

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
(P31) 427-4863

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Staff report: 5/24/01
Hearing date: 6/13/01

STAFF REPORT: REGULAR CALENDAR

Application number 3-01-019, Old Salinas River Channel Dredging

Applicant

Monterey County Water Resources Agency

Hugo Tottino

George Edward Boutonnet Trust

Gloria Cole Trust Et al

Luis A. Scattini - Family Limited Partnership

Assessors Parcel Number

APN 229-041-008

APN 135-021-001

APN 135-053-002

APN 135-053-003

APN 135-021-005

APN 229-041-007

APN 135-021-004

APN 229-041-012

Agents Bob Meyer, Monterey County Water Resources Agency
Frank Pierce, Lee & Pierce, Inc.

Project location Old Salinas River Channel, between Salinas River Lagoon tide gate and Monterey Dunes Way Road, North Monterey County.

Project description Dredging of approximately 15,000 cubic yards of material from selected locations in approximately 2.4 miles of drainage channel

Approvals Received US Army Corps of Engineers 404 permit (approved xx); State Lands Commission 5-year lease Agreement (approved 12/1/00); California Department of Fish and Game Streambed Alteration Agreement (approved 10/6/00); Monterey County Grading Exemption (PD01014)

File documents Post Dredging Management Standards (Revised 11/5/00; approved 12/4/00); Monterey County Water Resources Agency Mitigated Negative Declaration (6/26/00); Old Salinas River Channel Maintenance 401 Certification Application (7/14/00); U.S. Army Corps of Engineers Section 10 Application; Coastal Development Permits 3-95-074 and 3-01-019.



California Coastal Commission
June 13, 2001 Meeting in Los Angeles

Staff: K. Cuffe Approved by: *Rsb*

Staff recommendation... Approval with Conditions

Summary of Staff Recommendation: Staff recommends approval of this proposal to dredge approximately 15,000 cubic yards of material from the Old Salinas River Channel (one-time only). The project raises questions concerning protection of water quality and wetland habitat, as well as maintenance of flood management capacity and protection of agricultural lands. As conditioned to require: conformance with previously approved Post Dredging Management Standards, sediment testing prior to dredging, management of dredge disposal, and coordination and review by other government agencies, the project is consistent with the resource protection policies of the Coastal Act.

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Exhibits

- A. Regional Location Map
- B. Project Vicinity Maps
- C. Assessors Parcel Maps of Project Area
- D. Coastal Commission Post LCP-Certification Permit and Appeal Jurisdiction Map
- E. North Monterey County Land Use Plan Maps
- F. Project Site Plans, Cross Sections and Photos
- G. Post Dredging Management Standards



I. Staff Recommendation on Coastal Development Permit

The staff recommends that the Commission, after public hearing, **approve** the proposed project subject to the standard and special conditions below. Staff recommends a YES vote on the motion below. Passage of this motion will result in approval of the permit as conditioned and adoption of the resolution and findings below. The motion passes only by affirmative vote of a majority of the Commissioners present.

***Motion:** I move that the Commission approve Coastal Development Permit Number 3-01-019 subject to the conditions below and that the Commission adopt the following resolution:*

RESOLUTION FOR APPROVAL WITH CONDITIONS:

The Commission hereby grants a permit for the proposed development and adopts the findings set forth below on the grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the California Coastal Act of 1976 (Coastal Act) and will not prejudice the ability of the local government having jurisdiction over the area to prepare a local coastal program conforming to Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. Conditions of Approval

A. Standard Conditions

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.



- 5. Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

B. Special Conditions

- 1. Terms of Permit Conditions.** This coastal development permit is for the one time dredging and dredge spoil disposal of up to 15,000 cy of the Old Salinas River Channel from the area specified between the slidegate at the Salinas River Lagoon to just south of Monterey Dunes Way Road, as shown on Exhibit F. Project activities shall be completed between July 1 and October 15, 2001, according to a schedule submitted for Executive Director review and approval at least two weeks prior to commencement of work. Habitat restoration work pursuant to condition #3 may be scheduled to extend beyond October 15, 2001.
- 2. Post Dredging Management Standards.** Any dredge and disposal activities shall be conducted in conformance with the approved Post Dredging Management Standards (dated Revised November 5, 2000) and approved by the Executive Director on December 4, 2000 (Exhibit G).
- 3. Habitat Restoration.** This permit allows the applicants to undertake habitat restoration activities such as planting low lying ground cover on channel banks or within vegetated swales to minimize sediment input to the channel, planting trees or tall shrubs to provide shade and thus refugia for fish as well as providing perches for birds of prey, and construction of perch poles for birds of prey in order to keep the rodent population in check, and thus allow revegetation efforts not to have negative impact on agricultural activities. The main purpose of any such habitat restoration for the Old Salinas River Channel shall be to improve the aquatic habitat potential of the Old Salinas River Channel, for steelhead and other anadromous fish species. Prior to commencement of any such activities, the applicant(s) shall submit plans for Executive Director review and approval along with evidence of any other agency approvals.
- 4. Sediment Testing.** Prior to Dredging, sediment samples must be collected from areas to be dredged, and analyzed using EPA Method 8080, to determine the levels of persistent agricultural chemicals. Samples must be taken from a depth far enough below the actual level of dredging to assure that there is no potential for the dredge operation to disturb contaminated sediments and to ensure that post-dredge river flow will not expose and suspend contaminated sediments. Sediment sampling test results must be submitted to and approved by the Department of Fish and Game prior to the start of maintenance activities requiring disposal of sediment on adjacent fields. If residual levels are less than those found on adjacent fields, and if approved by Department of Fish and Game, dredged sediments may be placed on the adjacent fields, consistent with Special Conditions 2 and 5. Sediments with residual levels greater than those found on adjacent fields shall be deposited at an off-site location without tile drains to ensure that waters from these sediments do not reenter the Old Salinas River Channel. Under this permit, a portion of parcel APN 135-053-02 (shown as Alternate disposal Area on Exhibit B2), is authorized for use as a dredge disposal site for sediments with



residual levels greater than those found on adjacent fields. This permit allows no other off-site location without prior Executive Director review and approval.

5. Dredging and Dredge Disposal.

- (a) Prior to dredging, silt fencing shall be placed at the north and south end of the project work area to mitigate for increased turbidity due to dredging activities. Silt fencing shall also be placed north and south of the vegetated area adjacent to the Monterey Dunes Way Bridge crossing the OSRC to ensure that this area shall remain undisturbed by dredging and disposal activities. The silt fencing should be checked before beginning and daily during dredging operations to ensure that the fencing is in place and working properly. Silt fencing should be repaired or replaced as necessary.
- (b) The channel shall be dredged to the maximum width of 16 feet (channel base defined in the Maintenance Standards). As described in the Management Standards, all sediment removed shall be returned to adjacent fields only when residual levels of persistent agricultural chemicals, analyzed using EPA Method 8080, are equal to or below limits established by the California Department of Fish and Game.
- (c) Prior to any dredge disposal on adjacent farm land or field roads, the road or land should be graded in a way that ensures that sediment and water will not flow back into the channel. This may include the construction of a small containment berm along the channel side of the road or field. Disposal of dredge material in the oxbow area shall be allowed provided it does not increase the ground surface elevation more than one foot.
- (d) The channel edges and the location of any silt dam/berm shall be staked in the field. If non-permeable material is used for any berm it shall be covered with filter fabric and clean fill to allow for natural revegetation to occur. Revegetation atop channel banks and containment berms shall be allowed as part of a long-term management plan designed to provide for future habitat restoration.
- (e) An on-site project monitor shall be designated to provide supervision for the duration of the entire project. The name and qualifications of the project monitor shall be submitted to the Executive Director for review and approval prior to commencement of any dredging activities.
- (f) Upon project completion the project engineer shall certify in writing that work has occurred in compliance with all approved plans. Any changes to the construction plans during the project shall require review by the Executive Director prior to implementation and may require an amendment to this permit.

- 6. Agreement with Monterey County Water Resources Agency.** Each party signatory on the permit application is responsible for ensuring that all conditions of the permit are complied with. Should any future agreement regarding how the project is to be accomplished be developed between the



County and the other applicant/owners, the County shall submit a copy of any such agreement to the Executive Director for review and approval.

7. Other Agency Approvals. PRIOR TO TRANSMITTAL OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit to the Executive Director for review and approval:

(a) Monterey County Approval: The permittee shall provide evidence of Monterey County Planning and Building Department approval of associated project grading, or evidence that no such approval is required.

(b) State Lands Commission Review: The permittee shall obtain a written determination from the State Lands Commission that:

1. No state lands are involved in the development; or
2. State lands are involved in the development, and all permits required, including dredging permit, by the State Lands Commission have been obtained; or
3. State lands may be involved in the development, but pending a final determination of state lands involvement, an agreement has been made by the applicant with the State Lands Commission for the project to proceed without prejudice to the determination.

8. Other Agency Approvals. PRIOR TO COMMENCEMENT OF DREDGING ACTIVITIES, permittee shall submit to the Executive Director:

(a) U.S. Army Corps of Engineers Permit: A copy of a U.S. Army Corps of Engineers permit, or letter of permission, or evidence that no Corps permit is necessary.

(b) U. S. Coast Guard: Approval from the U. S. Coast Guard for construction in U. S. Navigable Waters or documentation that no such approval is necessary.

(c) California Department of Fish and Game: All plans, reports, and test results required by the State Department of Fish and Game Final Section 1601 Notification shall be submitted for Executive Director review and approval. Any modification to plans shall require review by the Executive Director prior to implementation.

III. Recommended Findings and Declarations

The Commission finds and declares as follows:

A. General Project Location & Background

The project consists of dredging approximately 15,000 cubic yards of material from approximately 2.4 miles of the Old Salinas River Channel between the Salinas River Lagoon and Monterey Dunes Way, in



North Monterey County (see Exhibits A and B). The Old Salinas River Channel (OSRC) hydrologically connects the Salinas River Lagoon with the Moss Landing Harbor approximately five miles north. Prior to the construction of Moss Landing Harbor, and the emplacement of the slidegate at the Salinas River Lagoon, the Salinas River flowed northward of the current river mouth, paralleling the coast till it exited near the south end of Zmudowski Beach, north of Elkhorn Slough. Although the drainage is now highly managed by control structures located near both ends of the channel, the Old Salinas River Channel now carries streamflow and agricultural runoff to Moss Landing Harbor. The Old Salinas River Channel receives streamflow from the Salinas River Lagoon via a slidegate culvert (Exhibit E1). The channel then meanders northward and discharges through the Potrero Road tide gates, 16 flap gates at the downstream end of the channel, which allow flows to exit when tide levels on the north side of the gates are lower than water levels on the south side of the gates. The Tembladero Slough enters the Old Salinas River Channel approximately 600 feet northwest of the intersection of Molera Road and Monterey Dunes Way Road. Both the Old Salinas River and the Tembladero Slough drain agricultural lands within the Salinas River Watershed.

Surrounding land uses in the immediate project area (Exhibit E1) include agricultural production (Agricultural Preservation) along both the east and west side of the channel, Scenic and Natural Resource Recreational lands west of the channel (within the Salinas River State Beach), and High Density Residential west of the channel (occupied by the Monterey Bay Dunes Colony). Access to the Monterey Bay Dunes Colony is from Highway One via Monterey Bay Dunes Way which crosses the OSRC at the north end of the project area (Exhibit B). Unpaved farm roads parallel the OSRC and provide access to farmlands surrounding the channel.

The water table immediately adjacent to the OSRC is very shallow and is easily affected by surface runoff, tidal action and flows from the Salinas River lagoon. Subterranean tile drains are used to control the water table and salinity in the fields adjacent to the channel. These subterranean tile drains discharge to the OSRC, so it is important that proper filtration measures are used to remove sediments and chemical constituents prior to tile drain discharge into the OSRC.

Previous Project Impacts and Benefits: The Monterey County Water Resources Agency (formerly known as the Monterey County Flood Control and Water Conservation District) has had a part in several of the projects that have affected the Old Salinas River's hydrology and hence its wetland resources. It received a coastal permit to replace the Portrero Road tide gates in 1982 (3-82-30) and an after-the-fact amendment to add more gates in 1984 after the original project did not function properly (3-82-30-A). The purpose of the Potrero Road tide gates is to prevent flooding of the upstream agricultural lands while maintaining adequate water in the channel to support wetland vegetation. Conditions of the previous permits required wetland restoration and a management plan. As part of that management plan, daily water flow measurements in Tembladero Slough were taken until the gauge broke in 1989.

Also, in 1986 the MCWRA dredged the Old Salinas River Channel between Portrero Road and Tembladero Slough and disposed the material on wetlands without benefit of a coastal permit. That project resulted in 1.3 acres of wetland impacted, plus an additional 4.8 acres of wetlands impacted by one of the co-applicants disking their land. The agency is currently working on a 4.3-acre mitigation



plan to compensate for the wetland loss it caused. The co-applicant has not yet submitted a restoration plan to remedy his violation.

North of Portrero Road the MCWRA has a pending application to install a flood control berm. Finally, the MCWRA has also received a permit to install piping under the river channel as part of a reclaimed wastewater irrigation project (3-94-40); this project was not anticipated to affect the river hydrology.

Several other projects have occurred or been proposed for this reach of the river channel above Portrero Road. As part of the Moss Landing Marine Lab proposal to rebuild along the river channel, a wetland restoration project is proposed (A-3-MCO-93-33). To the south the Moss Landing Harbor District has purchased the old Gaske property for possible restoration. (Portrero Road Wetlands Restoration Plan, 1991). The Harbor District has already constructed a wetland restoration project, as mitigation for both a permitted and an unpermitted activity along the Old Salinas River.

These many activities and planning efforts have had both negative and beneficial impacts. They can be characterized as a piecemeal approach to the restoration of the ecosystem. Cumulatively the planning efforts will yield a comprehensive management plan if pursued and implemented. However, success of such a plan requires that the hydrologic interconnections, i.e., wetland, surface and groundwater systems be studied in an integrated way.

Description of Siltation in Old Salinas River Channel: Dredging of the OSRC was last permitted in December of 1995 (CDP 3-95-74), following extensive flooding and siltation of the channel during March 1995 El Nino Storms. At that time, according to the applicant, approximately 1,000 acres of artichokes and other crops were lost as a direct result of the flood damage along the Old Salinas River and Tembladero Slough. Approximately 22,000 cubic yards of silt was removed from the channel in order to restore the channel to its previous flood capacity of the historic waterway.

The OSRC again silted in significantly following flooding from 1998 El Nino storms. The current application proposes the removal of approximately 15,000 cubic yards from 2.4 miles of the channel to again restore flood capacity to the minimum width that existed prior to these flooding events. As defined by the Post Dredging Management Standards, which were required as a condition of the 1995 dredging permit (CDP 3-95-74, Special Condition 2), the minimum channel width for the restored channel will be 16 feet at the channel base, with channel banks having 1:1 to 1:2 side slopes.

Description of Dredging Project: The applicant proposes to dredge approximately 15,000 cu.yds. from a 2.4 mile stretch of the Old Salinas River between the slidegate culvert at the Salinas River Lagoon to just south of the Tembladero Slough confluence with the Old Salinas River Channel. (See Exhibits B, E and F for the area of dredging.) The vegetated area immediately north and south of the Monterey Dunes Way Bridge crossing the OSRC (Exhibit F) shall remain undisturbed by dredging and disposal activities.

