granular carbon cartridges are replaced at the same time as the sediment filters.

This system appears to provide water only to the audience area. Portable water tanks should be provided at various locations throughout the parking lots and camping areas. During low water demand periods, the well with filtration, can be utilized to refill the portable water tanks. Also, a hand washing station should be provided at or near the portable toilet gallery.

We feel this system, with the above noted recommendations, is adequate to supply water needs for the festival. Flow rates, water quality, and pressure should be monitored during the event to confirm our preliminary evaluation.

If you have any questions please contact me.

Sincerely,  
LACO ASSOCIATES



Ronald J. den Heyer  
RCE 45626, Exp. 12/31/94

RDH:amm

cc: GJConversano/HWG/CWG



**LACO ASSOCIATES**  
consulting engineers

216 J Street, Eureka, CA 95501 • P.O. 1023 • (707) 443-5054 • FAX (707) 443-0593

GUY J. CONVERSANO • CE 14398

CHARLES WGALLATY • CE 20181

HOWARD W. GARDNER • ME 21300/CHE 4063

April 20, 1992

3722.00

The Mateel Community Center  
69 Rusk Lane  
Redway, California 95560

Subject: Reggae on the River; Traffic

To whom it may concern:

The traffic control plan for the 1991 Reggae on the River Festival was designed by myself under the direction of Guy J. Conversano, a registered traffic engineer in the State of California. I visited the site during the festival on Saturday, August 3, 1991 to observe plan compliance and effectiveness. A summary of my observations are as follows:

My first encounter with the event's traffic control was signage on southbound State Highway 101 beginning in the vicinity of the Benbow traffic loop turnoff. The signage from the Benbow traffic loop turnoff to the site appeared to have been constructed and installed as illustrated on the Traffic Control Plan. It appeared to me the signage was clear in informing the public that no left turns into the site were allowed and to proceed past the site for parking.

Shortly after 10:00 a.m., I passed the site on southbound Highway 101 and encountered minor congestion consisting of approximately a half a dozen vehicles. After passing the site the signage again appeared to be in compliance with the Traffic Control Plan and it directed me to the Piercy off ramp to turn-around and proceed northbound on Highway 101 back to the site. Immediately after turning into the parking area we were checked for tickets and directed to a parking space. I was parked at approximately 10:30 a.m. and the on-site parking lot was near capacity.

At 11:00 a.m. after the show started, I found Jerry Sevier of the Mateel Community Center and inquired how effective the Traffic Control Plan was during peak traffic flow. Mr. Sevier informed me that what I encountered was about the peak traffic flow and he was satisfied with the flow of traffic.

At approximately 12:00 p.m. the on-site parking was full and vehicles were directed to off-site parking. Traffic immediately became congested and from what I could see from the site it backed up on northbound Highway 101 beyond my view which was about 1/2 mile south of the site. Traffic returned to free flowing at approximately 1:30 p.m.

R-20 92 MON 12:50 LACO ASSOCIATES

P. 05

Mateel Community Center; Job No. 3722.01  
Reggae on the River; Traffic  
April 20, 1992; Page Two

Traffic control was in compliance with the Traffic Control Plan as prepared by LACO ASSOCIATES. I was satisfied with how the traffic was handled by the Community Center's volunteers. Early in planning of the Traffic Control Plan, I informed Mr. Sevier there was inadequate queuing area on Highway 101. Successful traffic control depends on continuous movement of vehicles from the highway, through the site and to parking spaces. Congestion on-site will cause congestion on the highway. I credit the success of the traffic control plan to the Mateel Community Center's staff for promptly directing vehicles off the highway and parking them.

Discussing the project with various personnel involved with the festival, some problems with Traffic Control Plan exist. Several people were parked on Highway 101 at night waiting for the gates to open. This creates an unsafe condition for through traffic at night and also causes congestion when the gates are open. When the on-site parking is to capacity, vehicles should be directed to off-site parking before reaching the site. The Benbow turn-around should be abandoned and turn a-round should be relocated to the Benbow off ramp.

If you have any questions please contact me.

Sincerely,  
LACO ASSOCIATES

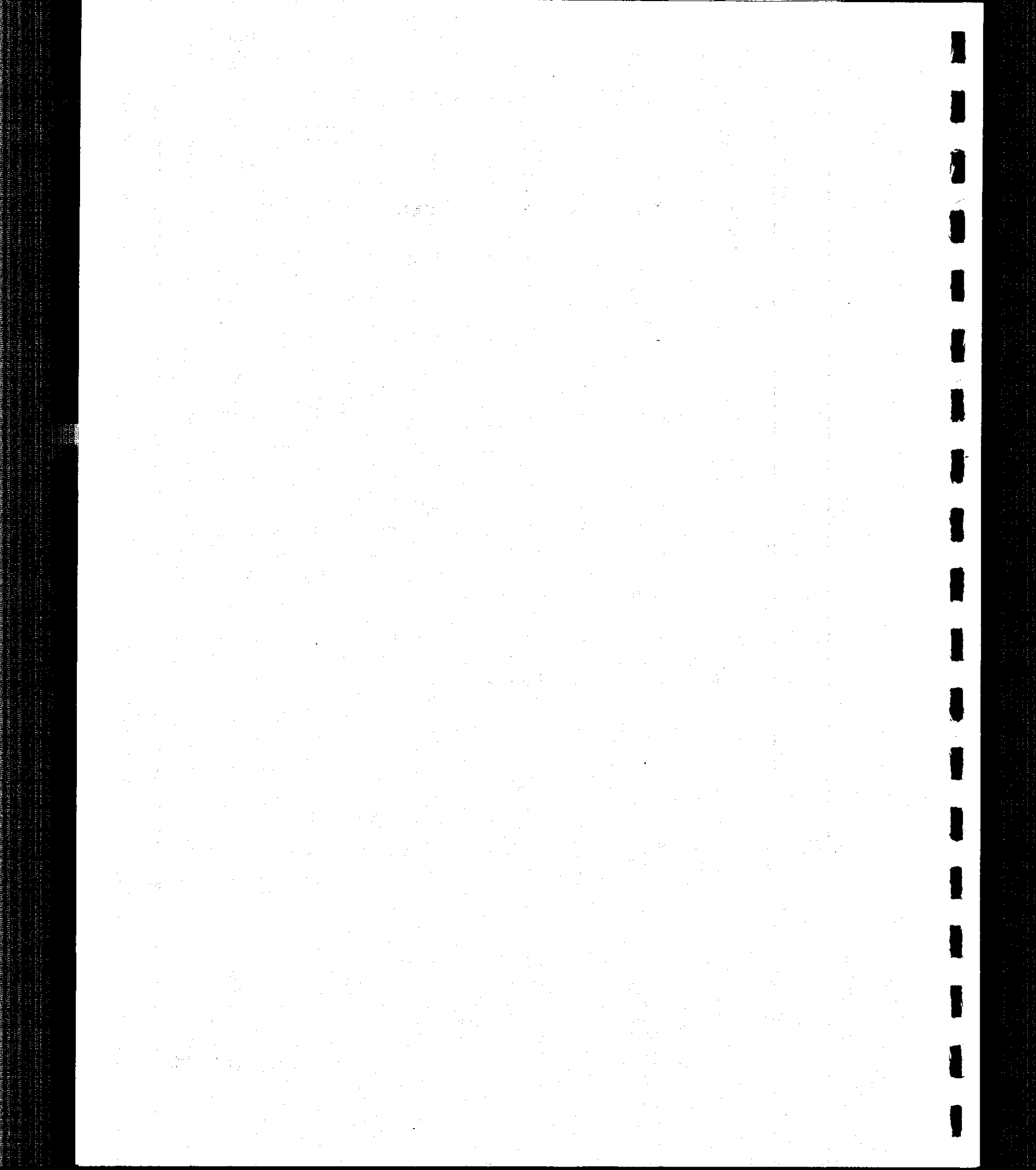


Ronald J. den Heyer  
RCE 45626, Exp. 12/31/93

RdH:kl

cc: GJConversano/CWG/HWG

**Appendix G.  
Initial Study**



## SECTION II.

ENVIRONMENTAL IMPACTS

(All "NO" answers are based on the enclosed Tentative Map Checklist and tentative map; a field inspection of the project site; referrals from all affected agencies; and a review of reference materials in the Planning Division of the Humboldt County Planning & Building Department.)

	<u>YES</u>	<u>MAYBE</u>	<u>NO</u>
1. <u>Earth.</u> Will the proposal result in:			
a. Unstable earth conditions or in changes in geologic substructures?	_____	_____	_____✓
b. Disruptions, displacements, compaction or overcovering of the soil?	_____	_____✓	_____
c. Change in topography or ground surface relief features?	_____	_____	_____✓
d. The destruction, covering or modification of any unique geologic or physical features?	_____	_____	_____✓
e. Any increase in wind or water erosion of soils, either on or off the site?	_____	_____	_____✓
f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	_____	_____✓	_____
g. Exposure of people or property to geologic hazards, such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	_____	_____	_____✓
2. <u>Air.</u> Will the proposal result in:			
a. Substantial air emissions or deterioration of ambient air quality?	_____	_____✓	_____
b. The creation of objectionable odors?	_____	_____✓	_____
c. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?	_____	_____	_____✓
3. <u>Water.</u> Will the proposal result in:			
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?	_____	_____✓	_____

	YES	MAYBE	NO
b. Changes in absorption rates, drainage patterns or the rate and amount of surface runoff?	---	---	✓
c. Alterations to the course or flow of flood waters?	---	---	✓
d. Change in the amount of surface water in any water body?	---	---	✓
e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to, temperature, dissolved oxygen or turbidity?	---	✓	---
f. Alteration of the direction or rate of flow of ground waters?	---	✓	---
g. Change in the quantity of groundwaters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	---	✓	---
h. Substantial reduction in the amount of water otherwise available for public water supplies?	---	✓	---
i. Exposure of people or property to water-related hazards such as flooding or tidal waves?	---	---	✓
4. <u>Plant Life.</u> Will the proposal result in:			
a. Change in the diversity of species or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?	---	---	✓
b. Reduction of the numbers of any unique, rare, or endangered species of plants?	---	---	✓
c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	---	---	✓
d. Reduction in acreage of any agricultural crop?	---	---	✓
5. <u>Animal Life.</u> Will the proposal result in:			
a. Change in the diversity of species, or numbers of any species of animal (birds, land animals including reptiles; fish and shellfish, benthic organisms, or insects)?	---	✓	---
b. Reduction of the numbers of any unique, rare or endangered species of animals?	---	✓	---



YES      MAYBE      NO

- |  | YES | MAYBE | NO  |
|--|-----|-------|-----|
| c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?  | --- | ---   | ✓   |
| d. Deterioration to existing fish or wildlife habitat?   | --- | ✓     | --- |
| 6. <u>Noise</u> . Will the proposal result in:   |     |       |     |
| a. Increases in existing noise levels?   | ✓   | ---   | --- |
| b. Exposure of people to severe noise levels?  | --- | ✓     | --- |
| 7. <u>Light and Glare</u> . Will the proposal produce new light or glare?  | ✓   | ---   | --- |
| 8. <u>Land Use</u> . Will the proposal result in a substantial alteration of the present or planned land use of an area?   | --- | ✓     | --- |
| 9. <u>Natural Resources</u> . Will the proposal result in:   |     |       |     |
| a. Increase in the rate of use of any natural resources?   | ✓   | ---   | --- |
| 10. <u>Risk of Upset</u> . Will the proposal involve:  |     |       |     |
| a. A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions? | --- | ---   | ✓   |
| b. Possible interference with an emergency response plan or an emergency evacuation plan?  | ✓   | ---   | --- |
| 11. <u>Population</u> . Will the proposal alter the location, distribution, density or growth rate of the human population of an area?   | --- | ✓     | --- |
| 12. <u>Housing</u> . Will the proposal affect existing housing, or create a demand for additional housing?   | --- | ---   | ✓   |
| 13. <u>Transportation/Circulation</u> . Will the proposal result in:   |     |       |     |
| a. Generation of substantial additional vehicular movement?  | ✓   | ---   | --- |
| b. Effects on existing parking facilities, or demand for new parking?  | ✓   | ---   | --- |
| c. Substantial impact upon existing transportation systems?  | ✓   | ---   | --- |

	YES	MAYBE	NO
d. Alterations to present patterns of circulation or movement of people and/or goods?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Alterations to waterborne, rail or air traffic?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. <u>Public Services.</u> Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:			
a. Fire protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Parks or other recreational facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Maintenance of public facilities, including roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Other governmental services?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15. <u>Energy.</u> Will the proposal result in:			
a. Use of substantial amounts of fuel or energy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. <u>Utilities and Service Systems.</u> Will the proposal result in a need for new systems, or substantial alterations to the following utilities:			
a. Power or natural gas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Communications systems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Water?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Sewer or septic tanks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Storm water drainage?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Solid waste and disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YES      MAYBE      NO

17. Human Health. Will the proposal result in:

- a. Creation of any health hazard or potential health hazard (excluding mental health)?
- b. Exposure of people to potential health hazards?

     \_\_\_\_\_      \_\_\_\_\_

     \_\_\_\_\_      \_\_\_\_\_

18. Aesthetics. Will the proposal result in:

- a. The obstruction of any scenic vista or view open to the public?
- b. The creation of an aesthetically offensive site open to public view?

\_\_\_\_\_      \_\_\_\_\_     

\_\_\_\_\_            \_\_\_\_\_

19. Recreation. Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?

     \_\_\_\_\_      \_\_\_\_\_

20. Cultural Resources. Will the proposal:

- a. Result the alteration of or the destruction of a prehistoric or historic archaeological site?
- b. Result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object?
- c. Have the potential to cause a physical change which would affect unique ethnic cultural values?

\_\_\_\_\_            \_\_\_\_\_

\_\_\_\_\_      \_\_\_\_\_     

\_\_\_\_\_            \_\_\_\_\_

21. Mandatory Findings of Significance.

- a. Potential to degrade: Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- b. Short-term: Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively, brief, definitive period of time. Long-term impacts will endure well into the future.)

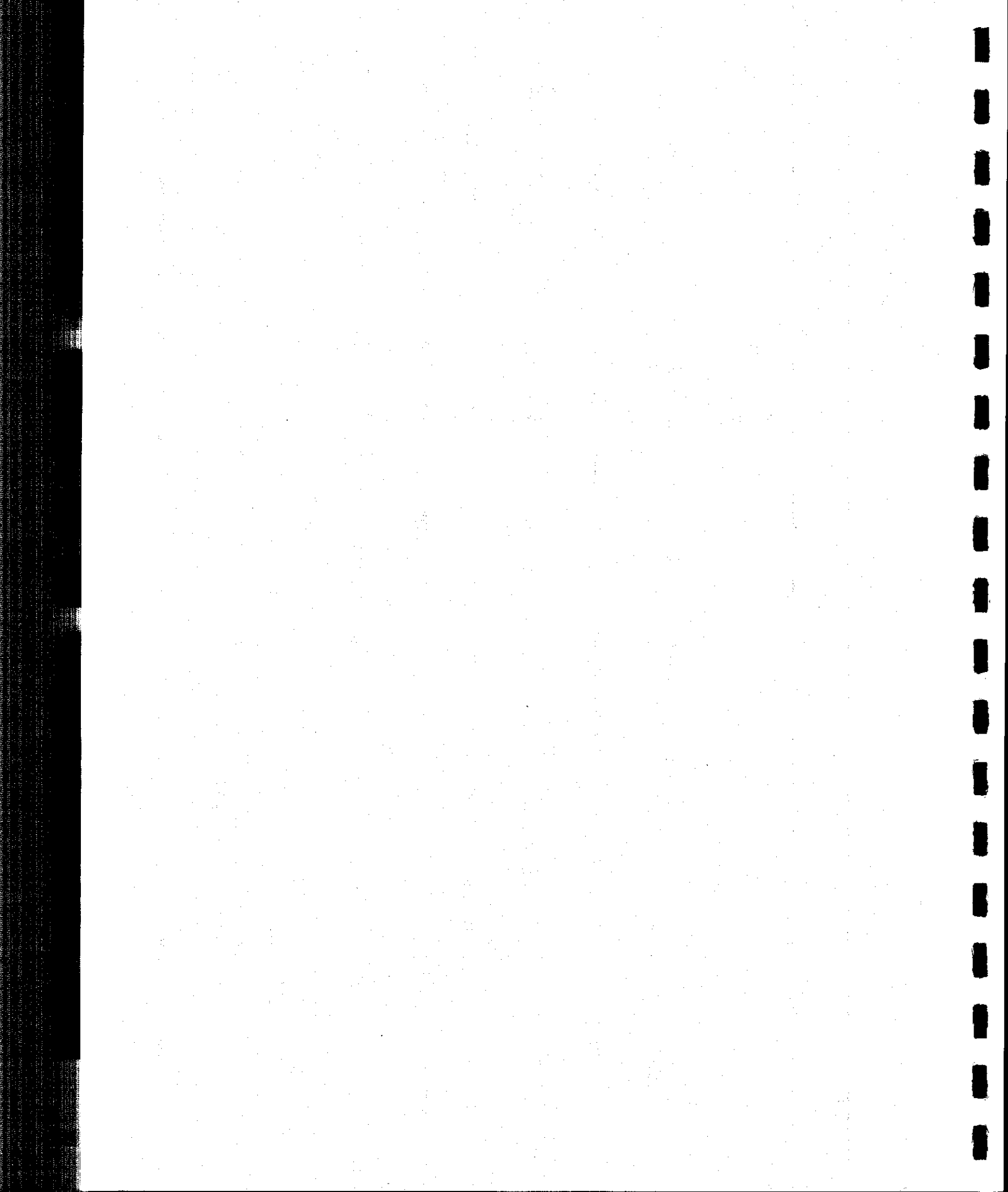
\_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_

\_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_

YES      MAYBE      NO

- c. Cumulative: Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect on the total of those impacts on the environment is significant.)
- 
- d. Substantial Adverse: Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?
-

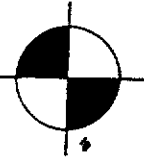
**Appendix H.  
On-site Sewage Disposal  
System Design**



# BUSHNELL & ASSOCIATES, INC.

SURVEYORS · CONSTRUCTION MANAGEMENT · TECHNICAL CONSULTANTS

649 BEAR CREEK ROAD GARBERVILLE, CA 95440  
(707) 923-2104



RECEIVED

JUN - 6 1988

HUMBOLDT CO. HEALTH DEPT.

03 June, 1988

Kevin Metcalfe, Area Sanitarian  
Humboldt County Dept. Of Public Health  
709 Cedar Street  
Garberville, CA 95440

RE: Percolation Test Results  
A.P. No. : 213-262-17  
Project: French's Camp Arena  
Owner: Jack Arthur  
Test Date: 12 May 1988 and 13 May 1988

Mr Metcalfe;

The following data results from percolation testing in accordance with the requirements of Humboldt County Code, Section 612-1 as amended 30 January, 1984.

The accompanying system designs are intended to provide on-site disposal methods sufficient for the 7500 person maximum occupancy and the concession stands operated during the events. Up to ten events may occur within a one year period.

A sand filter and subsurface disposal system is proposed for the Kiwanis' showers maintained within the arena area for staff and security personnel use only. Maximum use values are provided in the accompanying data.

The tests were conducted in 12"x12"x12" deep holes placed at the bottom of five (5) foot deep excavations, located as shown on the accompanying plan.

The logs of soil profiles completed by Jim Clark, County Sanitarian during a previous study indicate that no seepage, mottling, or other evidence of ground water is evident. In this case, a minimum separation of five feet can be maintained between the disposal trenches and sub-surface water.

I am recommending the enclosed disposal designs based upon the percolation study results.

RE: Percolation Test Results

page 2

A.P. No.: 213-262-17

Project: French's Camp Arena

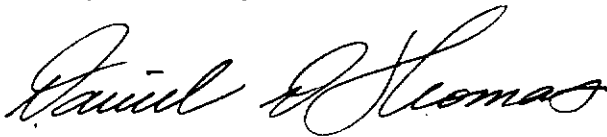
Owner: Jack Arthur

Test Date: 12 May 1988 and 13 May 1988

Systems schematics and typical proposed trench sections are included with the system designs for your review and approval. The site locations are shown on the accompanying plot plan. Percolation study results are attached.

Percolation testing was conducted by me or under my direction in accordance with Humboldt County Sewage Disposal Regulations.