Sediment will first be sampled and tested, using EPA Method 8080, to determine the levels of persistent agricultural chemicals. Dredge disposal may be placed in non-wetland areas on adjacent fields only for those sediments that have chemical levels below the residual amounts of those on the adjacent fields. If test levels show that dredge sediments have levels higher than sediments on adjacent fields, then



disposal of these sediments shall be allowed only at the upland site located on APN 135-053-02, owned by Mr. Hugo Tottino. Since the upland area around the oxbow bend area is one of the few remaining areas where agricultural production does not directly abut the channel, and the topography slopes down to the channel this area has the potential for habitat restoration. Therefore, disposal of dredge material in the oxbow bend area will be allowed provided it does not increase the ground surface elevation more than one foot. MCWRA staff has indicated that they expect that dredged material should not increase the elevation of this area by more than about a half foot.

Dredging will be conducted using a clamshell dredge, which would remove approximately 1 to 2 feet deep sediment from the channel. All work using heavy equipment will be done from the adjacent farm roads. Adjacent farmlands used for dredge disposal must be graded to ensure that return flow to the channel would be prevented (e.g., using silt curtains or compacted soil berm). A silt dam will be located at each end of the work area to prevent flow into the Salinas River Lagoon or Tembladero Slough during dredging period. Exhibit F shows sectional plans for the river dredging. The dredging is proposed to restore the functional flood capacity and river gradient that existed in the Old Salinas River before the 1998 El Niño floods although no historic flow data has been submitted by the applicants. Dredging should be conducted when the channel is dry or flow has been reduced to the minimum level in the channel by closing the slidegate at the Salinas River Lagoon, and keeping the slidegate closed until project completion.

B. Ownership and Jurisdiction Status

1. Property Ownership: The proposed dredging project will take place on and adjacent to the following properties (Assessor's Parcel Numbers):

Applicant	Assessors Parcel Number
Monterey County Water Resources Agency	APN 229-041-008
Hugo Tottino	APN 135-021-001 APN 135-053-002 APN 135-053-003
George Edward Boutonnet Trust	APN 135-021-005 APN 229-041-007
Gloria Cole Trust Et al	APN 135-021-004
Luis A. Scattini – Family Limited Partnership	APN 229-041-012

All landowners are designated as applicants on the coastal development permit application. Additionally, all property owners have signed the authorization of agent Section VIII specifying Bob Meyer (MCWRA) and sub-consultant, Frank Pierce (Lee and Pierce) as their authorized representatives.



Although the Monterey County Water Resources Agency and other property owners have not signed into any agreement regarding the work to be performed under this permit, it is understood that the County staff will be performing all of the work. Nevertheless, each party signatory on the permit application is responsible for ensuring that all conditions of the permit are complied with.

2. **Permit Jurisdiction Status:** Various agencies have regulatory jurisdiction over different portions of the project area. The following is a description of each agency and its jurisdictional powers.

- (a) **Coastal Commission Jurisdiction:** Although Monterey County has a certified Local Coastal Program, the Commission retains original permit jurisdiction on lands below the mean high tide line and on Public Trust and potential public trust lands. Since the majority of the project site (channel and adjacent upland areas) is comprised of the tidal waters and former tidelands that have historically been diked and used for agriculture, the Commission has jurisdiction in and immediately adjacent to the Old Salinas River Channel in the project area. Any development, including dredging activities in this area requires a Coastal Development Permit from the Commission.

This permit is for a one-time-only dredge/disposal episode. The work authorized by this permit is to be conducted under dry channel conditions between July 1 and October 15, 2001.

- (b) **State Lands Commission:** The Coastal Commission Local Coastal Program Post Certification Maps for the area show the Old Salinas River channel and immediately adjacent uplands as public trust or potential public trust lands and, hence, within the Commission's original jurisdiction. A rough calculation from the map would indicate that the approximate State Lands jurisdiction is 200 to 300 feet wide. No in field detailed survey has been undertaken. However, during a previous field inspection conducted by Commission and Department of Fish and Game staff prior to the 1995 dredging, the channel was estimated to be only 20 feet in some areas with farm roads often enclosing the channel on either side. State Lands approved a five year lease for the maintenance dredging of the Old Salinas River (WP 7864) on January 17, 2001. The lease agreement begins December 1, 2000 and ends August 31, 2005.
- (c) **Monterey County Permit Jurisdiction:** Monterey County has a certified Local Coastal Program. Areas outside of the public trust are within the County's coastal permit jurisdiction. The County has jurisdiction on all lands outside of the Coastal Commission's original permit jurisdiction, including most of the farmlands adjacent to the Old Salinas River Channel. The coastal permit is therefore conditioned to require evidence of the County's grading permit for the proposed disposal sites or evidence from the County that no such approval is required. MCWRA has submitted evidence from Monterey County Planning and Building Inspection Department that no permits are required.
- (d) **Regional Water Quality Control Board:** The RWQCB (in correspondence dated April 9, 2001) determined that the project protects beneficial uses of State waters and so has issued a standard Section 401 Water Quality Certification of Clean Water Act subject to compliance with three permit conditions. Designated Beneficial Uses include Agricultural Supply, Non-Contact Water Recreation, Wildlife Habitat, Drinking Water Supply and Freshwater Replenishment



- (e) California Department of Fish and Game: A Stream Alteration Agreement, Section 1603, Notification No. R3-2000-0664, dated 10/6/00 has been issued with fifteen (15) special conditions. The special conditions are designed to protect water quality and aquatic fish species that have been observed in the OSRC. As such, the Notification R3-2000-0664 requires work to be done between August and mid-October to avoid fish migration
- (f) Army Corps of Engineers: Corps Public Notice 25095S was circulated pursuant to Section 404 of the Clean Water Act and Section 10 of the River and Harbors Act of 1899. Several comments were received regarding water quality and resource concerns. These are discussed in the following findings. This coastal development permit is conditioned to require submittal of the Corps permit prior to commencement of construction.

C. Standard of Review

The Old Salinas River Channel is located within the coastal zone and within the area covered by the North County segment of the certified Monterey County Local Coastal Program (LCP). As described above, and as shown in the Post-LCP Certification Permit and Appeal Jurisdiction map (Exhibit D), the Coastal Commission has jurisdiction in and immediately adjacent to the Salinas River in the project area. Monterey County has jurisdiction over the adjacent farmlands. The majority of the project site (channel and adjacent upland areas) is comprised of the tidal waters and former tidelands that have historically been diked and used for agriculture. The Coastal Act provides that, within such tidelands and former tidelands, the Coastal Commission shall retain "original" jurisdiction with respect to coastal development permits. Therefore, the standard of review for these areas is the Coastal Act, particularly the policies contained in Chapter 3. The North [Monterey] County Land Use Plan and Coastal Implementation Plan may also serve as an advisory document.

D. Issues Discussion

1. Natural Resources/Hydrologic Setting

In addition to serving a flood control and conveyance purpose, the Old Salinas River channel also serves a valuable function as a wetland in itself and in the management of the upstream Salinas River Lagoon wetland and the wetlands adjacent to Monterey Dunes Way road. The Commission has determined that by definition, wetlands are environmentally sensitive habitat.

Section 30240 of the Coastal Act states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly



degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30233 of the Coastal Act identifies eight allowable uses in wetlands, requires that the proposed project be the least environmentally damaging feasible alternative, and where applicable, requires feasible and appropriate mitigation. The allowable uses are, briefly, coastal dependent facilities, navigational channels, boating facilities, public recreational piers, incidental public services, mineral extraction except in environmentally sensitive areas, restoration purposes, resource dependent activities.

Section 30233 also requires that dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation and that in addition to its other provisions, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary.

The US Coast Guard Chief of Waterways Management has confirmed that the Old Salinas River Channel is not listed as a navigational waterway subject to U.S. Coast Guard jurisdiction. However, as the channel does flow into navigable waters of the US (Moss Landing Harbor, Elkhorn Slough and ultimately the Pacific Ocean), water quality in the channel can affect these downstream waters. As the channel's hydrology has been modified by the control structures at each end, its main function has been as a wetland/river drainage that provides conveyance and flood control uses for adjacent agricultural lands. While the proposed dredging project does not fall under any of the eight categories that basically identify new, expanded or resource dependent uses, the channel can be considered an existing erosion control and flood control facility and so is subject to the environmental guidance of the policy. The proposed dredging is intended to restore channel capacity in order to maintain the functional capacity of the waterway to serve as a flood control facility.

In addition Section 30236 of the Coastal Act states:

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Section 30241 of the Coastal Act states that "...the maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas agricultural economy..."

All of the farmlands on either side of the Old Salinas River Channel are identified in the North County Land Use Plan as Agricultural Preservation, 40-acre minimum. The Agricultural Preservation policy 4.3.1.E of the LUP states:

Preservation of agricultural land for exclusive agricultural use is required. The designation is applied to the prime and productive agricultural lands ... Major importance is given to the



preservation of large, continuous areas of agricultural land capable of long term productivity in order to protect its viability from encroaching conflicting land uses...

The LUP provides for preservation of the surrounding agricultural lands to the fullest extent possible consistent with the protection of sensitive habitats. Policy B.3 states the following activities shall be prohibited within intermittent and perennial stream channels: "...cultivated agriculture, pesticide applications, and installation of septic systems..."

Finally, the section of the Old Salinas River Channel that is the subject of this permit is one small component of the Salinas River watershed. However, for hydrologic, ecologic and flood control purposes it cannot be separated from the system. The North Monterey County segment Land Use Plan certified by the Commission in June 1982 designates the Old Salinas River Channel Resource Conservation, Wetlands and Coastal Strand in the LUP. The category is described (p. 69) as follows:

Resource Conservation

Protection of sensitive resources, plant communities, and animal habitats is emphasized. This land use is applied to wetlands, dunes, and riparian corridors under the Wetlands and Coastal Strand Category, and to sensitive forest and upland habitats... Only very low intensity uses and supporting facilities compatible with protection of the resource are allowed. Uses would include low intensity recreation, education, and research, and where no feasible alternative exists, essential public utility lines outside of Elkhorn Slough... In appropriate wetland areas, aquaculture would also be encouraged, agricultural uses which would destroy or disrupt the habitat area are not allowed.

Though the standard of review for projects within the Commission's original jurisdiction, the certified North Monterey County Local Coastal Program provides guidance. The LCP provides for the protection of the plant and wildlife values of all wetland areas, for development of a comprehensive natural resource and water basin management plan for North County and for wetland management plans for the sloughs and estuarine areas.

Specifically, Policy 2.3.4.2 states that a comprehensive wetland management plan should be completed for the Bennett Slough, Moro Cojo Slough, Elkhorn slough, and the Old Salinas River estuarine areas.

The Coastal Commission's 1994 ReCAP surveyed all the wetlands in the Monterey and Santa Cruz Counties' coastal zone. Eighteen of the twenty-five largest wetlands were subject to management plans; the Old Salinas River was one of the largest wetlands still lacking a management plan. Recommendations from the ReCAP study indicated that management plans be prepared for those wetlands lacking them.

Since certification of the Land Use Plan, wetland restoration and management plans have been completed for the Salinas River Lagoon, Moro Cojo Slough and Elkhorn Slough. While each of the plans include the Old Salinas River Channel as a hydrologic link between the Salinas River and the



Moss Landing Harbor area, none of these plans include specific management guidelines for the Old Salinas River Channel.

Subsequently, special conditions of the previous dredging permit (3-95-74) required that Post Dredging Management Standards (PDMS) be developed for the OSRC. In compliance with this condition, the MCWRA, in conjunction with the local property owners, developed the PDMS (dated Revised November 5, 2000 and approved 12/4/00). The PDMS identifies areas of resource conservation to remain undisturbed, as well as erosion control measures, flood control management, and channel maintenance activities to be conducted within the project area.

Discussion.

Historically, the Salinas River joined with the mouth of Elkhorn Slough and emptied into Monterey Bay north of Moss Landing. A reach of the river 5-7 miles long was tidally influenced fresh and brackish water marsh. Historically, the Salinas River system experienced higher volumes and higher quality of inflows. Following a series of storms in 1909-1910 the river changed course, creating a river mouth at its present location. Farmers subsequently diked the river and farmed the rich soils reclaimed in this manner. The portion of the Salinas River that flowed northward has since been referred to as the Old Salinas River Channel. The entrance to the Old Salinas River Channel (OSRC) was blocked by the levees and flow into the channel is now controlled by a culvert equipped with a slidegate. Since the major river flows began discharging directly to the ocean, the Old Salinas River has been modified by agricultural activity, maintenance dredging and hydraulic structures.

During the summer months a berm forms across the Salinas River mouth, backing up flow and forming the Salinas River Lagoon. The Old Salinas River channel connects the Salinas River Lagoon with the south end of Moss Landing Harbor approximately 5 miles downstream. Outflow to Moss Landing Harbor from the Old Salinas River Channel occurs through a series of 13 culverts at Potrero Road, which are each equipped with flap gates on the downstream (harbor) side to restrict tidal flows in the Old Salinas River. Salt water still enters at both ends of the Old Salinas River Channel - from the upstream slidegate at the Lagoon and from tidal waters that leak through the Potrero tidegates at high tide.

The major freshwater inflow occurs via Tembladero Slough (see Exhibit B). In addition to the major inflows to Tembladero Slough and periodic flows from the Salinas River Lagoon, subdrains from the adjacent agricultural fields discharge into the OSR. At times the only water in the southern reaches of the OSR is agricultural drainage.

Excessive sediment deposition in the OSRC resulted following the 1998 El Nino storms, which flooded adjacent farmlands and transported topsoil from the fields into the channel. Sediment deposition within the channel has reduced the channel cross section and thus the capacity of the channel to convey flow. Such infilling of the channel can lead to additional flooding during winter storm events and elevated groundwater levels in the adjacent fields. Both of these conditions can also lead to loss of crops and agricultural production.



The project is designed to restore the OSRC to pre-1998 conditions, with a channel bottom width of approximately 16 feet and side slopes of 1:1 to 1:2. This channel cross section will provide for average design flows of 16 cfs and will allow discharge of subterranean tile drains during low to moderate flows. Sediment will be removed using a drag-line bucket excavator working from the adjacent farm access roads. Wet sediments will be allowed to dewater onto the farm fields and then will be incorporated into the adjacent fields.

As described in the earlier 1995 permit (3-95-74), the Department of Fish and Game conducted a preliminary field review of the southern one third of the project channel prior to the earlier dredging in 1995, and identified marsh wrens, killdeer, marsh hawks, willets, sanderlings, and egrets. Plants found along the channel included typical wetland plant species, such as salt grass, sedge, pickleweed, grass buttons, alkali heath, and tules. These animal and plant species are typical of an estuarine habitat.

More recently, a Biotic Resource Assessment was prepared for the MCWRA by John Gilchrist & Associates (April 2000). The biotic report indicates that the reach of the OSRC that encompasses the project area is a possible migration corridor for steelhead trout (*Oncorhynchus mykiss*), an anadromous fish species listed as threatened under the federal Endangered Species Act. According to the report, the Endangered Species Act protects the steelhead trout, trout habitat and potential modifications to steelhead migration routes. The biotic report indicated however that while there is no data on the presence of steelhead in the OSRC, steelhead trout have been observed in the Salinas River, Pajaro River, Carmel River and Big and Little Sur Rivers. The OSRC does not provide juvenile rearing habitat in the summer (due to high water temperature, low flows and poor habitat conditions). However, as the Salinas River lagoon provides fair to good steelhead rearing habitat, it is possible that juvenile smolts and adults could use the OSRC for out migration when the Salinas River mouth is closed and flows are restored through the culvert/slidegate. In recognition of the migration corridor potential of the OSRC, the MCWRA has been developing plans to modify the Potrero Road tide gates, and has approved plans to provide fish passage structures in both the tide gates and slide gate at the upstream end of the OSRC.