Respectfully Submitted;



Daniel D. Thomas, RCE 35554

cc: file  
client

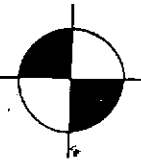
attachments: (13)



# BUSHNELL & ASSOCIATES, INC.

SURVEYORS · CONSTRUCTION MANAGEMENT · TECHNICAL CONSULTANTS

649 BEAR CREEK ROAD GARBERVILLE, CA 95440  
(707) 923-2104



PROJECT: \_\_\_\_\_  
ASSESSOR'S PARCEL NO.: \_\_\_\_\_  
DATE: \_\_\_\_\_

SHEET \_\_\_\_\_ OF \_\_\_\_\_

RECEIVED

JUN - 6 1988

MUMBOLDT CO. HEALTH DEPT.

## DISPOSAL SYSTEM DESIGN:

### DESIGN LOAD:

Maximum capacity of privy holding tanks = 8000 gallons:  
required per event.

assuming 1 gallon/person/event:	7500 gallons/event
All handwashing facilities:	500 gallons/event

---

TOTAL LOAD DETERMINATION: 8000 gallons/event

Maximum frequency of events = 1 event / week

### NOTE:

8000 gallon/event load determination was conceptually approved at a 17 May, 1988 meeting @ D.E.H., Eureka, attended by D.Kelson, DEH; Kevin Metcalfe, DEH; William Rodriguez, RWOCB, Tom Stephens, B&A, Inc; and Jack Arthur, Applicant.

DESIGN LOAD = 8000 gallons/event / 5 days (min) between events  
= 1600 gallons / day

### SIZE TREATMENT TANK:

Minimum tank size per Manual of Septic Tank Practice, U.S. Public Health Service = 1.6 x daily design load.

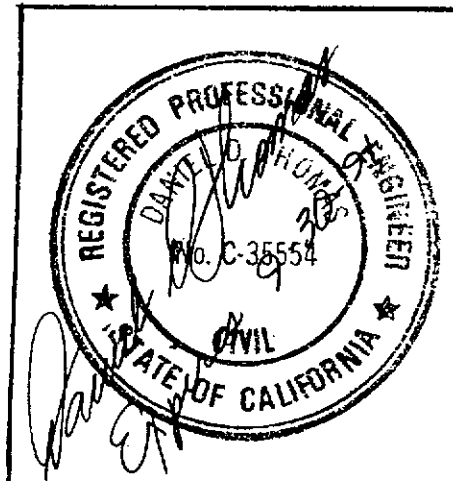
$(1.6) \times 1600 \text{ gal/day} = 2560 \text{ gallons}$

USE (1) 1200 GALLON & (1) 1800 GALLON CONCRETE TANK  
IN SERIES

### NOTE:

On-site waste storage facilities capacity requirements will be determined for future installation by determination of an actual measured volume at 1988 events.

Interim storage facilities consist of 8000 gallon privy capacity, and 1750 gallon pump tank capacities.



PROJECT: \_\_\_\_\_  
ASSESSOR'S PARCEL NO.: \_\_\_\_\_  
DATE: \_\_\_\_\_

SHEET \_\_\_\_\_ OF \_\_\_\_\_

DISPOSAL SYSTEM DESIGN (cont'd.)

LEACH LINE LENGTH (L):

CLASS "A" SYSTEM:

$$L = 1600 \text{ gal/day} / (1.67 \text{ gal/sq ft/day})(6 \text{ sq ft/ lin ft}) \\ = 160 \text{ lin. ft.} \times 2 \text{ fields} = 320 \text{ lin. ft.}$$

CLASS "D" SYSTEM:

$$L = 1035 \text{ sq ft} (0.41) / 1.5 = 283 \text{ lin. ft.}$$

ALTERNATE 1:

USE (6) - 4" O.D. PERFORATED PVC LINES X 50 FT LONG EA.  
IN 18" WIDE (MIN.) TRENCHES X 10 FT O.C.

ALTERNATE 2:

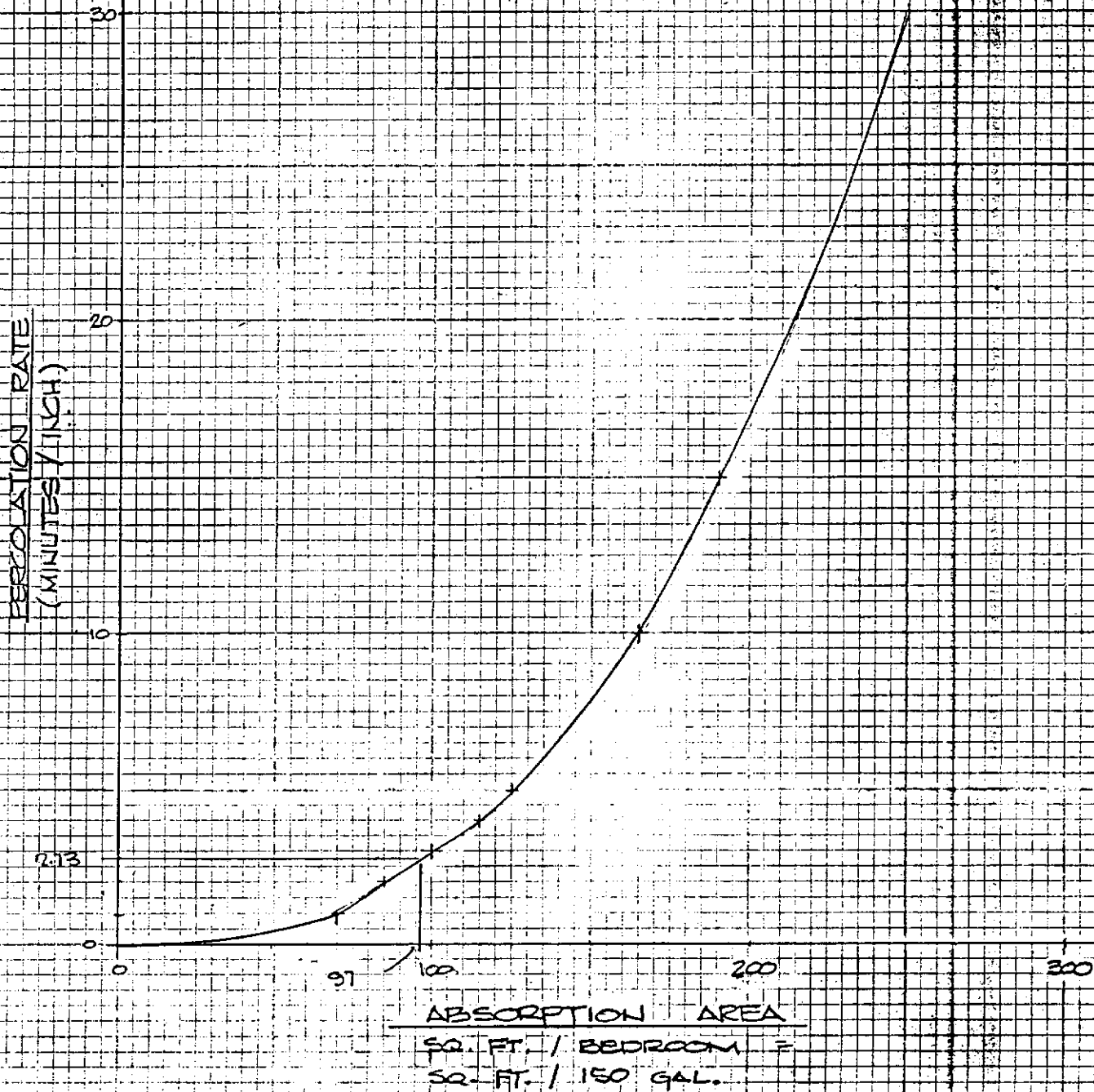
USE (4) - 4" O.D. PERFORATED PVC LINES X 75 FT LONG EA.  
IN 18" WIDE (MIN.) TRENCHES X 10 FT O.C.



PROJECT: \_\_\_\_\_  
ASSESSOR'S PARCEL NO.: \_\_\_\_\_  
DATE: \_\_\_\_\_

SHEET \_\_\_\_\_ OF \_\_\_\_\_

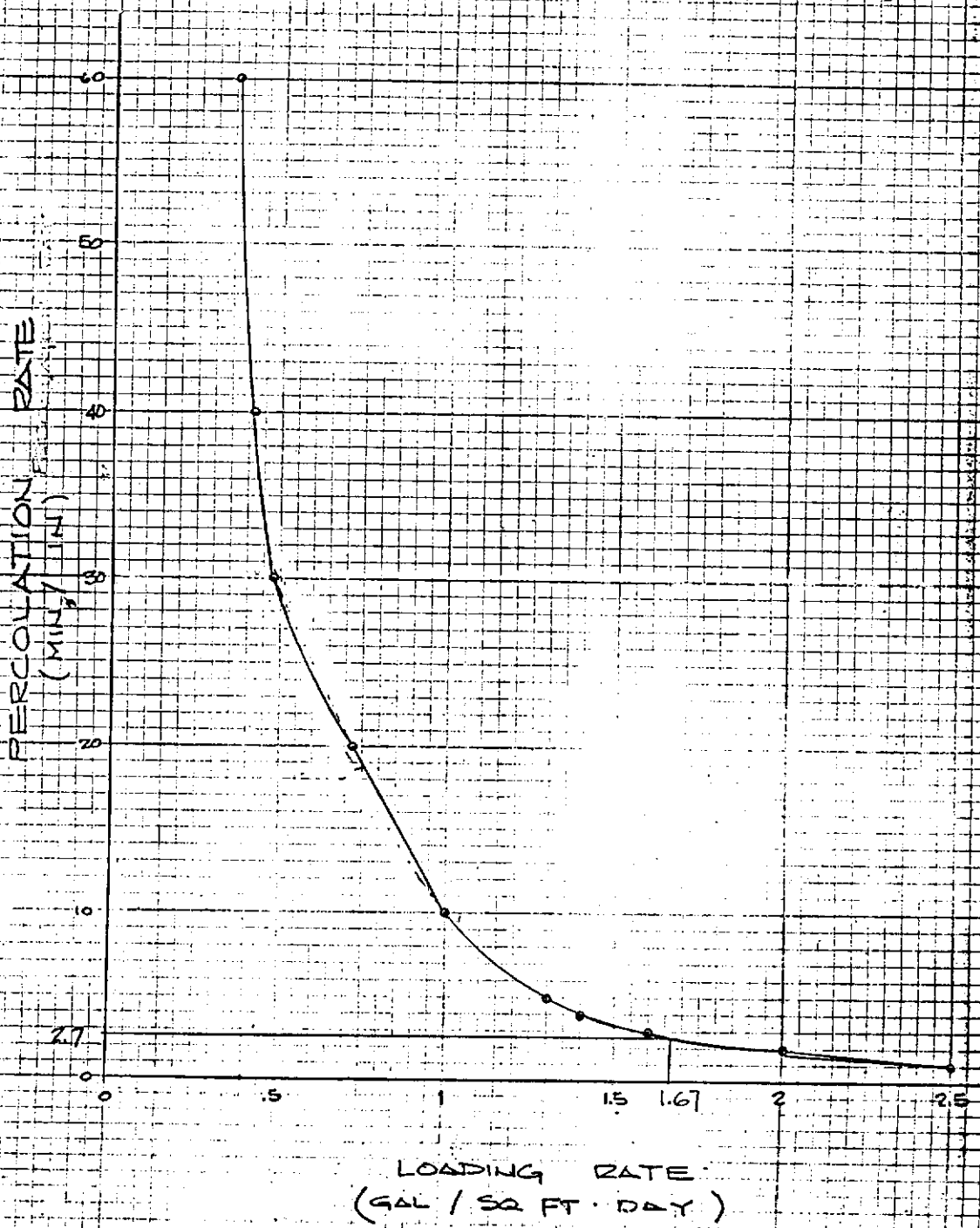
ABSORPTION AREA REQUIREMENT  
FOR CLASS "D" SYSTEMS



PROJECT: \_\_\_\_\_  
ASSESSOR'S PARCEL NO.: \_\_\_\_\_  
DATE: \_\_\_\_\_

SHEET \_\_\_\_\_ OF \_\_\_\_\_

### WASTE WATER LOADING RATES OF DISPOSAL FIELDS



SURVEYORS • CONSTRUCTION MANAGEMENT • TECHNICAL CONSULTANTS

640 BEAR CREEK ROAD GARDNERVILLE, CA 95440  
(707) 923-2200



DATE

DAY	S	M	T	W	TH	F	S
-----	---	---	---	---	----	---	---

Project \_\_\_\_\_ No. \_\_\_\_\_

Contractor \_\_\_\_\_

Subject \_\_\_\_\_

To \_\_\_\_\_

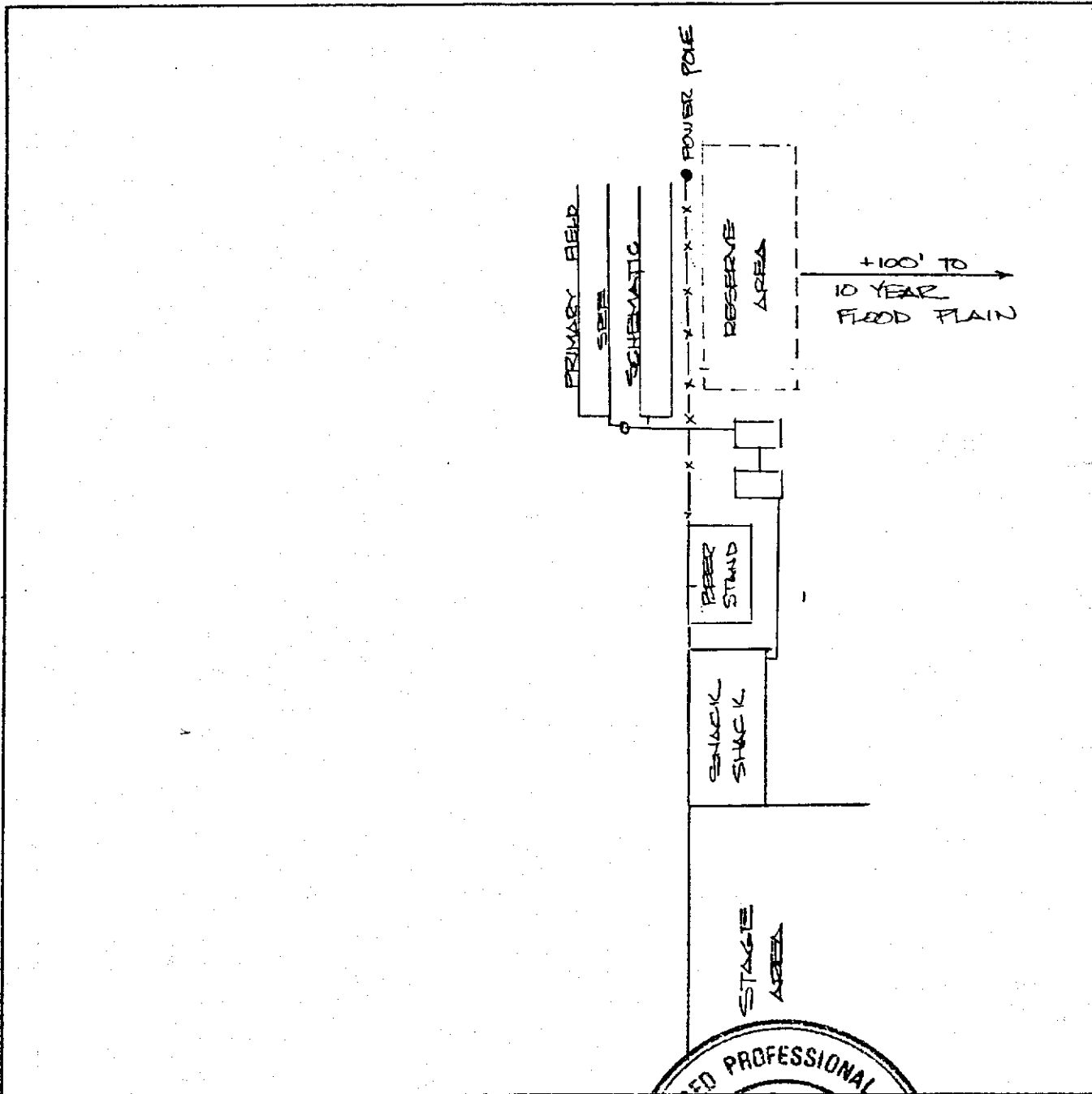
WEATHER

TEMP.

WIND

HUMIDITY

Rate Sun	Clear	Overcast	Rain	Storm
To 32	32-50	50-70	70-85	85 up
Still	Moder	High	Report 70+	
Dry	Moder	Humid		