Though wetland species were identified in the project area, the project proponents have not conducted a wetland delineation for this project. The PDMS does, however, show the area of wetland vegetation north and south of the Monterey Dunes Way overcrossing that is to remain undisturbed (Exhibit G). Additionally, while the PDMS indicates that channel banks are to be kept devoid of vegetation in order to assist with rodent control in the adjacent fields, there is the likelihood that left to their own, wetland vegetation would regenerate in this area if they were not removed for this purpose. Though the banks of the channel are clearly identifiable for most of the project area (see photos in Exhibit F), other sections are not and because the area may be sprayed wetland vegetation may not be present.

Historic aerial photos from 1980, 1986, and 1994 show that the OSRC has been maintained on the same course at least since 1980. The photos show varying widths of vegetation along the channel banks and certain sections of the channel that were vegetated in the past but are now bare. Though the wet and inundated areas are clearly wetland, how far the wetland extends on each side of the channel and whether or not encroachment on wetlands has occurred since the inception of state coastal zone management cannot be determined without further analysis.



In conjunction with specific projects as discussed in finding 4 below, assessments have been done for the adjoining river/slough systems to both the north and south. A Biotic Assessment of the Old Salinas River and Tembladero Slough Channel Cleaning (Harvey and Stanley Assoc., November 1988) was undertaken for a proposed channel cleaning north of the project site, i.e., north of the Tembladero Slough confluence and including Tembladero Slough. A Preliminary Wetland Delineation for Old Salinas River Dredge Spoils, Habitat Restoration Group, July 1994, was also done for the same area. For the area south of the project area, the Salinas River Lagoon Management and Enhancement Plan was developed. The SRLMEP was the product of numerous research and evaluation projects. A wetland delineation was conducted for the Salinas River Lagoon Slidegate/Culvert, Habitat Restoration Group, July 1993, for both the lagoon inlet side and the Old Salinas River outlet side. The documents referenced above refer to this area and provide a picture of rich resource values in these adjoining areas.

The proposed dredging project raises several issues. The Coastal Act allows for dredging of channels for flood protection. However, Section 30236 also requires the incorporation of the best mitigation measures feasible when altering a river, and Section 30233 regarding wetlands requires that permitted development be the least environmentally damaging feasible alternative.

Since the 1998 El Nino storms, the OSRC has silted up in several locations severely reducing flood capacity so that it is likely that additional flooding may occur if the area experiences severe winter rain events. Prime agricultural land could be lost if the river floods impacting the agricultural economy of the area which Section 30241 of the Coastal Act seeks to maintain.

In compliance with conditions of the previous dredging permit, the Post Dredging Management Standards (Management Standards) were developed in order to establish maintenance dredging procedures that would also protect the natural wetland habitats and water quality of the OSRC. The Management Standards describe specific actions to be taken to minimize impacts from dredging and dredge disposal. While they do indicate the existing areas of wetland habitat to remain undisturbed, they do not present any additional wetland restoration alternatives for improving wetland or aquatic habitat in the channel. And they do not provide any mitigations for the impacts to the habitat value of the channel itself. While the proposed dredging will occur within the channel base only (that portion of the channel between the toe of each bank), the proposed dredging and disposal could remove potential wetland habitat by removing the natural sedimentation upon which such habitat might develop. The dredging project would also remove intertidal habitat and invertebrate animal species that have adapted to this environment, and will likely reduce water quality by increasing turbidity and the potential resuspension of contaminated soils (see Finding 5 below) during dredging activities.

Therefore, in order to minimize impacts from the dredging, the permit requires that mitigation measures to protect existing habitat areas be implemented. These mitigation measures include having a project monitor on site during dredging activities, using silt fencing across the channel at both the north and southern extents of the project area, and placing protective fencing around the vegetated areas to remain undisturbed. Additionally, as the natural topography around the oxbow bend in the OSRC is such that it provides the best potential for wetland restoration along the channel, no dredge disposal or other activities that would increase the ground surface elevation by more than one foot will be allowed in that



area (Condition 5f). If any disposal sites, other than those shown on the attached plans are to be used, the applicant will have to submit revised plans for Executive Director review and approval prior to their use. All disposal sites on nearby farmlands shall be located inland of any farm road and designed so that no sediment or return flow from dewatering of the soil occurs.

Additionally, in order to protect the migration corridor potential of the OSRC for steelhead, construction activities have been restricted to the period between August and mid October, when adult and juvenile salmonids are not migrating upstream to spawn or downstream as smolts. Furthermore, to prevent additional fish from entering the channel during dredging, the slidegate culvert will remain closed throughout the dredging period.

Therefore, as conditioned, to conduct dredge and disposal activities in conformance with the Post Dredging Management Standards, including suitability determinations based on sediment sampling test results, assuring dredge disposal in areas where no return flow can occur, and protecting existing wetland habitat areas by using silt fencing and other protective fencing, and by protecting the potential steelhead migration corridor, the proposed project is consistent with Coastal Act policies 30236 which allows for alteration of rivers for flood control purposes and 30233 which provides that existing flood control facilities in degraded wetlands can be dredged if no feasible less environmentally damaging alternative exists.

It is clear that the OSRC is a degraded stream/tidal channel that would benefit from additional aquatic and wetland restoration efforts. In order to accomplish further restoration of these habitats, the Commission suggests that MCWRA initiate a cooperative resource management effort among the landowners, CDFG, and the RWQCB. Additionally, these efforts may be more successful with assistance and funding from agencies (such as the Coastal Conservancy, Natural Resources Conservation Service and/or local Resource Conservation District) that provide incentive programs landowners for such restoration activities. The Commission would like to see a comprehensive resource management plan that includes wetland restoration and aquatic habitat restoration elements that can work in conjunction with agricultural preservation efforts prior to the next request for future dredging.

3. Marine Resources and Water Quality

Coastal Act Sections 30230 and 30231 require that:

... the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface



water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Monterey County Land Use Plan Policy B.2. under Riparian, Wetland, and Aquatic Habitats (p. 15) requires the following:

All development, including dredging, filling, and grading within stream corridors, shall be limited to activities necessary for flood control purposes, water supply projects, improvement of fish and wildlife habitat orThese activities shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution. When such activities require removal of riparian plant species, revegetation with native plants shall be required.

Major concerns have been raised throughout the years regarding pesticides, heavy metal, and other toxic material that may be present in the sediments of the Salinas River watershed and slough channels. Disturbance of the sediments by dredging could degrade the water quality of the river system and ultimately the Monterey Bay National Marine Sanctuary.

Background

According to the Salinas River Lagoon Management and Enhancement Plan (March 1997) the water quality of the Salinas River and its hydrologic components has been altered by a variety of human activities. These include diversion of the river, diking and draining of wetlands, agricultural practices, point source discharges by industry, and reduction of groundwater supply. Primary threats to biological resources are due to increased nutrient input and persistent pesticide residue. It is unknown to what extent pesticides and eutrophication have impacted the biological resources of the Salinas River and/or terrestrial organisms that rely on the aquatic system for survival.

Nutrients enter the Salinas River primarily from agricultural runoff. Nutrient enrichment causes eutrophication (increased plant growth) which tends to clog waterways, decrease flow rates, produce unpleasant odors, and reduce oxygen availability for aquatic animals. Eutrophication has been a major periodic problem in the Salinas River.

DDT, toxaphene, dieldrin, endrin, aldrin, and endosulfan are major persistent pesticides which have been used throughout the Salinas Valley. With the exception of endosulfan these chemicals have now been banned for use in California. These pesticides enter the Salinas River by runoff, percolation, and wind transport. These pesticides are insoluble in water, but are highly soluble in lipids or animal fatty tissue where they tend to concentrate.

Chlorinated hydrocarbons persist in the soil for years and ultimately end up in the aquatic environment of the Salinas River due to runoff, where they are passed through the food chain via bioaccumulation.

Studies have been undertaken to examine water quality. A study was completed by AMBAG (1992) on the potential for pesticides from agricultural fields to migrate to ground and surface waters. Water



samples from subsurface drains, surface soil and surface runoff were collected in two 30-acre fields located approximately 7 miles from the Salinas River Lagoon, but hydrologically connected to the Salinas River via agricultural ditches and the Blanco Reclamation Canal (M. Puckett, pers. comm.). Concentrations of pesticides currently used in production agriculture were below laboratory reporting limits; however, some surface water samples indicated presence of Dieldrin, DDT, DDD and DDE in parts-per-billion range. The study suggests that, though previously banned, these persistent organochlorine pesticides are still present in agricultural fields and are absorbed to suspended sediment leaving the fields, thereby finding their way into surface water bodies (SRLMEP, p.107).

The issues concerning contaminated sediments and water quality are far reaching geographically and jurisdictionally and will need a broader planning context for resolution. Nevertheless, each project involving disturbance of sediments in the drainage area including the Salinas River Lagoon or the Old Salinas River Channel is a potential contributor of contaminants to Moss Landing Harbor and to Monterey Bay as well as the aquatic ecosystem of the river system itself.

Project Issues

During earlier dredging events, the Monterey Bay National Marine Sanctuary, California Department of Fish and Game and United States Fish and Wildlife Service all raised concerns regarding the potential for DDT/DDE contaminants reaching the waters of the Sanctuary and the need for pre-dredge sediment analysis, silt fences, etc. In response to these and other comments the applicants undertook soil sampling to determine levels of contaminants in the slough sediments and residual levels of contaminants in agricultural soils on the fields.

Initial soil sampling was conducted in September 1995 under the direction of the MCWRA at three locations along the Old Salinas River Channel. The MCWRA indicated that a low level (less than 0.130 parts per million (PPM)) of DDT and/or its breakdown constituents were identified in the sediments of the Old Salinas River Channel and adjacent farmlands. These totals are below accepted regulatory levels for these constituents. Removal of sediments and increasing the depth of the channel will recreate an environment for aquatic species. DDT and its breakdown products are non-soluble in water but adhere to fine grained sediments. According to the applicant's report based on past testing and experience with DDT, there are most likely no leachable analytes of concern remaining and any detectable amounts found are generally bound to soil. Proper placement of dredge spoils on prepared areas sloped to drain into adjacent fields will reduce the impact to the water column. Water filtering back through the field will be clear of soil and thus pose no threat to the environment. Additional mitigation beyond the careful placement of dredge spoils includes installation of silt dams at drainback points along the field drain or tail ditches and containment dams at each end of the channel with overflow weirs to allow for settling of disturbed silt.

This project has, therefore, been conditioned to require sediment testing prior to dredging. The sediment testing protocol is outlined in the attached PDMS. Additionally, samples must be taken from a depth far enough below the actual level of dredging to assure that there is no potential for the dredge operation to disturb contaminated sediments and to ensure that post-dredge river flow will not expose and suspend



contaminated sediments. As described in the PDMS, test results must be submitted to and approved by the Department of Fish and Game prior to the start of maintenance activities. Furthermore, sediment removed from the OSRC may be placed on adjacent fields only when residual levels of persistent chemicals, analyzed using EPA Method 8080, are below limits established by the California Department of Fish and Game. Any dredged sediment with levels higher than those of adjacent fields shall be deposited off site at a location that does not have tile drains discharging to the OSRC. Mr. Hugo Tottino, owner of parcel APN 135-053-02 has consented to use a portion of this parcel for disposal of such sediments. The proposed offsite location is an old abandoned airstrip that has no subterranean tile drainage (Exhibit B2). This is the same location that was previously used in 1997 for disposal of dredged material.

To prevent backflow of dredged sediment back into the OSRC, adjacent farm land or field roads should be graded in a way that ensures that sediment and water will not flow back into the channel. Such grading must be done prior to dredging and may include the construction of a small containment berm along the channel side of the road or field. If non-permeable material is used for any berm it should be covered with filter fabric and clean fill to allow for natural revegetation to occur. Revegetation atop channel banks and containment berms can also help to maintain water quality by minimizing sediment erosion and deposition into the OSRC. While vegetated banks may pose a perceived conflict with pest management, it is possible that a solution can be found that resolves this apparent conflict.

Therefore, as conditioned, to follow the approved sampling protocol described in the PDMS, including sediment sampling and testing to determine site suitability for dredge disposal, and use of silt curtains and sediment containment berms to ensure that no backflow of sediments enter the OSRC, the proposed project is consistent with Section 30230 and 30231 of the Coastal Act which provide for the protection of marine resources and the biological productivity and quality of coastal waters.

4. Flooding Hazards

Section 30236 of the Coastal Act states:

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Section 30241 of the Coastal Act states that "the maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas agricultural economy..."

Section 30253 of the Coastal Act provides, in part, that:

New development shall:



(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create or contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

In recent years the Old Salinas River culvert and slidegate which manages the flow that enters from the Salinas River have been used to control dry season and pre-breach water elevations in the Salinas River Lagoon. Under the provisions of the slidegate culvert coastal development permit (3-95-58) there is a fixed maximum flow of 120 cfs through the culvert.

Agricultural fields abut the Old Salinas River Channel in most of the project area. The agricultural fields are at relatively low elevations and the sub-drain inverts are also low. In the northern reaches of the OSRC the lowest agricultural fields are periodically flooded when high runoff in the Old Salinas River coincides with high tides in Moss Landing Harbor and water backs up behind the Potrero Road tidegates. Water also causes the subdrains to back up, saturating the soils and raising the water table.

In the southern reaches of the OSRC the water level from the Salinas River Lagoon is controlled by the slidegate/culvert and flooding from this source can be managed.

Since the cross section of the OSRC has been reduced due to sediment deposition, there is an increased risk that flow from the Salinas River Lagoon slidegate/culvert could flood across the agricultural fields. The dredging project is intended to restore channel capacity and thereby restore flood capacity of the channel and reduce the risk of future flooding. The newly dredged channel must accommodate the drainage from the agricultural fields and the maximum design flow that can enter through the slidegate culvert (120 cfs). Although no additional hydrologic data has been submitted with the application, the PDMS has established the 16-foot wide channel base with 1:1 to 1:2 side slopes as the pre-flood channel condition and has indicated that this channel configuration is capable of conveying the maximum design flow.

The proposed project is a "flood control project", a development permitted under Coastal Act Section 30236 when necessary to protect existing development. The protection of existing agricultural land has a high priority under Coastal Act Section 30241 and Section 30253 requires that development minimize risks to life and property in areas of flood hazard. The dredging project will result in a deeper channel with a well-defined low-flow thalweg that will restore the natural channel configuration and reduce the risk of flooding adjacent agricultural lands.

However, Section 30236 also requires best mitigation measures feasible when altering rivers. Implementation of the approved PDMS, along with conditions of this permit will mitigate the impacts of dredging in the OSRC. The MCWRA approved a Mitigated Negative Declaration (prepared March 30, 2000, approved June 26, 2000) and determined that with the mitigation measures outlined in the PDMS, the project will not have a significant adverse environmental impact.



Given that the existing conditions produce a degraded natural resource, almost exclude the aquatic environment, and pose an increased risk of flooding, the Commission finds that as conditioned to use protocols established in the PDMS, the dredging project can be undertaken on a one time basis.

Therefore, as conditioned, the proposed development is consistent with Section 30236 and Section 30253 of the Coastal Act.

5. Public Access and Recreation

Coastal Act Section 30604(c) requires that every coastal development permit issued for any development between the nearest public through road and the sea includes a specific finding that the development is in conformance with the public access and recreation policies of Chapter 3 of the Coastal Act. The proposed project is located seaward of Highway One, which is the first public through road. Coastal Act Sections 30210 through 30214 and 30220 through 30224 specifically protect public access and recreation. In particular:

30210: In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

30211: Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

30212(a): Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

- (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,*
- (2) adequate access exists nearby, or,*
- (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.*

30213: Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Section 30211 protects existing access to the sea where acquired through use or legislative authorization. Section 30212 provides for establishment of public access from the nearest public roadway to the shoreline and along the coast in new development projects except where it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, or where adequate access exists nearby, or, where agriculture would be adversely affected. The North County Land Use Plan identifies Monterey Dunes Way as an existing primary access route to the Salinas River State Beach.



This accessway will not be affected by this project. No other existing or proposed accessways are identified in the project site area. The farm roads that will be used during the dredging activities are on private property and so are not considered public access routes.

The proposed development will not impact existing or planned access and is consistent with the public access provisions of the Coastal Act. Therefore, the Commission finds that the proposed project is consistent with Coastal Act Sections 30210 through 30214 and 30220 through 30224.

E. California Environmental Quality Act (CEQA)

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effects, which the activity may have on the environment. The Commission incorporates its findings on conformity of the permit with the Coastal Act at this point as if set forth in full.

On June 26, 2000, the Monterey County Water resources Agency approved a Mitigated Negative Declaration for the proposed development. The Secretary for Resources has certified the Coastal Commission's review and analysis of land use proposals as being the functional equivalent of environmental review under CEQA.

Accordingly, the Commission is approving the project subject to conditions that implement the mitigating actions required of the Applicant (see Special Conditions). As such, the Commission finds that only as modified and conditioned by this permit will the proposed project not have any significant adverse effects on the environment within the meaning of CEQA.



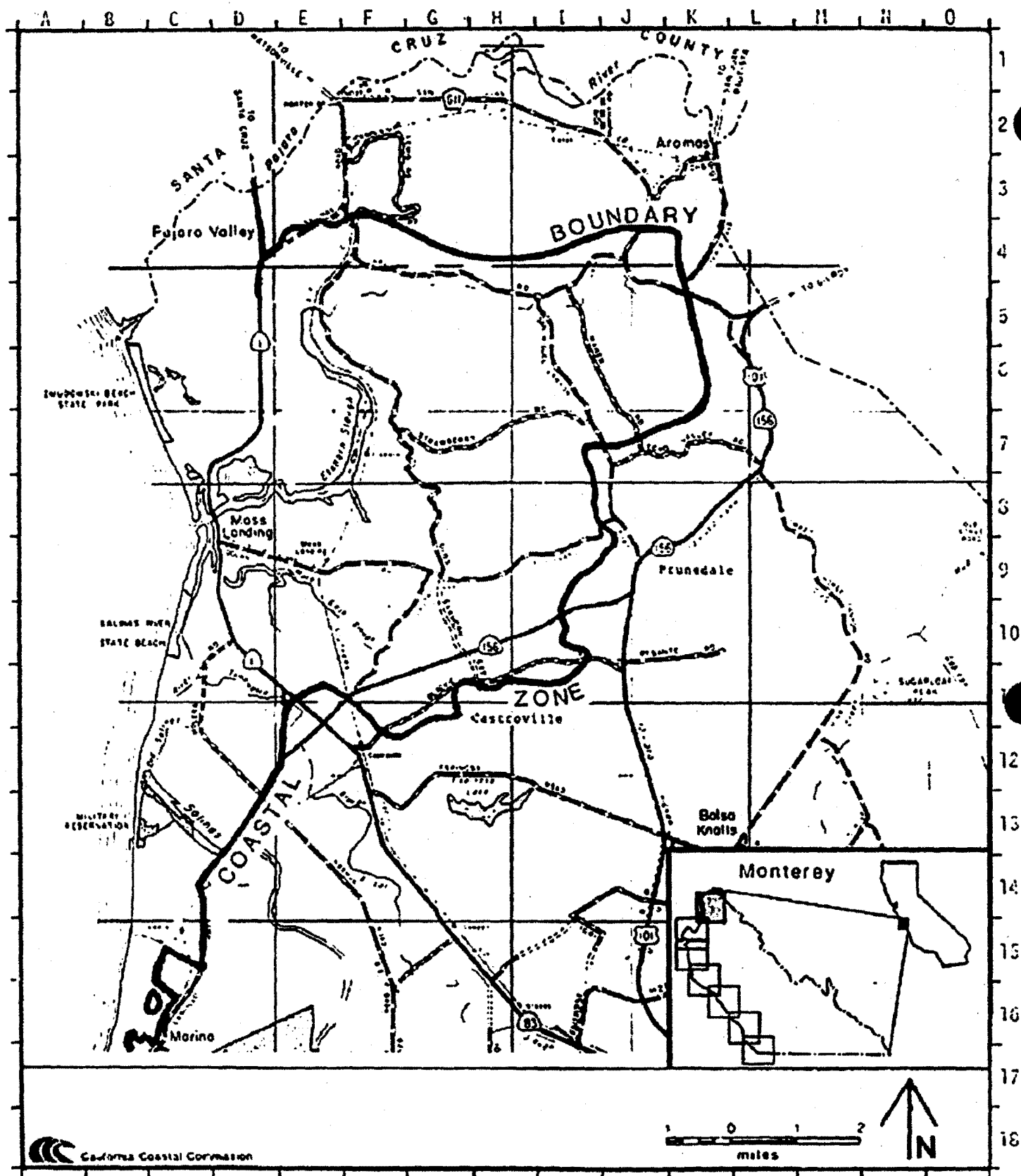
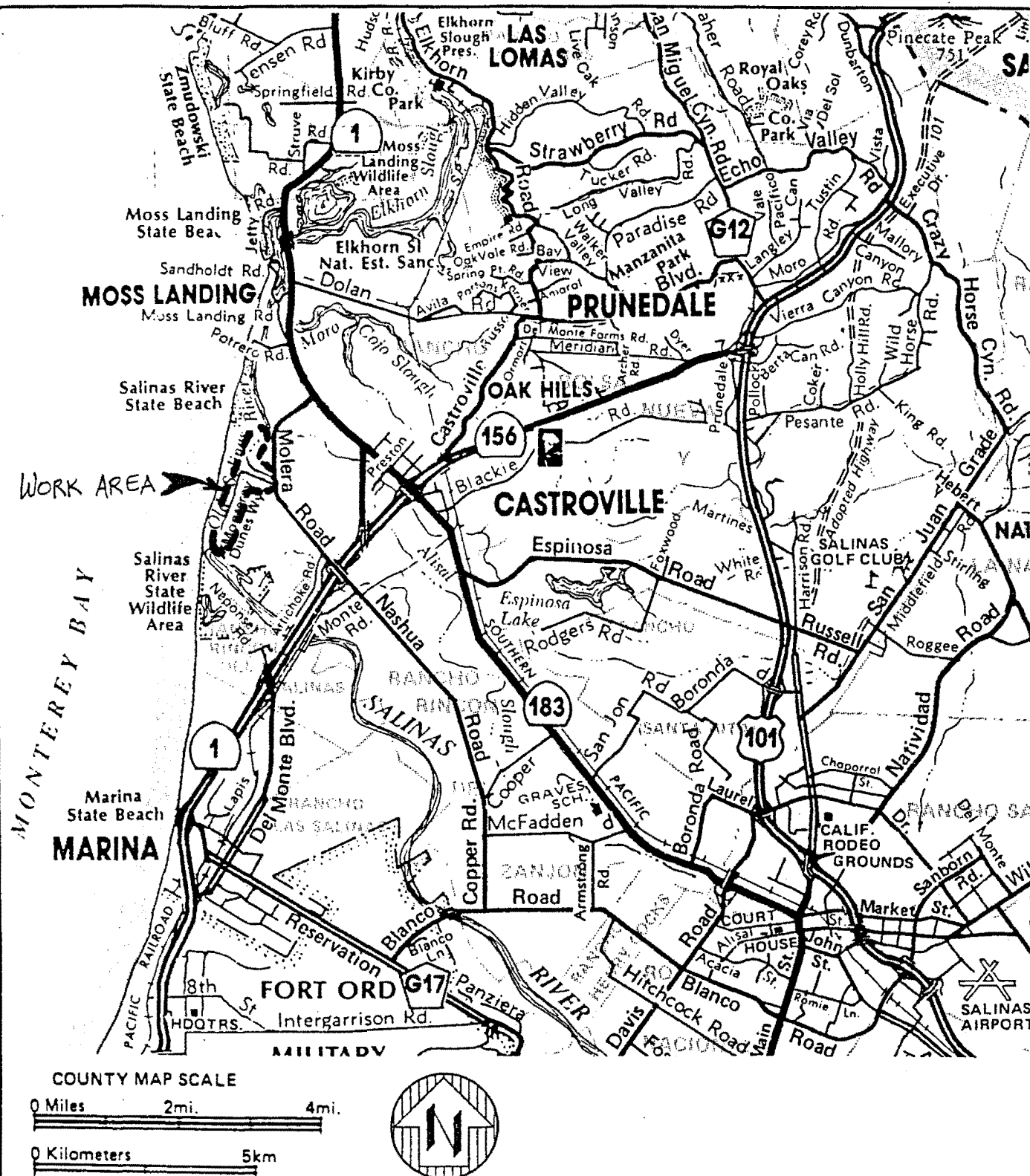


EXHIBIT A
Regional Location Map
 3-01-019
Old Salinas River Channel Dredging

Purpose: Provide standards for removal of channel and bank vegetation and accumulations of silt, sandbars, and other debris as may be required to maintain a clear channel.



Location Map
Castroville Area

Drawn By: D.P.

Checked By: F.P.

Ref: Date: 9-23-98

LEE & PIERCE inc.
consulting engineers

546 Abbott St #20 Salinas, CA 93901
Phone (408) 758-0096

Sheet No.

1

of 2 Sheets

Date 09/21/98

3-01-019

(Old Salinas River Channel Dredging)

Form file quadbord.ged

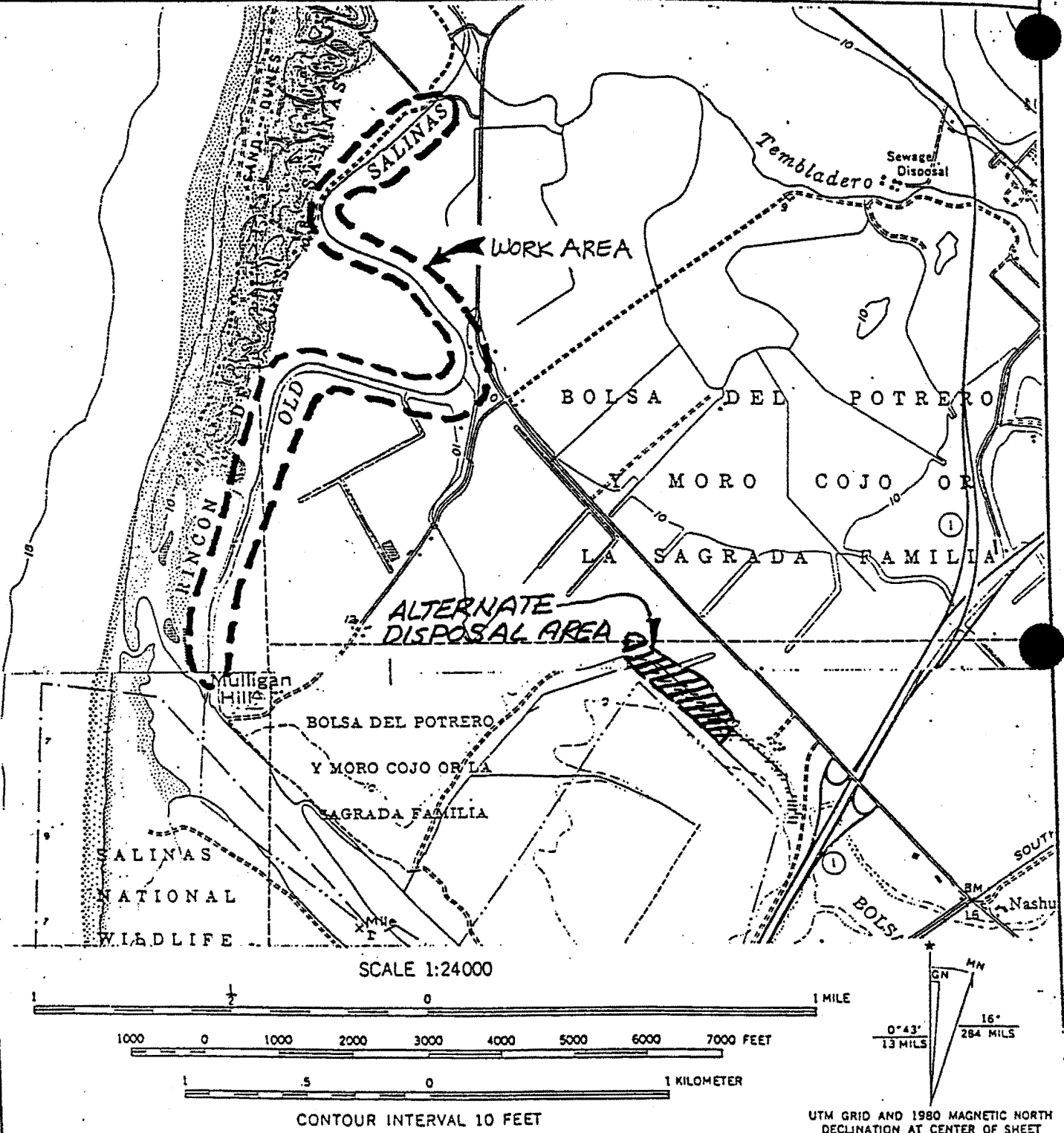
Exhibit B

1 of 2

OLD SALINAS RIVER CHANNEL POST-DREDGING MANAGEMENT STANDARDS

SEPTEMBER 1998

Purpose: Provide standards for removal of channel and bank vegetation and accumulations of silt, sandbars, and other debris as may be required to maintain a clear channel.



Prepared By: D.P.

Date 9-23-98

Checked by: F.P.