- DISTRIBUTION:
1. Proj. Mgr.
  2. Field Office
  3. File
  4. Owner

Wiley-Fisk Form B-3

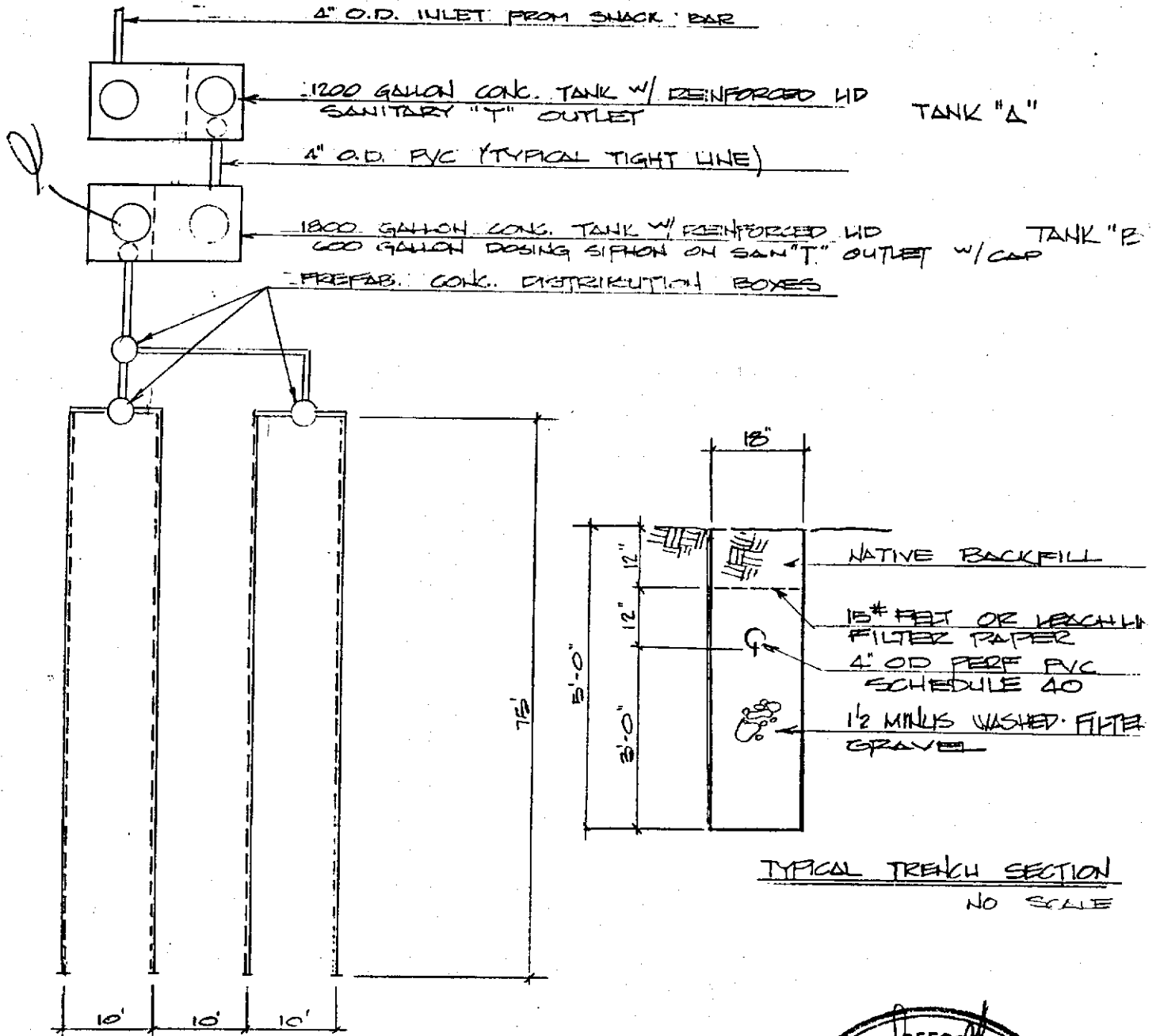
Signature

*Daniel D. Thomas*  
Expires 9/30/91

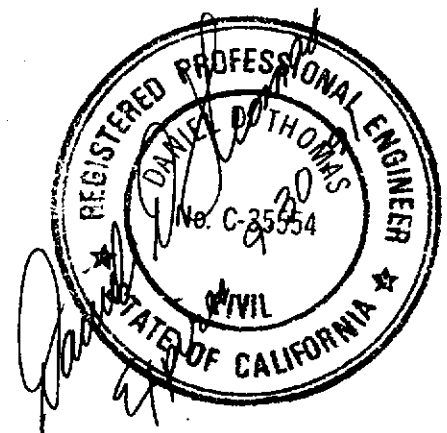


PROJECT: \_\_\_\_\_  
 ASSESSOR'S PARCEL NO.: \_\_\_\_\_  
 DATE: \_\_\_\_\_

SHEET \_\_\_\_\_ OF \_\_\_\_\_



SYSTEM SCHEMATIC  
 - ALTERNATIVE 2 -  
 NO SCALE



642 BEAR CREEK ROAD BARBERVILLE, CA 95440  
(707) 923-2308

DATE 13 MAY '88

Project FRENCH'S CAMP No. \_\_\_\_\_

DAY	S	M	T	W	TH	F	S
							✓

Contractor LEE HUNT

WEATHER	Date Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moderate	High	Report No.	
HUMIDITY	Dry	Moderate	Humid		

Subject SEWAGE DISPOSAL ANALYSIS

To \_\_\_\_\_

EH-1

PERCOLATION TEST DATA

TEST DEPTH BELOW GRADE 50 FT BEGIN PRESOAK: 5: PM 12 MAY '88

REFERENCE LEVEL AT: 14" STABILIZED RATE: 1.82 MIN/IN

TIME	LEVEL (in.)	DROP (in.)	RATE (min/in)	TIME	LEVEL (in.)	DROP (in.)	RATE (min/in)
8:10A	12			9:43	12 <sup>1</sup> / <sub>8</sub>		
8:17	ADD WATER			9:58	3 <sup>7</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>4</sub>	1.82
8:18	12 <sup>1</sup> / <sub>4</sub>			ADD WATER			
8:33	1 <sup>7</sup> / <sub>8</sub>	10 <sup>3</sup> / <sub>8</sub>	1.45	10:00	11 <sup>3</sup> / <sub>4</sub>		
8:36	ADD WATER			10:15	3 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>4</sub>	1.82
8:36	12 <sup>1</sup> / <sub>8</sub>	10	1.5				
8:51	2 <sup>1</sup> / <sub>8</sub>						
8:53	ADD WATER						
8:53	11 <sup>7</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>4</sub>	1.62				
9:08	2 <sup>3</sup> / <sub>4</sub>						
9:10	ADD WATER						
9:10	11 <sup>3</sup> / <sub>4</sub>	8 <sup>3</sup> / <sub>4</sub>	1.71				
9:25	3						
9:27	ADD WATER						
9:27	12 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>2</sub>	1.76				
9:42	3 <sup>3</sup> / <sub>4</sub>						
	ADD WATER						

- DISTRIBUTION:
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  2. Field Office
  3. File
  4. Owner

Signature [Signature] Title \_\_\_\_\_

SURVEYORS • CONSTRUCTION MANAGEMENT • TECHNICAL CONSULTANTS  
 649 BEAR CREEK ROAD GARDENVILLE, CA 95440  
 (707) 923-2300



DATE 13 May '88

DAY 

S	M	T	W	TH	F	S
						✓

Project FRENCH'S CAMP No. \_\_\_\_\_

Contractor LEE HUNT 364662

Subject SEWERAGE DISPOSAL ANALYSIS

To \_\_\_\_\_

WEATHER	Dry Sun	Clear	Overcast	Rain	Storm
TEMP.	To 32	32-50	50-70	70-85	85-100
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid		

EH-2

PERCOLATION TEST DATA

TEST DEPTH BELOW GRADE 5.0' BEGIN PRESOAK: 5: PM 12 MAY '88

REFERENCE LEVEL AT: 13 1/2" STABILIZED RATE: 2.73

TIME	LEVEL (in.)	DROP (in.)	RATE (min/in)	TIME	LEVEL (in.)	DROP (in.)	RATE (min/in)
8:12	12 <sup>5</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>2</sub>	2.0	9:47	12 <sup>1</sup> / <sub>4</sub>	5 <sup>3</sup> / <sub>4</sub>	2.61
8:27	5 <sup>1</sup> / <sub>8</sub> ADD WATER			10:02	6 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	2.73
8:28	12 <sup>1</sup> / <sub>2</sub>	6 <sup>3</sup> / <sub>4</sub>	2.22	10:17	1		
8:43	5 <sup>3</sup> / <sub>4</sub> ADD WATER			10:18	12 <sup>3</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>	2.67
8:44	12 <sup>7</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>2</sub>	2.31	10:33	6 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	2.73
8:59	6 <sup>3</sup> / <sub>8</sub> ADD WATER			10:48	1 <sup>1</sup> / <sub>4</sub>		
9:00	12 <sup>1</sup> / <sub>4</sub>	5 <sup>7</sup> / <sub>8</sub>	2.55				
9:15	6 <sup>3</sup> / <sub>8</sub> ADD WATER						
9:16	12 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	2.73				
9:31	7	6 <sup>1</sup> / <sub>2</sub>	2.73				
9:46	1 <sup>1</sup> / <sub>2</sub> ADD WATER						

- DISTRIBUTION:
1. Proj. Mgr.
  2. Field Office
  3. File
  4. Owner

Signature [Signature] Title \_\_\_\_\_



PROJECT: FRENCH'S CAMP  
ASSESSOR'S PARCEL NO.: 93-232-17  
DATE: 21 JUNE 1988

SHEET \_\_\_\_\_ OF \_\_\_\_\_

SHOWER DISPOSAL SYSTEM:

DESIGN LOAD: ASSUME 10 GALL. / PERSON / DAY (C.D.R. PUBLIC PARK)  
MAX USE 15 PERSONS / DAY (ZIVANIS ONLY)

FACILITY: 3 SHOWERS w/ 2.55 GALL / MIN (C.E.C. PUR # P400-00-020)  
ASSUME 3 PERS @ 10 MIN / DAY (T.F.R.O.M. 2/2/88 D. KELSON)

∴ FLOW BASED ON SDR = 150 GALL / DAY (MIN)  
" " FACILITY = (2.55)(3)(3)(10) = 230.25 GALL / DAY (MAX)

SAND FILTER:

TREATMENT: 20 GALLON SIFTING TANK & DOSING  
SIPHON SUFFICIENT FOR 10 DOSES / DAY =  
= 40 GALLONS / DOSE

LOADING: 7.5 GALL / DAY / SQ FT (MEDIAN RATE PER U.S. EPA, 1980)

MEDIA MATERIAL: 0.5 MM TO 1.0 MM (SIEVE ANALYSIS REQ'D)

MEDIA BED DEPTH: 30"

UNDERDRAIN: FEA GRAVEL (1/4" TO 3/4") FILTER MEDIA  
SLOPE: -0.1% TO CENTER TRENCH

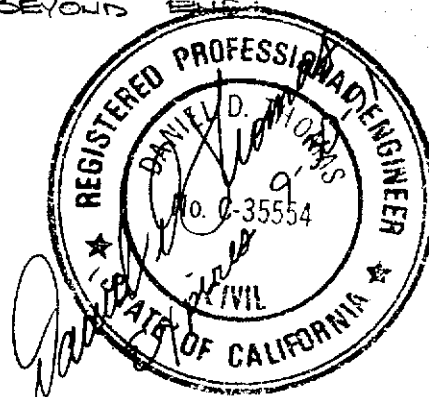
DOSING: 2" COVER / DOSE

FIELD AREA:  $(332.5 \text{ GALL / DAY}) / (7.5 \text{ GALL / DAY / SQ FT}) =$   
 $= 51.0 \text{ SQ FT}$   
 $= 4' \times 13' \text{ AREA}$

SUBSURFACE DISPOSAL @ 1.6 GALL / SQ FT / DAY (SDR LOADING RATE)

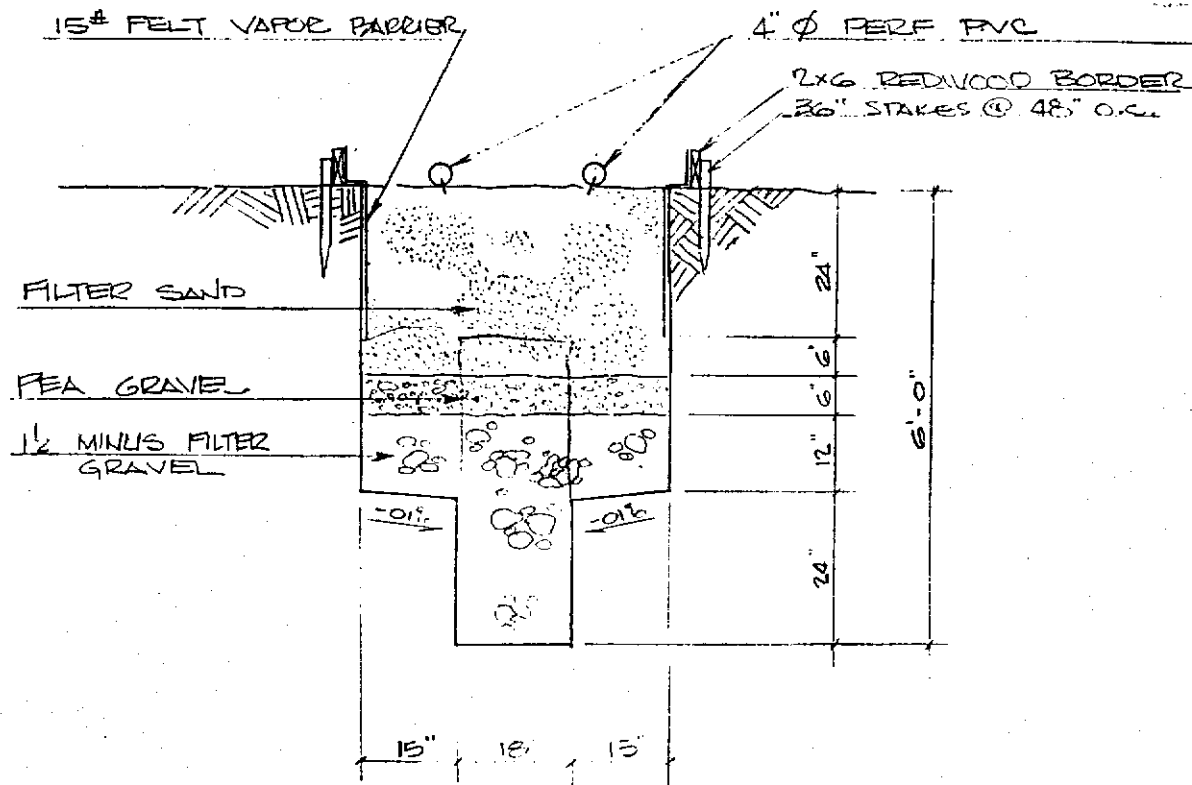
$$L = \frac{332.5 \text{ GALL / DAY}}{(1.6 \frac{\text{GALL}}{\text{SQ FT}}) (8 \text{ SQ FT / LIN FT})} = 30'$$

EXTEND DISPOSAL TRENCH 3/2 FT BEYOND END  
OF SAND FILTER LIMITS



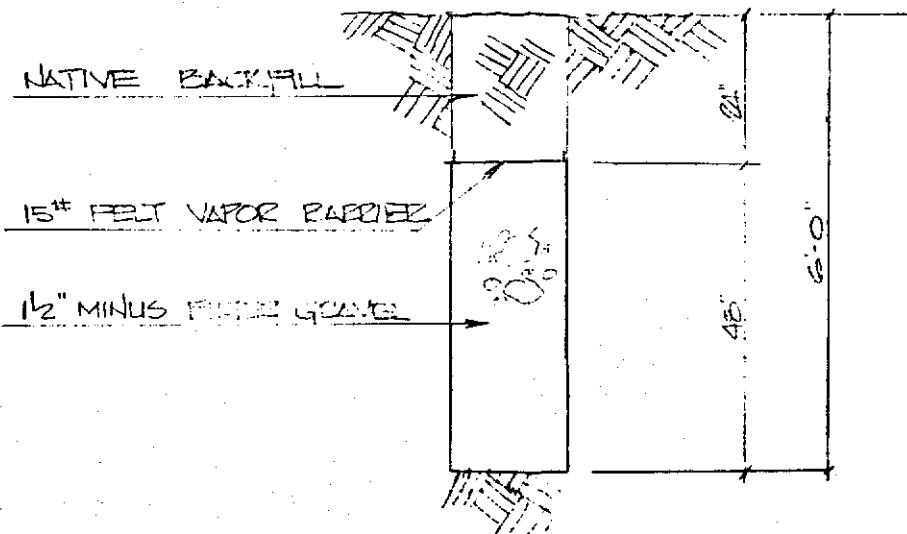
PROJECT: \_\_\_\_\_  
ASSESSOR'S PARCEL NO.: \_\_\_\_\_  
DATE: \_\_\_\_\_

SHEET \_\_\_\_\_ OF \_\_\_\_\_



SAND FILTER SECTION

1" = 2.5'



DISPOSAL TRENCH SECTION

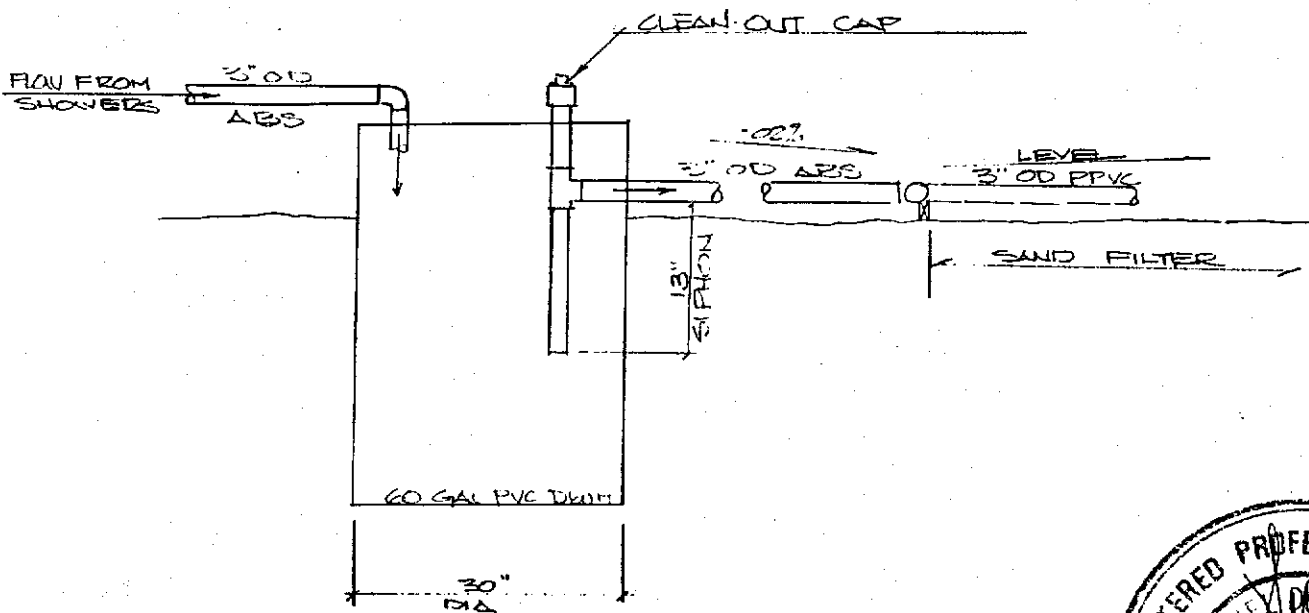


PROJECT: JACK ARTIUE - FRENKLI'S CAMP

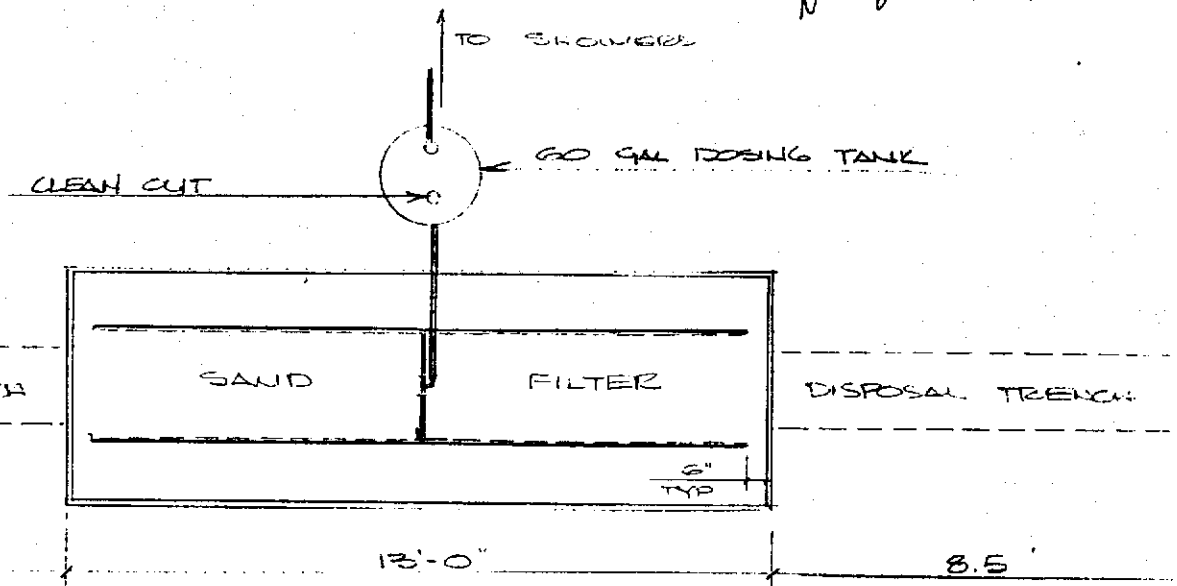
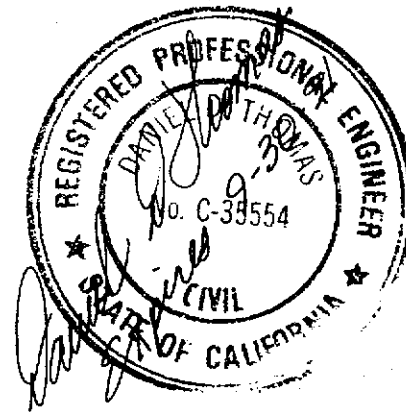
SHEET \_\_\_\_\_ OF \_\_\_\_\_

ASSESSOR'S PARCEL NO.: \_\_\_\_\_

DATE: \_\_\_\_\_



DOSEING TANK SECTION  
NO SCALE



SYSTEM SCHEMATIC  
NO SCALE



FIELD INVESTIGATION REPORT

RECEIVED

JUN 16 1988

DATE 10 June 80 13 June

DAY	S	M	T	W	TH	F	S
	→						→

Project FRANKS CAMP AREA No. \_\_\_\_\_

Contractor LEE HUNT

UMBOLDT CO. HEALTH DEPT.

Subject SEWAGE QUANTITY MONITOR

To \_\_\_\_\_

WEATHER

TEMP.