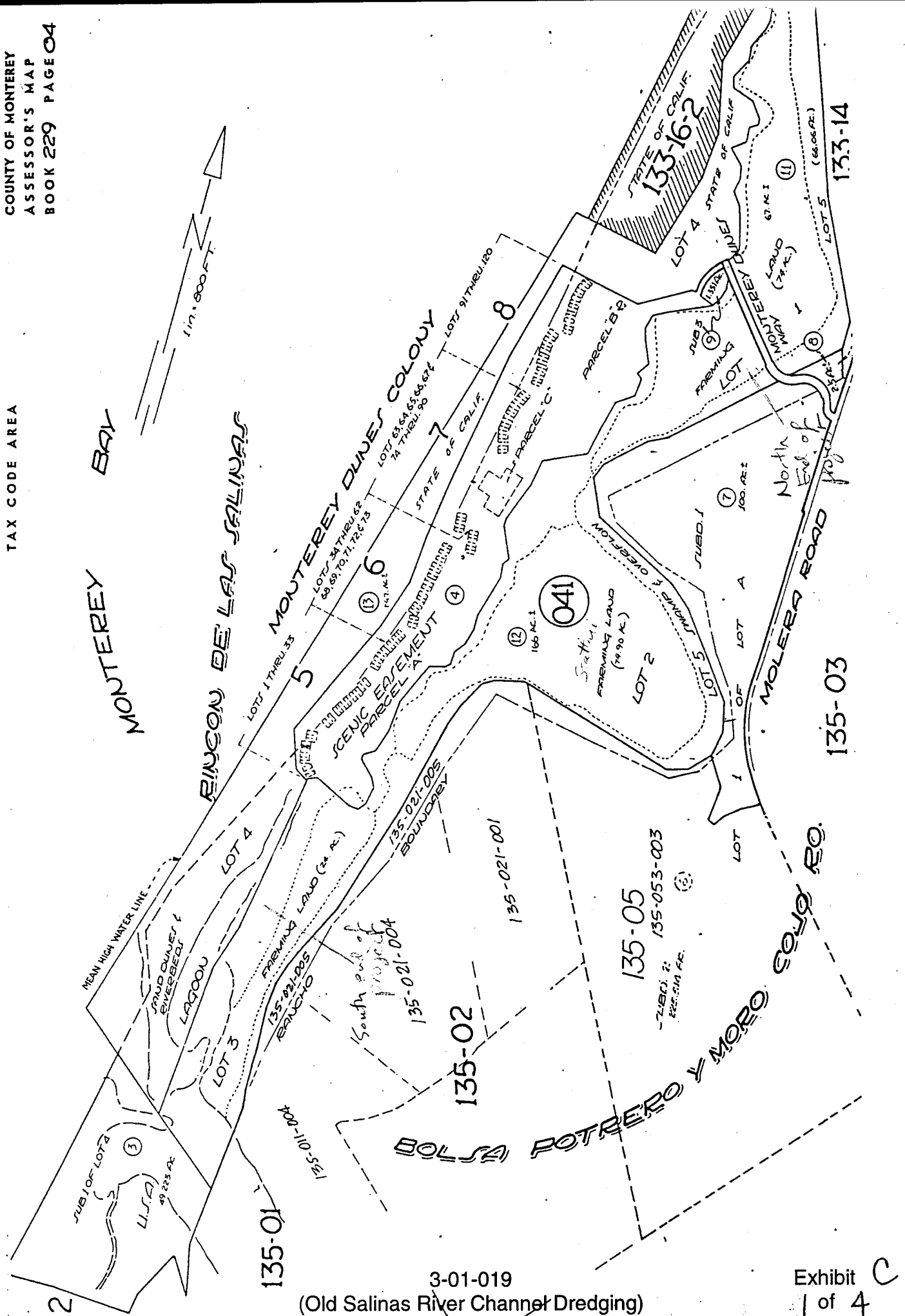
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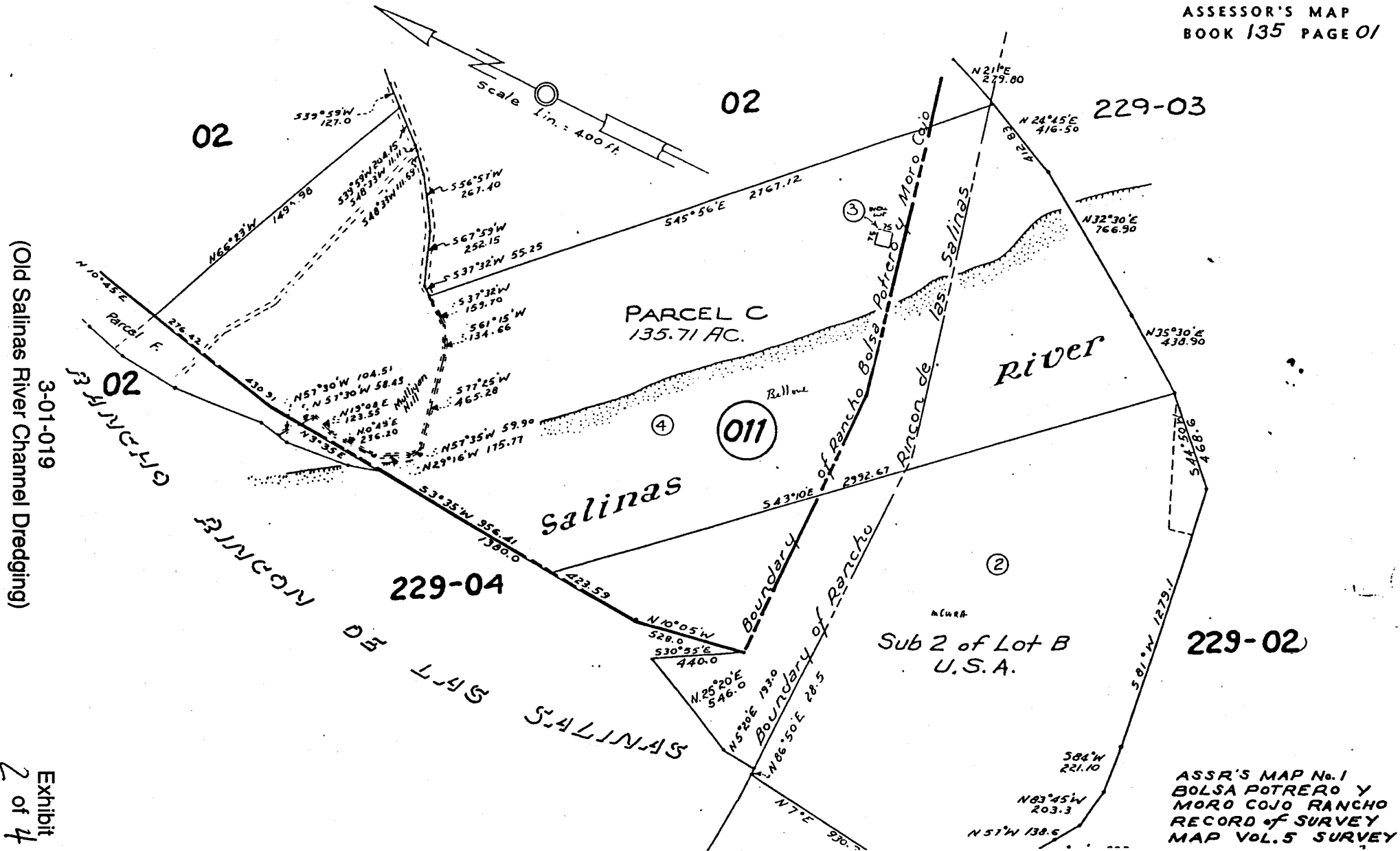
U. S. G. S. 7.5 min Series Quadrangle Sheet
Location Map Showing Work Area
Old Salinas River Channel

LEE & PIERCE inc.
consulting engineers
546 Abbott St #20 Salinas, CA 93901
Phone (408) 758-0096

Sheet No.
2
of 2 Sheets

TAX CODE AREA





(Old Salinas River Channel Dredging)

3-01-019

Exhibit
2 of 4

05

PARCEL E
71.36 AC.

PARCEL B
67.40 AC.

PARCEL D
72.50 AC

229-04

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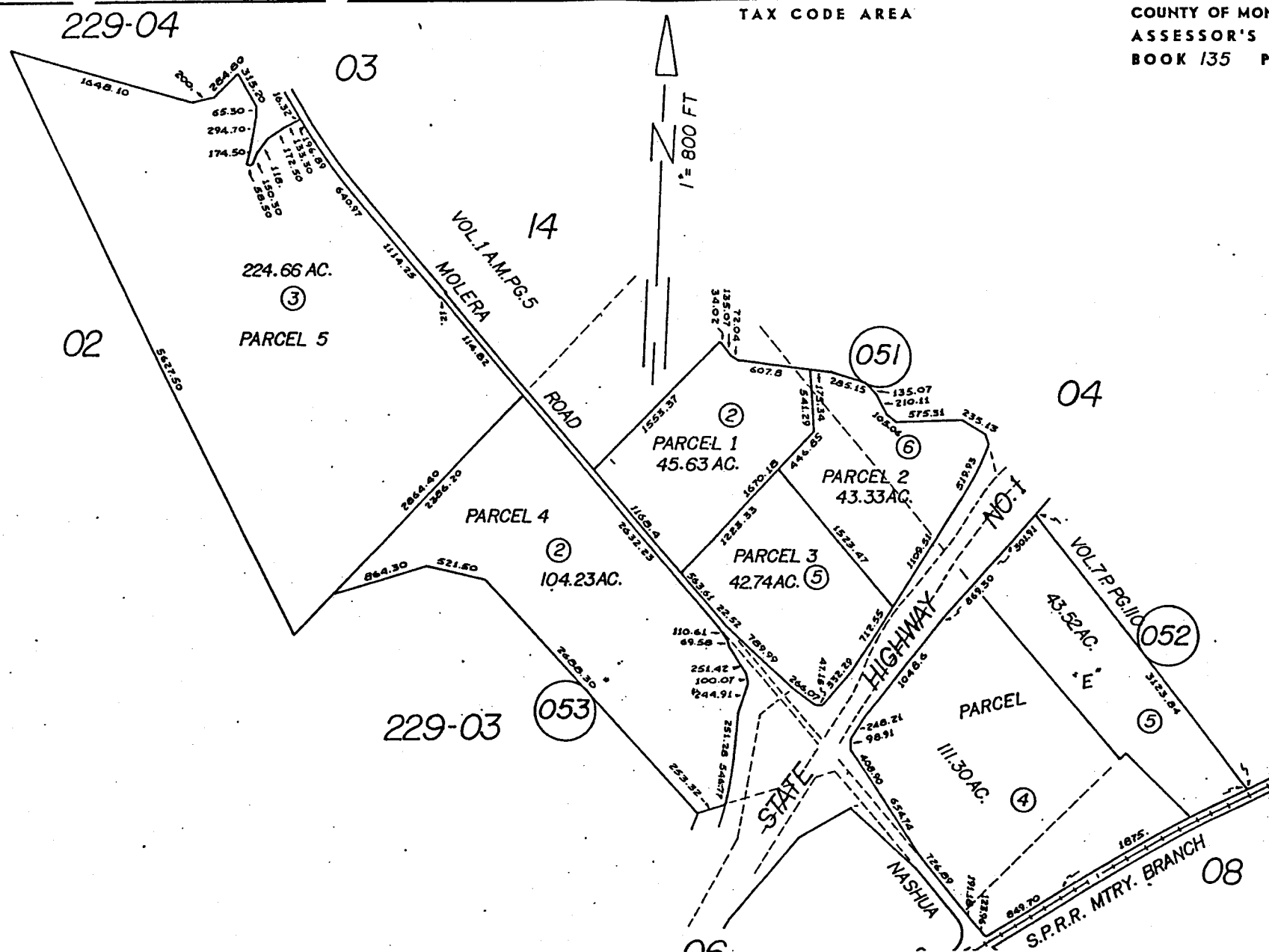
ASSR'S MAP NO 1
BOLSA POTRERO Y MORO
COJO RANCHO
RECORD of SURVEY MAP
VOL 5 SURVEY PAGE 9

3-01-019
(Old, Salinas River Channel Dredging)

Exhibit C
3 of 4

3-01-019

Exhibit
4 of 4



00199 (i)(2) of the LCP
appeal jurisdiction
is the first row of
from the mean high tide
a greater distance.

100' from wetland

First Public Rd.

100' from wetland

First Public Rd.

100' from wetland

First Public Rd.

Original
CCC
jurisdiction

First Public Rd.

Project Area

100' from wetland

100' from stream

100' from stream

100' from wetland

original CCC
jurisdiction

100' from wetland

Monterey County
Jurisdiction

EXHIBIT NO. D
APPLICATION NO. 3-01-019
CC Post-LCP Certification Permit + Appeal Jurisdiction map

from:
North County
L.U.P.
Land Use Plan
Map

Zmudowski
State Beach

MOSS LANDING COMMUNITY
PLAN BOUNDARY

Moss Landing
State Beach

SEE MOSS LANDING
COMMUNITY PLAN

MOSS LANDING

DOLAN

MORO

POTRERO RD.
TIDE GATES

Salinas River
State Beach
Scenic & Natural
Resource Recreation

Resource Conservation
Wetlands & Coastal
Strand

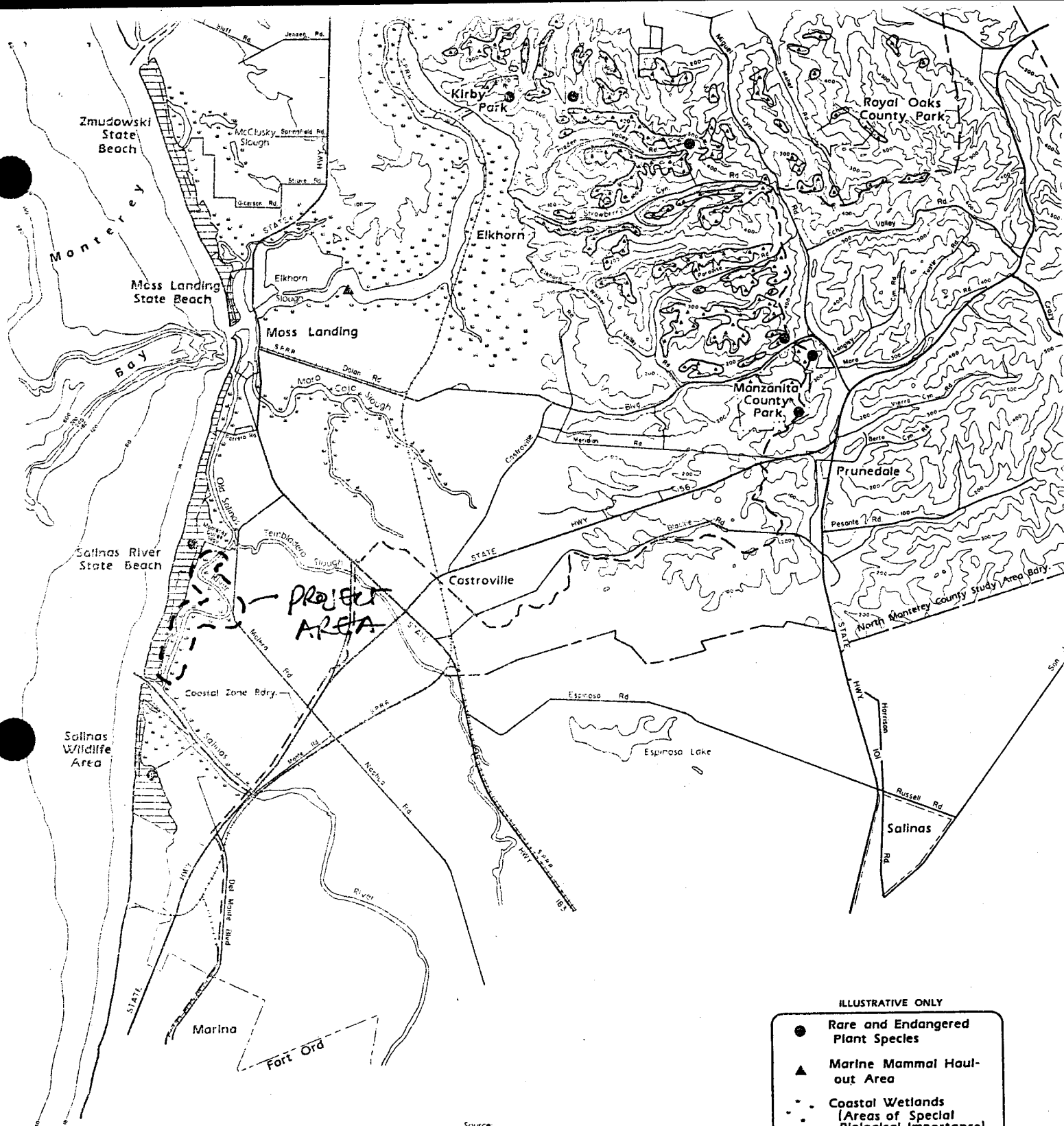
SALINAS
RIVER
LAGOON
TIDE GATE

Salinas Wildlife Area

EXHIBIT NO. E-1 of 5

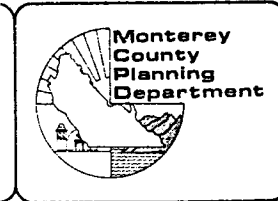
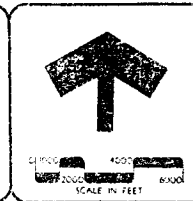
APPLICATION NO.
3-01-019