WIND

HUMIDITY

Date	Clear	Overcast	Rain	Snow
To 32	X	50-70	70-85	85 up
Still	Moder	High	Report No.	
Dry	Moder	Humid		
	X			

DATE	TIME	QUANTITY	REMARKS
10 JUNE	7-10 PM	0	RICK REESE & BSA, INC STAFF ON SITE NO CHARGES PLACED IN TRAPS - KITCHEN SINKS ONLY LOAD ON SYSTEM
11 JUNE	8:40 A	250 gal	MORNING MAINT. BELIEVED ALL PRIVIES - NO ACCESS TO PRIVIES BY MID-AFTERNOON.
	10:30 A	250 gal	
12 JUNE	9:30 A	250 gal	20 PRIVIES AT ROAD OF AREA WERE MOST USED. SINGLE PRIVY @ ROAD TO AREA OVERUSED. OTHERS SUSTAINED MINIMAL USE
	10:15 A	250 gal	
	11:05 A	250 gal	
	1:10 P	250 gal	
	1:40 P	250 gal	
	2:20 P	250 gal	
	2:50 P	250 gal	
	3:15 P	250 gal	
4:00 P	-250 gal		

TOTAL CHARGES - 2750 gal

+ KITCHEN USE 2300 gal

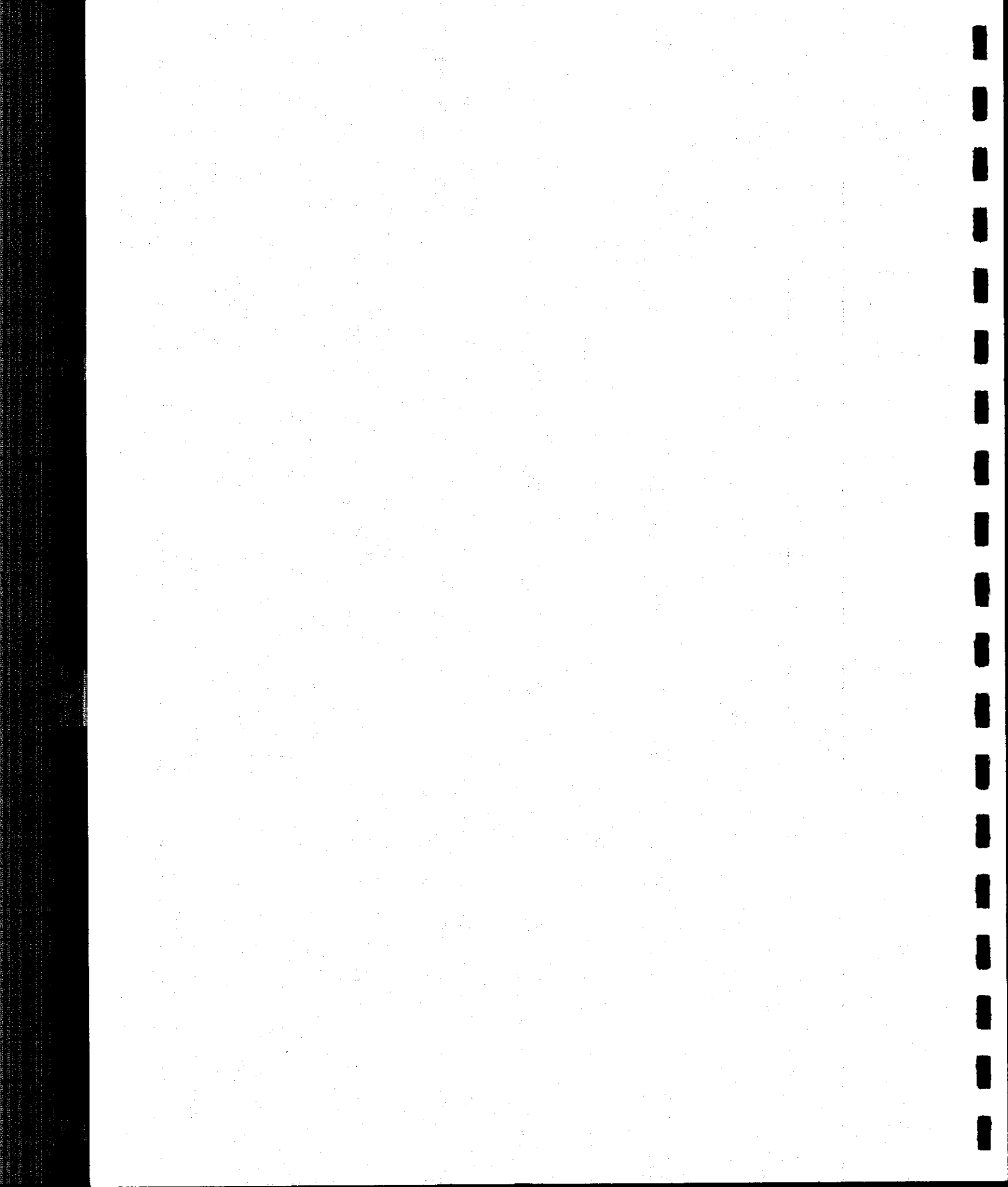
TOTAL EVENT FLOW = 3000 gal

- DISTRIBUTION:
1. Proj. Mgr.
  2. Field Office
  3. File
  4. Owner

Signature

Title

**Appendix 2 - Initial Study**



## Initial Study and Checklist

**Title of Proposal:** A Conditional Use Permit for the 1993-1997 Reggae on the River events for the first weekend in August of each year. Attendance is limited to a maximum of 10,000 people (8,000 attendees and 2,000 staff, artist, vendors and guest). Temporary on-site camping facilities for up to 4,000 people.

**Date Checklist Submitted:** December 8, 1992

**Agency Requiring Checklist:** Humboldt County Planning Division

**Agency Address:** 3015 "H" Street

**City/State/Zip:** Eureka, California, 95501

**Agency Contact:** Kevin Caldwell, Senior Planner

**Phone:** (707) 445-7541

### DETERMINATION:

**On the basis of this initial evaluation:**

The Humboldt County Planning Division has determined that the proposed project *may* have a significant effect on the environment, and therefore recommends that an Environmental Impact Report (EIR) be required.

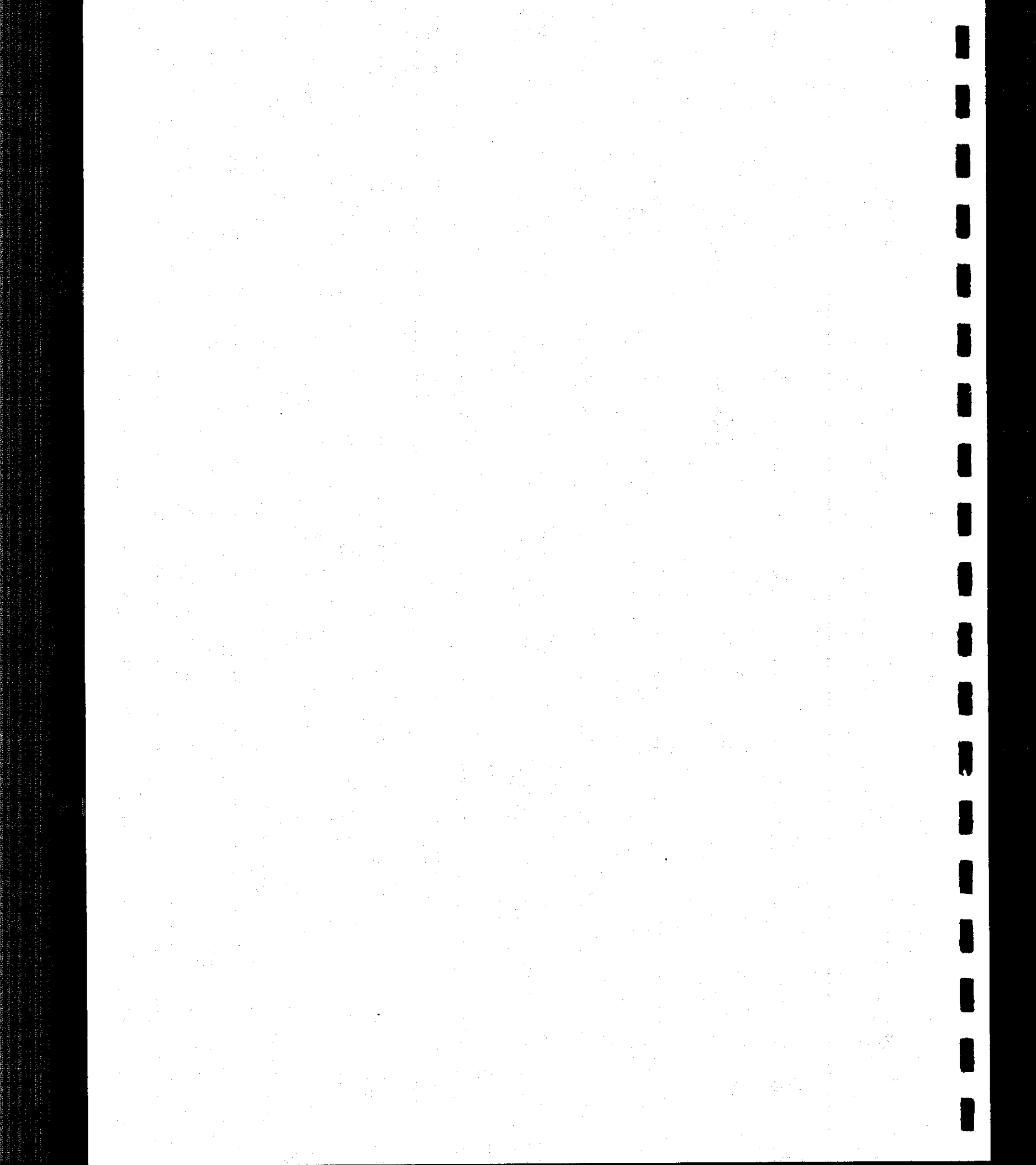
Kevin Caldwell  
Signature

KEVIN CALDWELL  
Print Name

Humboldt County  
For

December 15, 1992  
Date

PLANNING DIVISION  
OF THE PLANNING AND BUILDING DEPARTMENT  
**COUNTY OF HUMBOLDT**  
3015 H STREET  
EUREKA, CALIF. 95501-4484 PHONE (707) 445-7541

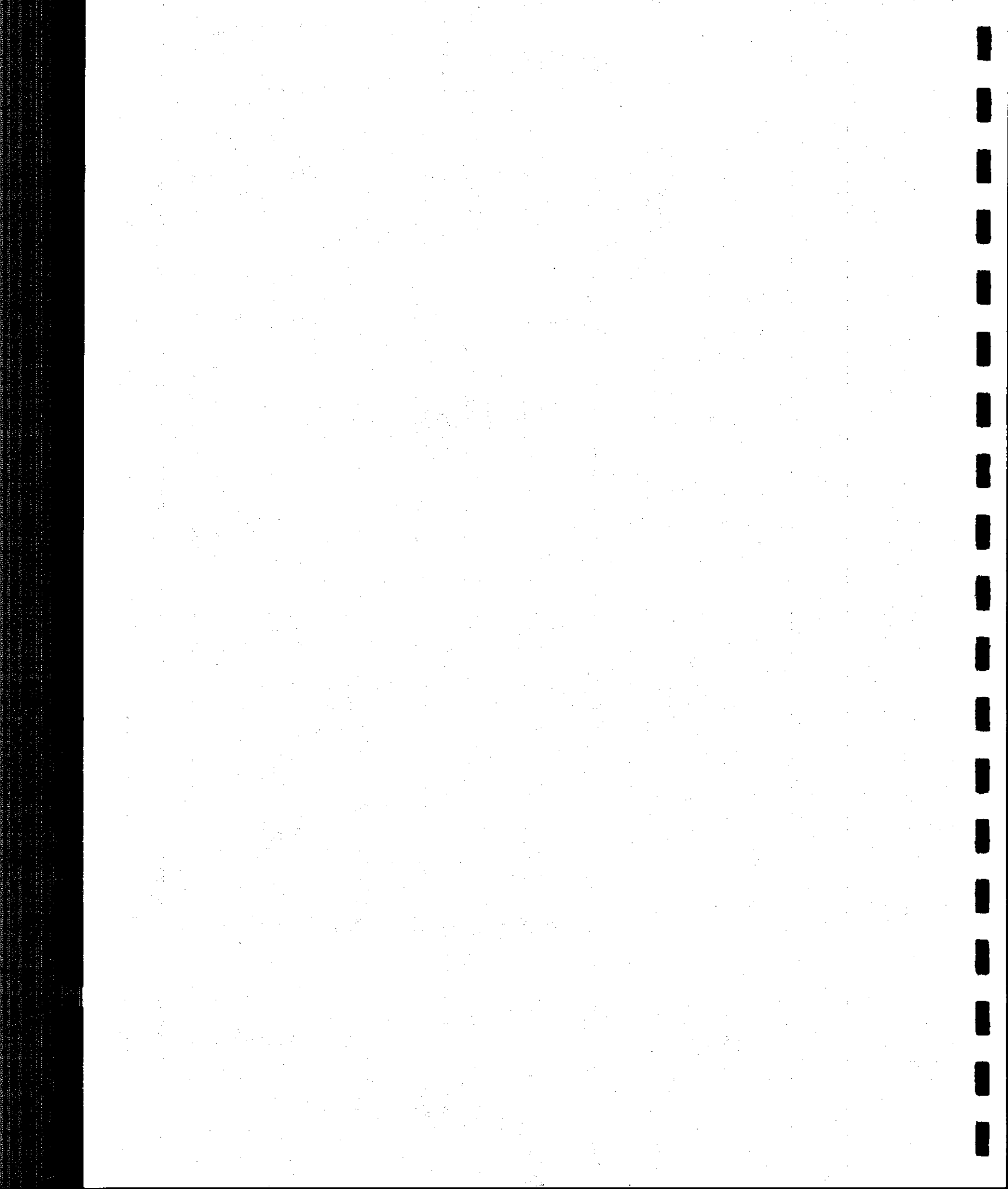




**INITIAL STUDY  
FOR A FIVE YEAR  
CONDITIONAL USE PERMIT  
FOR  
REGGAE ON THE RIVER  
1993-1997**

**PROJECT:** A Conditional Use Permit for the 1993-1997 Reggae on the River events for the first weekend in August of each year. Attendance is limited to a maximum of 10,000 people (8,000 attendees and 2,000 staff, artist, vendors and guest). Temporary on-site camping facilities for up to 4,000 people.

**PROJECT LOCATION:** The project site is located in the Garberville area on the east side of Highway 101, approximately 0.7 of a mile from the intersection of Cook's Valley Road with Highway 101. On property known as 675 Highway 101.



## SECTION II.

ENVIRONMENTAL IMPACTS

(All "NO" answers are based on the enclosed Tentative Map Checklist and tentative map; a field inspection of the project site; referrals from all affected agencies; and a review of reference materials in the Planning Division of the Humboldt County Planning & Building Department.)

	<u>YES</u>	<u>MAYBE</u>	<u>NO</u>
1. <u>Earth.</u> Will the proposal result in:			
a. Unstable earth conditions or in changes in geologic substructures?	_____	_____	_____✓
b. Disruptions, displacements, compaction or overcovering of the soil?	_____	_____✓	_____
c. Change in topography or ground surface relief features?	_____	_____	_____✓
d. The destruction, covering or modification of any unique geologic or physical features?	_____	_____	_____✓
e. Any increase in wind or water erosion of soils, either on or off the site?	_____	_____	_____✓
f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	_____	_____✓	_____
g. Exposure of people or property to geologic hazards, such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	_____	_____	_____✓
2. <u>Air.</u> Will the proposal result in:			
a. Substantial air emissions or deterioration of ambient air quality?	_____	_____✓	_____
b. The creation of objectionable odors?	_____	_____✓	_____
c. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?	_____	_____	_____✓
3. <u>Water.</u> Will the proposal result in:			
a. Changes in currents, or the course of direction of water movements, in either marine or fresh waters?	_____	_____✓	_____

YES      MAYBE      NO

- |   | YES   | MAYBE  | NO     |
|---|-------|--------|--------|
| b. Changes in absorption rates, drainage patterns or the rate and amount of surface runoff?   | _____ | _____  | _____✓ |
| c. Alterations to the course or flow of flood waters?   | _____ | _____  | _____✓ |
| d. Change in the amount of surface water in any water body?   | _____ | _____  | _____✓ |
| e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to, temperature, dissolved oxygen or turbidity?              | _____ | _____✓ | _____  |
| f. Alteration of the direction or rate of flow of ground waters?  | _____ | _____✓ | _____  |
| g. Change in the quantity of groundwaters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?                | _____ | _____✓ | _____  |
| h. Substantial reduction in the amount of water otherwise available for public water supplies?  | _____ | _____✓ | _____  |
| i. Exposure of people or property to water-related hazards such as flooding or tidal waves?   | _____ | _____  | _____✓ |
| <b>4. <u>Plant Life.</u> Will the proposal result in:</b>   |       |        |        |
| a. Change in the diversity of species or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?                                   | _____ | _____  | _____✓ |
| b. Reduction of the numbers of any unique, rare, or endangered species of plants?   | _____ | _____  | _____✓ |
| c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?   | _____ | _____  | _____✓ |
| d. Reduction in acreage of any agricultural crop?   | _____ | _____  | _____✓ |
| <b>5. <u>Animal Life.</u> Will the proposal result in:</b>  |       |        |        |
| a. Change in the diversity of species, or numbers of any species of animal (birds, land animals including reptiles; fish and shellfish, benthic organisms, or insects)? | _____ | _____✓ | _____  |
| b. Reduction of the numbers of any unique, rare or endangered species of animals?   | _____ | _____✓ | _____  |

YES      MAYBE      NO

- |     |   |     |     |     |
|-----|---|-----|-----|-----|
| c.  | Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?  | --- | --- | ✓   |
| d.  | Deterioration to existing fish or wildlife habitat?   | --- | ✓   | --- |
| 6.  | <u>Noise.</u> Will the proposal result in:  |     |     |     |
| a.  | Increases in existing noise levels?   | ✓   | --- | --- |
| b.  | Exposure of people to severe noise levels?  | --- | ✓   | --- |
| 7.  | <u>Light and Glare.</u> Will the proposal produce new light or glare?   | ✓   | --- | --- |
| 8.  | <u>Land Use.</u> Will the proposal result in a substantial alteration of the present or planned land use of an area?  | --- | ✓   | --- |
| 9.  | <u>Natural Resources.</u> Will the proposal result in:  |     |     |     |
| a.  | Increase in the rate of use of any natural resources?   | ✓   | --- | --- |
| 10. | <u>Risk of Upset.</u> Will the proposal involve:  |     |     |     |
| a.  | A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions? | --- | --- | ✓   |
| b.  | Possible interference with an emergency response plan or an emergency evacuation plan?  | ✓   | --- | --- |
| 11. | <u>Population.</u> Will the proposal alter the location, distribution, density or growth rate of the human population of an area?   | --- | ✓   | --- |
| 12. | <u>Housing.</u> Will the proposal affect existing housing, or create a demand for additional housing?   | --- | --- | ✓   |
| 13. | <u>Transportation/Circulation.</u> Will the proposal result in:   |     |     |     |
| a.  | Generation of substantial additional vehicular movement?  | ✓   | --- | --- |
| b.  | Effects on existing parking facilities, or demand for new parking?  | ✓   | --- | --- |
| c.  | Substantial impact upon existing transportation systems?  | ✓   | --- | --- |

	YES	MAYBE	NO
d. Alterations to present patterns of circulation or movement of people and/or goods?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Alterations to waterborne, rail or air traffic?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. <u>Public Services.</u> Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:			
a. Fire protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Parks or other recreational facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Maintenance of public facilities, including roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Other governmental services?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15. <u>Energy.</u> Will the proposal result in:			
a. Use of substantial amounts of fuel or energy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. <u>Utilities and Service Systems.</u> Will the proposal result in a need for new systems, or substantial alterations to the following utilities:			
a. Power or natural gas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Communications systems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Water?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Sewer or septic tanks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Storm water drainage?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Solid waste and disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YES      MAYBE      NO

17. Human Health. Will the proposal result in:

- a. Creation of any health hazard or potential health hazard (excluding mental health)?
- b. Exposure of people to potential health hazards?

18. Aesthetics. Will the proposal result in:

- a. The obstruction of any scenic vista or view open to the public?
- b. The creation of an aesthetically offensive site open to public view?

19. Recreation. Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?

20. Cultural Resources. Will the proposal:

- a. Result the alteration of or the destruction of a prehistoric or historic archaeological site?
- b. Result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object?
- c. Have the potential to cause a physical change which would affect unique ethnic cultural values?

21. Mandatory Findings of Significance.

- a. Potential to degrade: Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- b. Short-term: Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively, brief, definitive period of time. Long-term impacts will endure well into the future.)

YES      MAYBE      NO

- c. Cumulative: Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect on the total of those impacts on the environment is significant.)
- d. Substantial Adverse: Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

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