North County LUP
Land Use Map



Source
U.S.G.S. 7.5 minute quads, May 1979

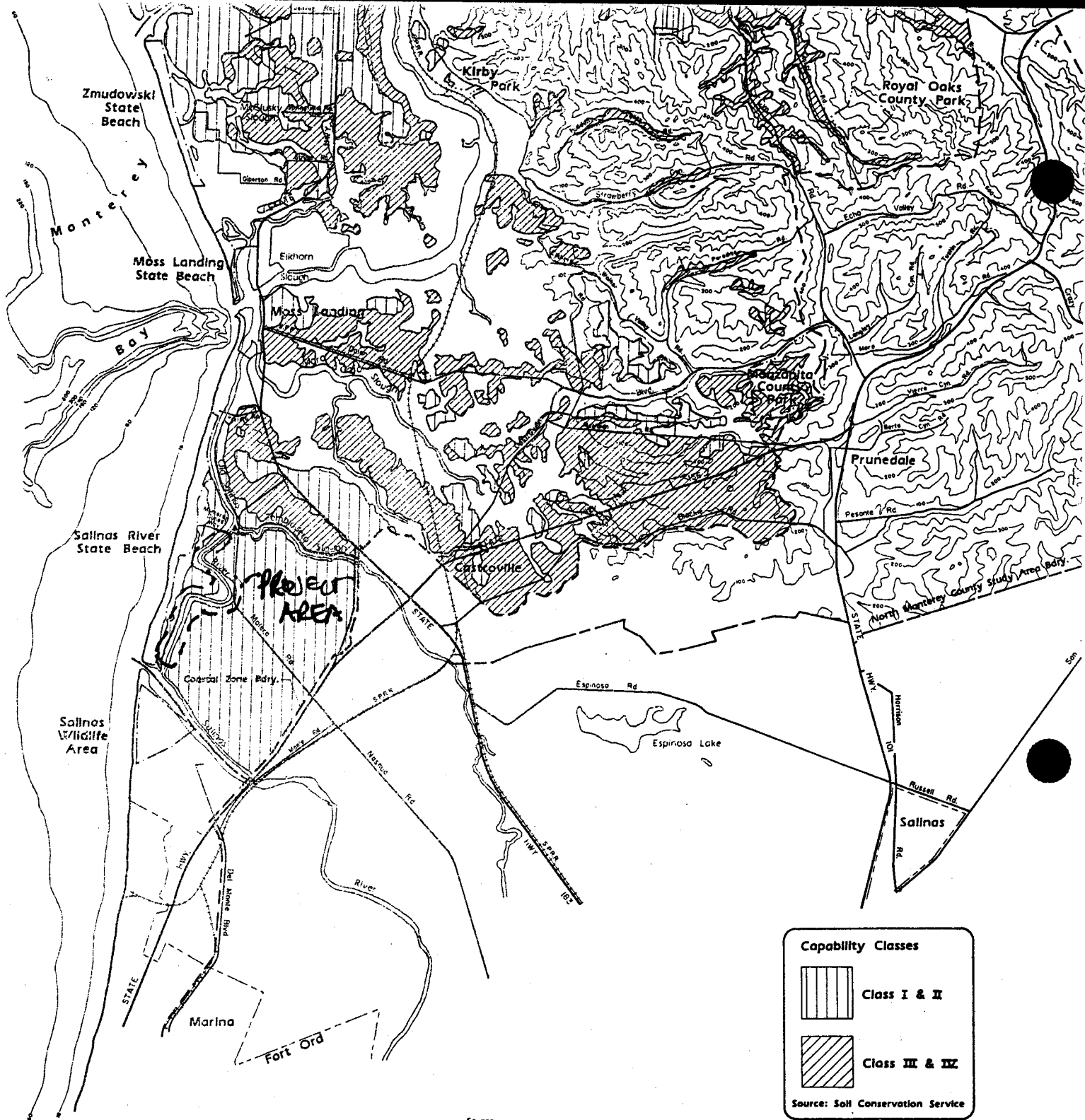
NORTH COUNTY GENERAL PLAN
LOCAL COASTAL PROGRAM
ENVIRONMENTALLY SENSITIVE HABITATS



ILLUSTRATIVE ONLY

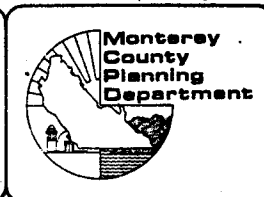
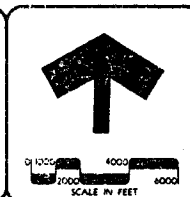
- Rare and Endangered Plant Species
- ▲ Marine Mammal Haul-out Area
- Coastal Wetlands (Areas of Special Biological Importance)
- ◻ Maritime Chaparral
- ▨ Coastal Strand

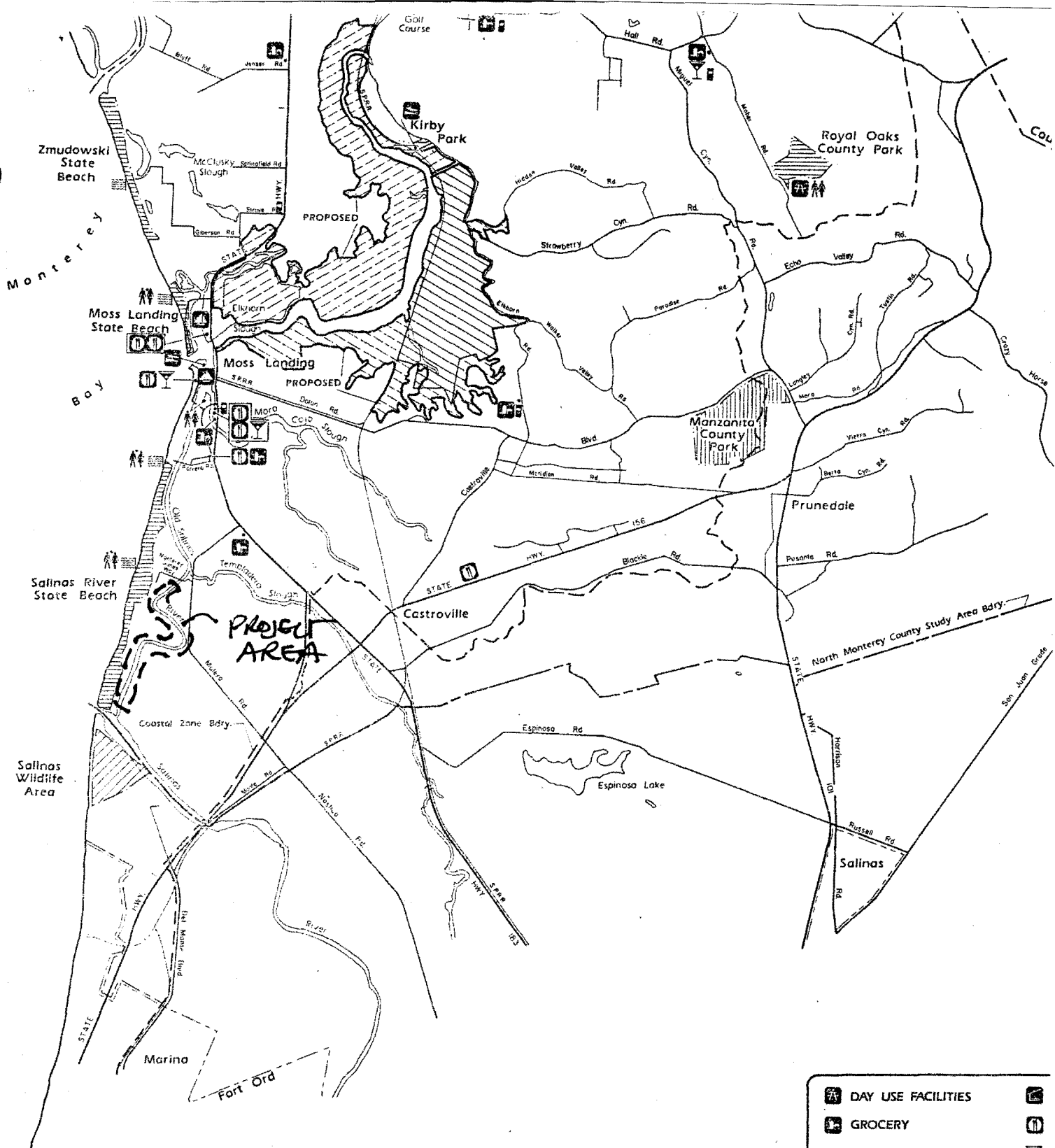
Source: California Department of Fish and Game, Ed Mercurio, and Monterey County Planning Department, 1980.



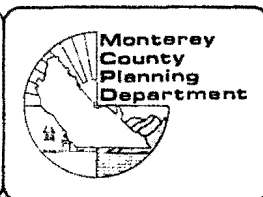
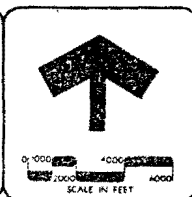
Source:
U.S.G.S. 7.5 minute quads, May 1979

NORTH COUNTY GENERAL PLAN
LOCAL COASTAL PROGRAM
PRIME AND PRODUCTIVE
AGRICULTURAL SOILS



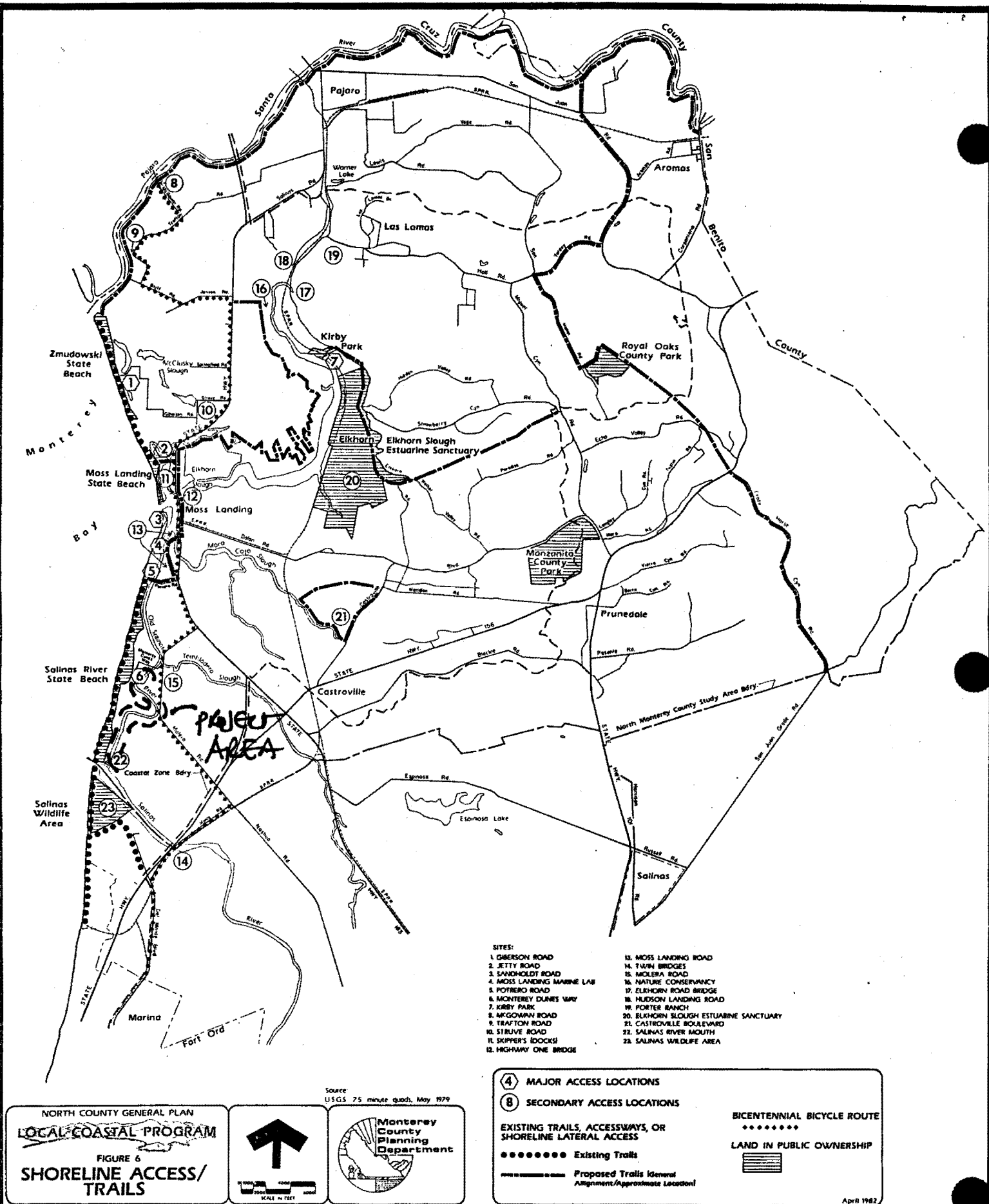


NORTH COUNTY GENERAL PLAN
LOCAL COASTAL PROGRAM
 RECREATION AND VISITOR
 SERVING FACILITIES



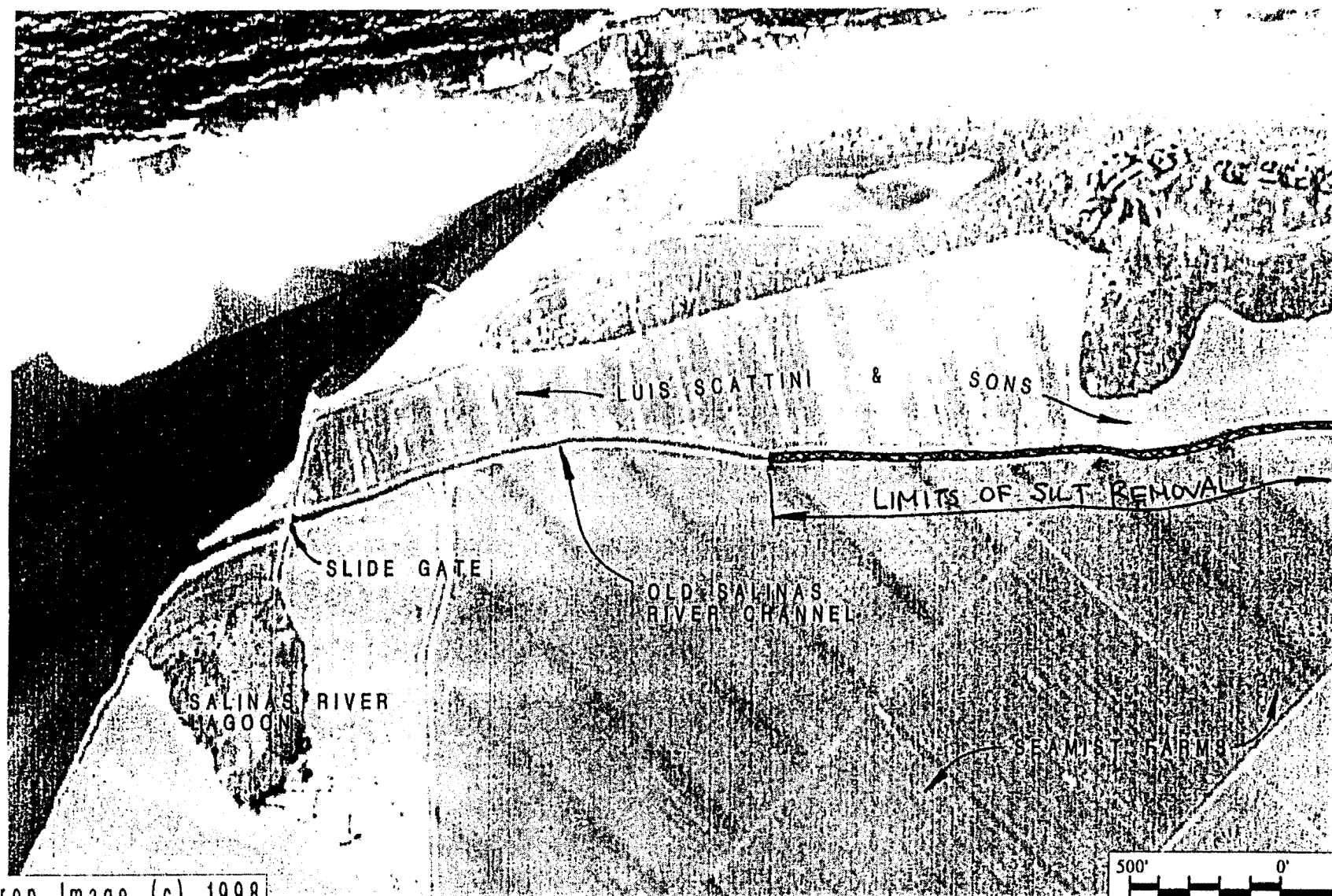
Source: Monterey County
 Planning Dept., 1980
 U.S.G.S. 7.5 minute quads, May 1979

	DAY USE FACILITIES		GROCERY
	GAS STATION		RESTROOMS (**CHEMICAL)
	LAUNCHING RAMP		PUBLIC RECREATION OPEN
	PUBLIC RECREATION OPEN		PUBLIC RECREATION UNOPEN



OLD SALINAS RIVER CHANNEL, YEAR 2000
SEDIMENT REMOVAL WORK LOCATION

JUNE
2000



Crop Image (c) 1998

Site Plan Photo

adr715_2.sc.049 - July 1998

Drawn By: LRM.

Purpose: Provide standards for removal of channel and bank vegetation and accumulations of silt, sandbars, and other debris as may be required to maintain a clear channel.

Checked By:

Date: 06-20-2000

LEE & PIERCE inc.
consulting engineers

546 Abbott St #20 Salinas, CA93901
Phone (831) 758-0096

Sheet No.

1

of 4 Sheets

File 98557-21.ged

(Old Salinas River Channel Dredging)

3-01-019

Exhibit F

1 of 13

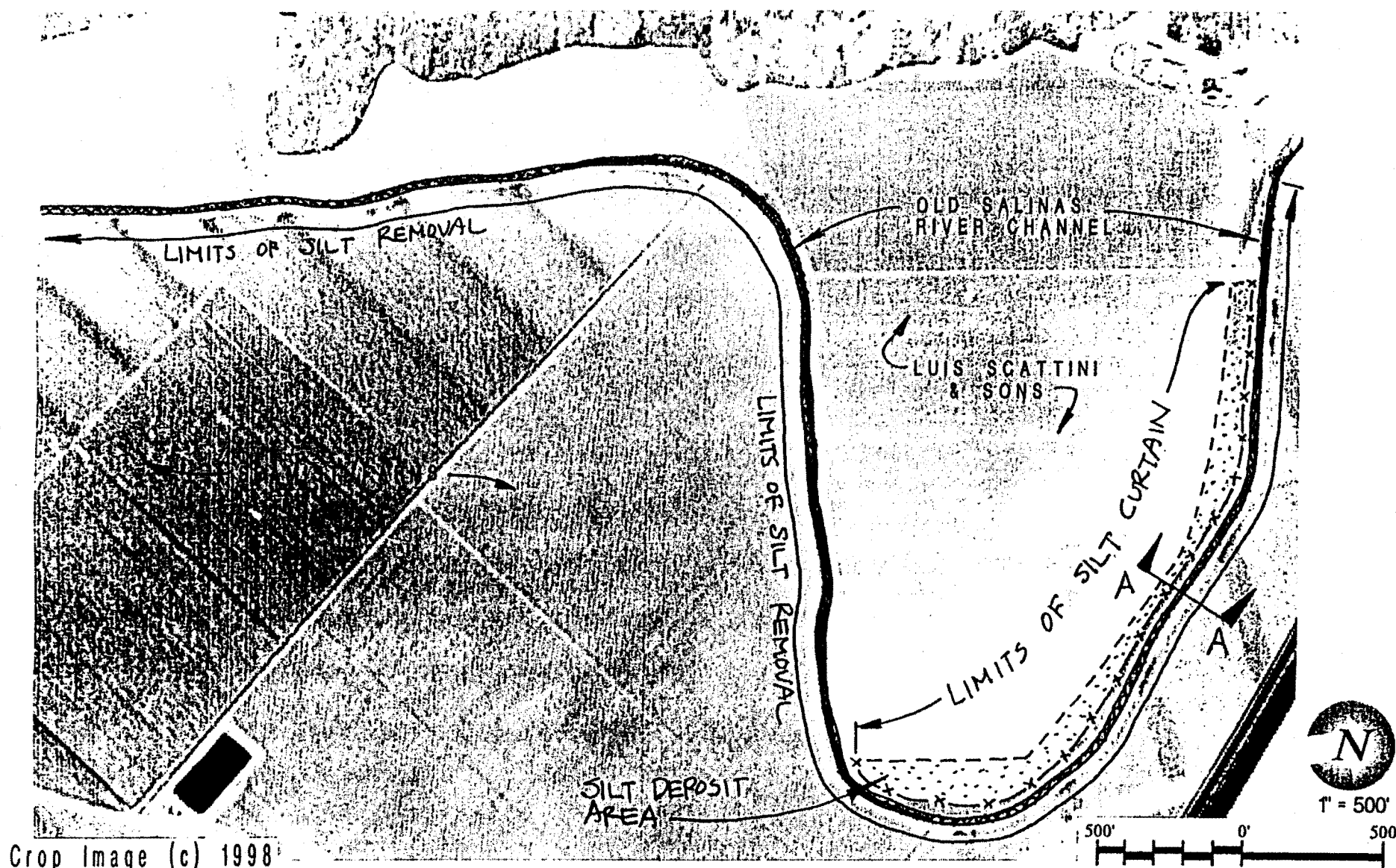
OLD SALINAS RIVER CHANNEL, YEAR 2000
SEDIMENT REMOVAL WORK LOCATION

JUNE
2000

(Old Salinas River Channel Dredging)

9-01-019

Exhibit
2 of 13



Crop Image (c) 1998

Site Plan Photo

adr715_2.sc.049 - July 1998

Drawn By: LRM.

Purpose: Provide standards for removal of channel and bank vegetation and accumulations of silt, sandbars, and other debris as may be required to maintain a clear channel.

Checked By:

Date: 06-20-2000

LEE & PIERCE inc.
consulting engineers

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Sheet No.

2

of 4 Sheets

File 7-22.ged

OLD SALINAS RIVER CHANNEL, YEAR 2000
SEDIMENT REMOVAL WORK LOCATION

JUNE
2000



Crop Image (c) 1998

Site Plan Photo

adr714_3.sc.005 - July 1998

Purpose: Provide standards for removal of channel and bank vegetation and accumulations of silt, sandbars, and other debris as may be required to maintain a clear channel.

Drawn By: LRM.

Checked By:

Date: 06-20-2000

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Sheet No.

3

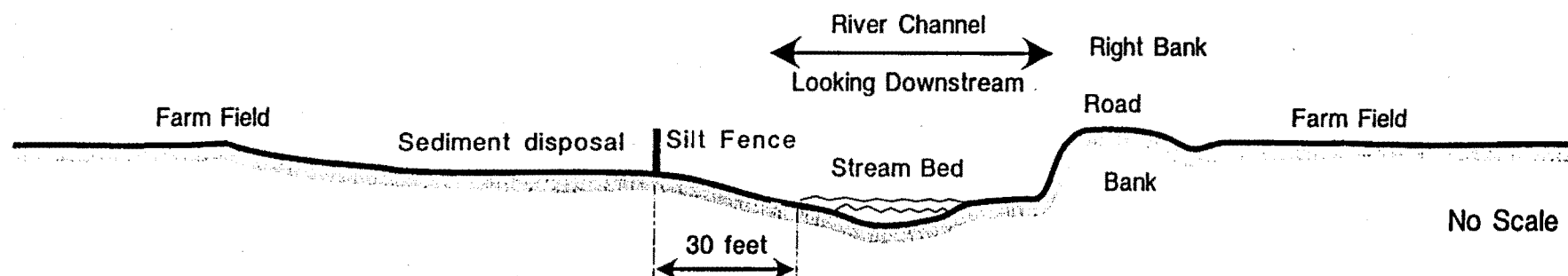
of 4 Sheets

File 98557-23.ged

(Old Salinas River Channel Dredging)

3-01-019

Exhibit
3 of 13



(Old Salinas River Channel Dredging)
3-01-019

Exhibit F
4 of 13

SPOILS DISPOSAL AREA CROSS SECTION A-A

Purpose: Provide management standards for removal of channel bank vegetation and accumulations of silt, sandbars, and other debris to maintain a clear channel.

Date: 06-20-2000

LEE & PIERCE inc.
consulting engineers

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Figure No.

4

of 4 Sheets

Form 98557-24.gcf

Monterey County Water Resources Agency

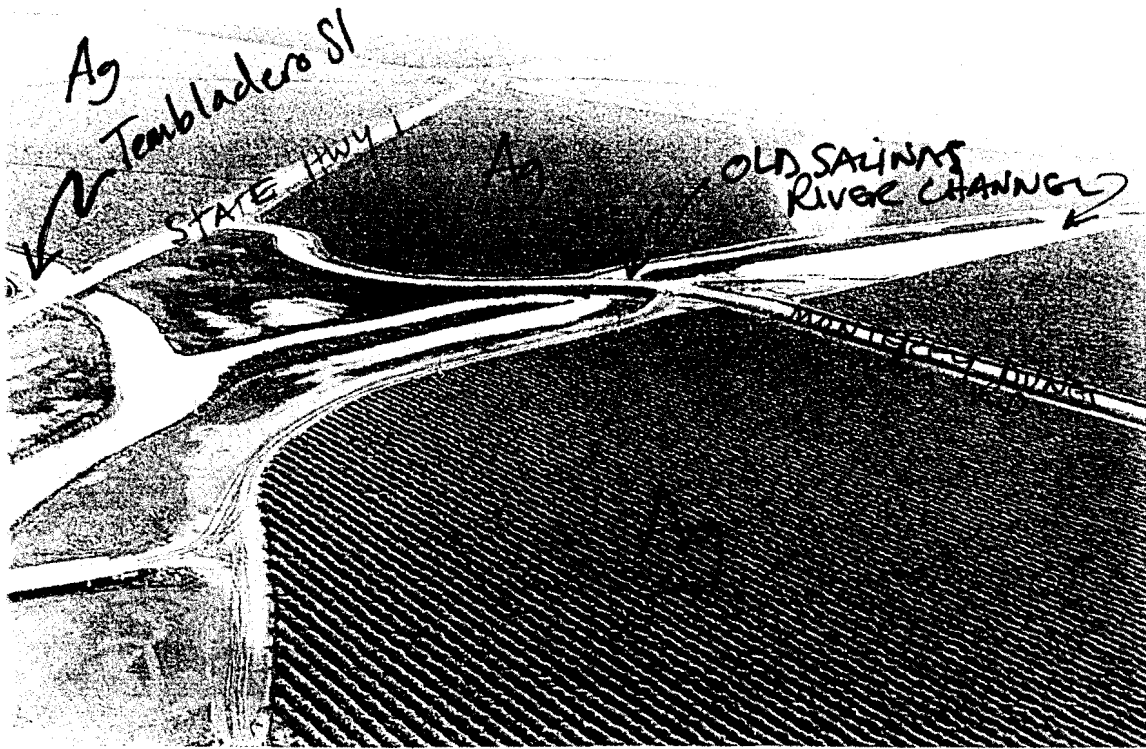


Photo By: F. PIERCE
Photo Date: 1-26-00
River Mile: 050.00-050.25

1

Photo Number



Photo By: F. PIERCE
Photo Date: 1-26-00
River Mile: 050.25-050.00

2

Photo Number

Old Salinas River Channel
Maintenance Program
Photo Sheet

LEE & PIERCE inc.
consulting engineers

546 Abbott St #20 Salinas, CA93901
Phone (831) 758-0096

Job # 98557

Date 2-1-00

By LRM

Figure

F

5 of 13

3-01-019 (OSRC)

Monterey County Water Resources Agency

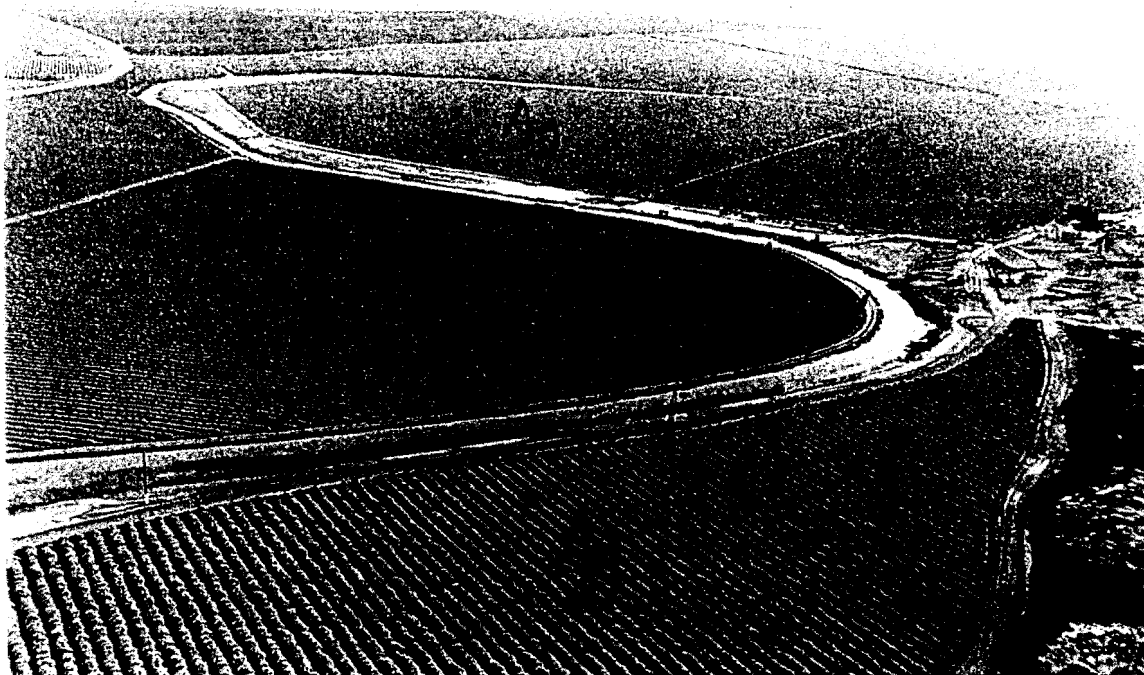


Photo By: F. PIERCE

Photo Date: 1-26-00

River Mile: 05 0.50 - 05 1.50

3

Photo Number



Photo By: F. PIERCE

Photo Date: 1-26-00

River Mile: 05 1.50 - 05 1.00

4

Photo Number

Old Salinas River Channel
Maintenance Program
Photo Sheet

LEE & PIERCE inc.
consulting engineers

546 Abbott St #20 Salinas, CA 93901
Phone (831) 758-0096

Job # 98557

Date 2-1-00

By LRM

Figure

F

6 of 13

3-01-019 (OSRC)

Monterey County Water Resources Agency

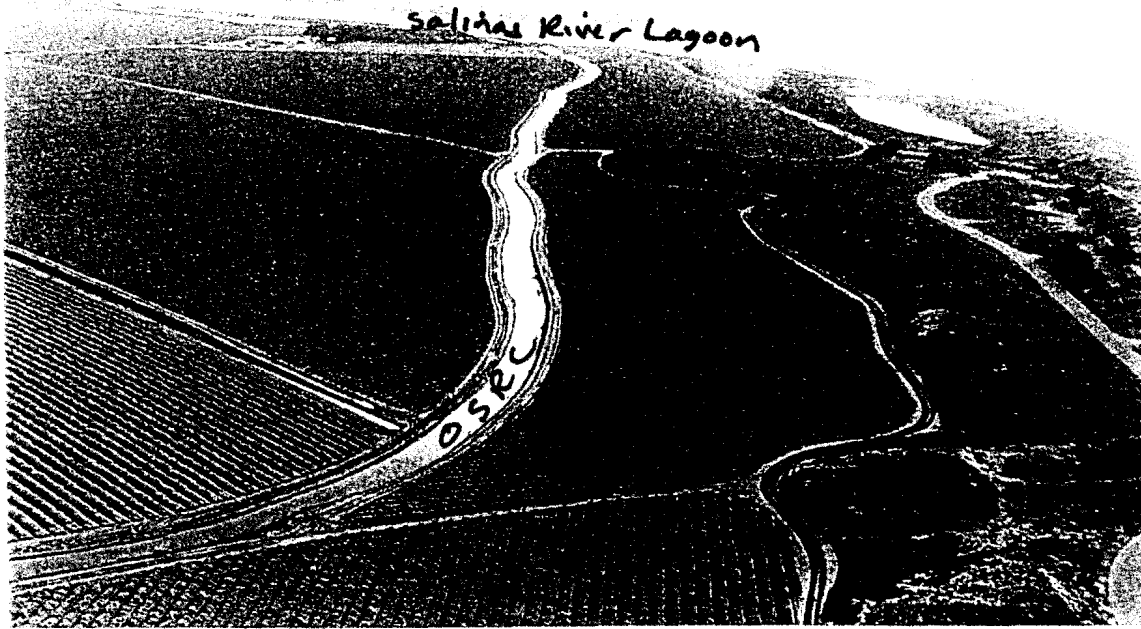


Photo By: F. PIERCE
 Photo Date: 1-26-00
 River Mile: 051.75 - LA400N

5

Photo Number



Photo By: F. PIERCE
 Photo Date: 1-26-00
 River Mile: 052.00 - LA400N

6

Photo Number

Old Salinas River Channel
 Maintenance Program
 Photo Sheet

LEE & PIERCE inc.
 consulting engineers

546 Abbott St #20 Salinas, CA 93901
 Phone (831) 758-0096

Job # 98557
 Date 2-1-00
 By LRM

Figure
 F
 7 of 13

3-01-019 (OSRC)

Monterey County Water Resources Agency



Photo By: F. PIERCE
 Photo Date: 2-8-00
 River Mile: 051.15

11

Photo Number



Photo By: F. PIERCE
 Photo Date: 2-8-00
 River Mile: 051.60

12

Photo Number

Old Salinas River Channel
 Maintenance Program
 Photo Sheet

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 Phone (831) 758-0096

Job # 98557

Date 2-14-00

By LRM

Figure

F

8 of 13

3-01-019 (OSRL)

Monterey County Water Resources Agency

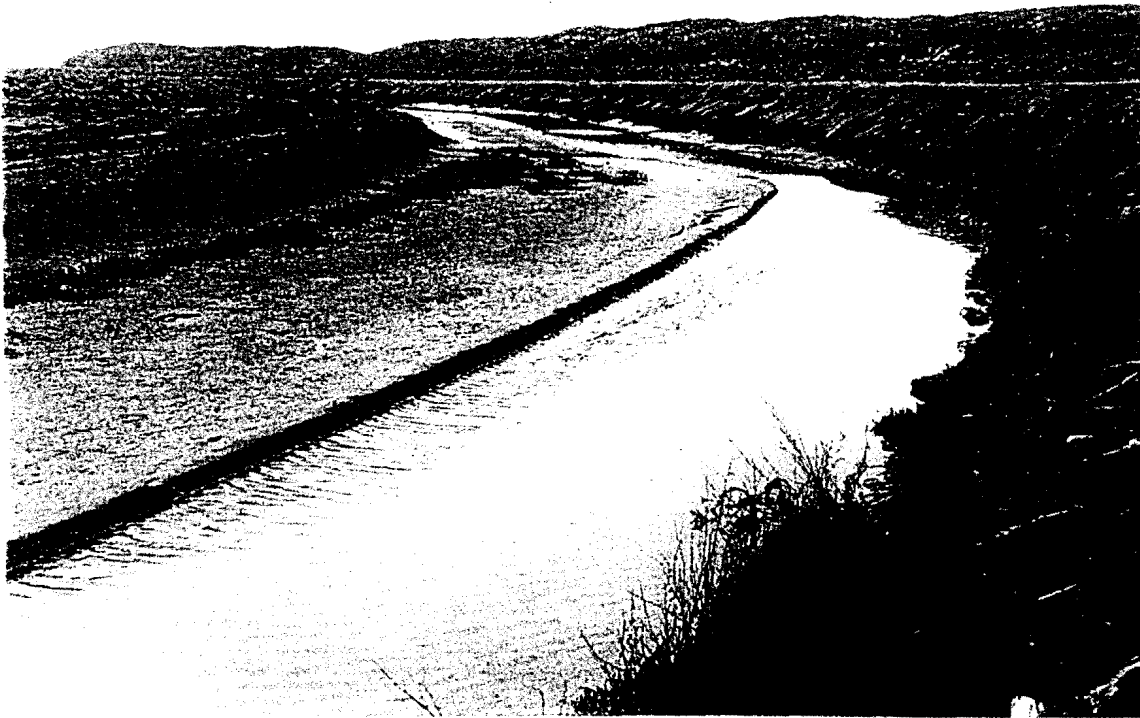


Photo By: F. PIERCE
 Photo Date: 2-8-00
 River Mile: 051.65

13

Photo Number



Photo By: F. PIERCE
 Photo Date: 2-8-00
 River Mile: 051.70

14

Photo Number

*Old Salinas River Channel
 Maintenance Program
 Photo Sheet*

LEE & PIERCE inc.
 consulting engineers
 546 Abbott St #20 Salinas, CA93901
 Phone (831) 758-0096

Job # 78557
 Date 2-14-00
 By LRM

Figure
F
 9 of 13

3-01-019 (OSRC)

Form 98557-05.ged - Feb. 1, 2000

Monterey County Water Resources Agency



Photo By: F. PIERCE
Photo Date: 2-8-00
River Mile: 051.70

15

Photo Number



Photo By: F. PIERCE
Photo Date: 2-8-00
River Mile: 051.85

16

Photo Number

Old Salinas River Channel
Maintenance Program
Photo Sheet

LEE & PIERCE inc.
consulting engineers

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Phone (831) 758-0096

Job # 98557

Date 2-14-00

By LRM

Figure

F

10 of 13

3-01-019 (OSRC)

Monterey County Water Resources Agency



Photo By: F. PIERCE
 Photo Date: 2-8-00
 River Mile: 052.35

17

Photo Number

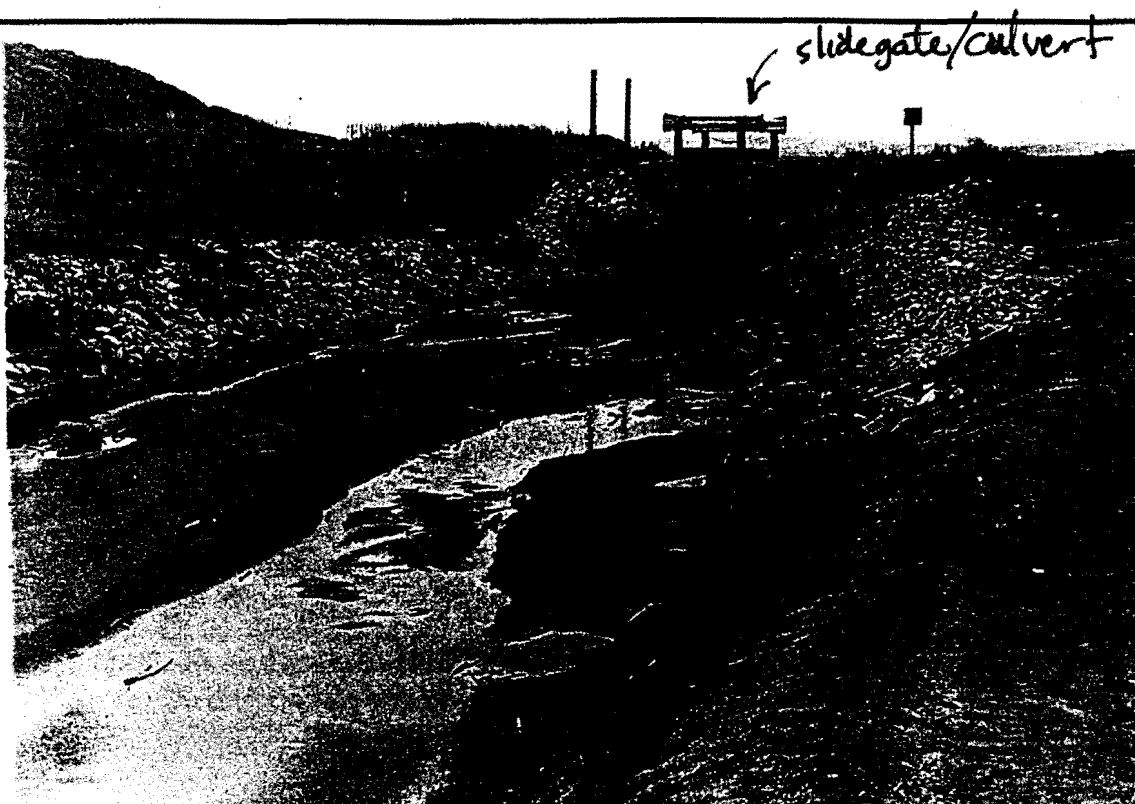


Photo By: F. PIERCE
 Photo Date: 2-8-00
 River Mile: 052.45 (GATE)

18

Photo Number

Old Salinas River Channel
 Maintenance Program
 Photo Sheet

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 Phone (831) 758-0096

Job # 98557

Date 2-14-00

By LRM

Figure

F
11 of 13

3-01-019 (OSRC)

Form 98557-05.ged - Feb. 1, 2000

Monterey County Water Resources Agency



Photo By: F. PIERCE
 Photo Date: 2-8-00
 River Mile: 051.10

9

Photo Number



Photo By: F. PIERCE
 Photo Date: 2-8-00
 River Mile: 051.10

10

Photo Number

Old Salinas River Channel
 Maintenance Program
 Photo Sheet

LEE & PIERCE inc.
 consulting engineers

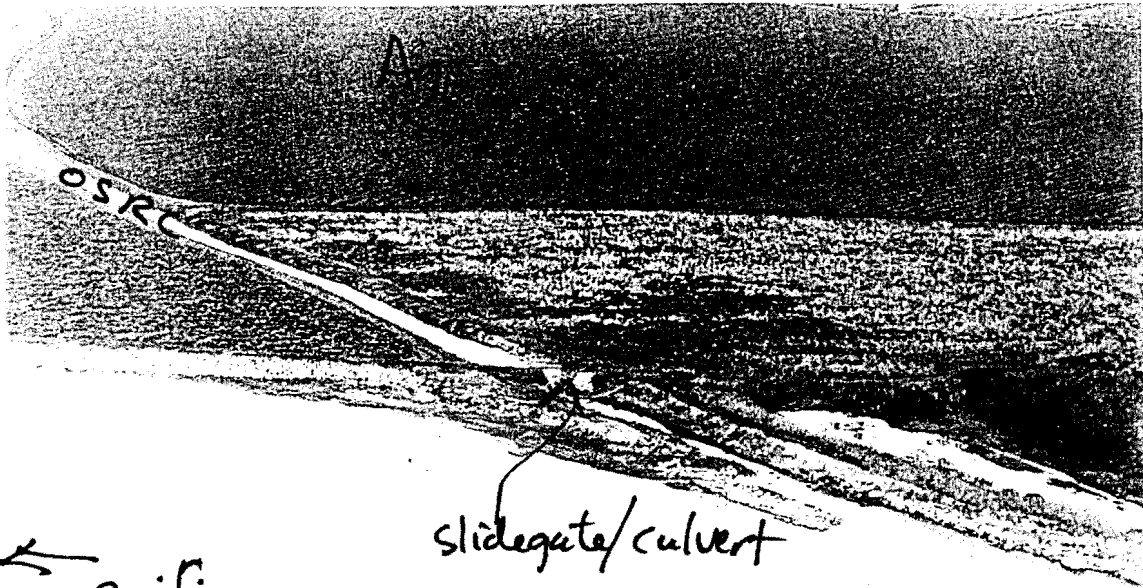
546 Abbott St #20 Salinas, CA93901
 Phone (831) 758-0096

Job # 98557
 Date 2-14-00
 By LRM

Figure
F
12 of 13

3-01-019 (OSRC)

Monterey County Water Resources Agency



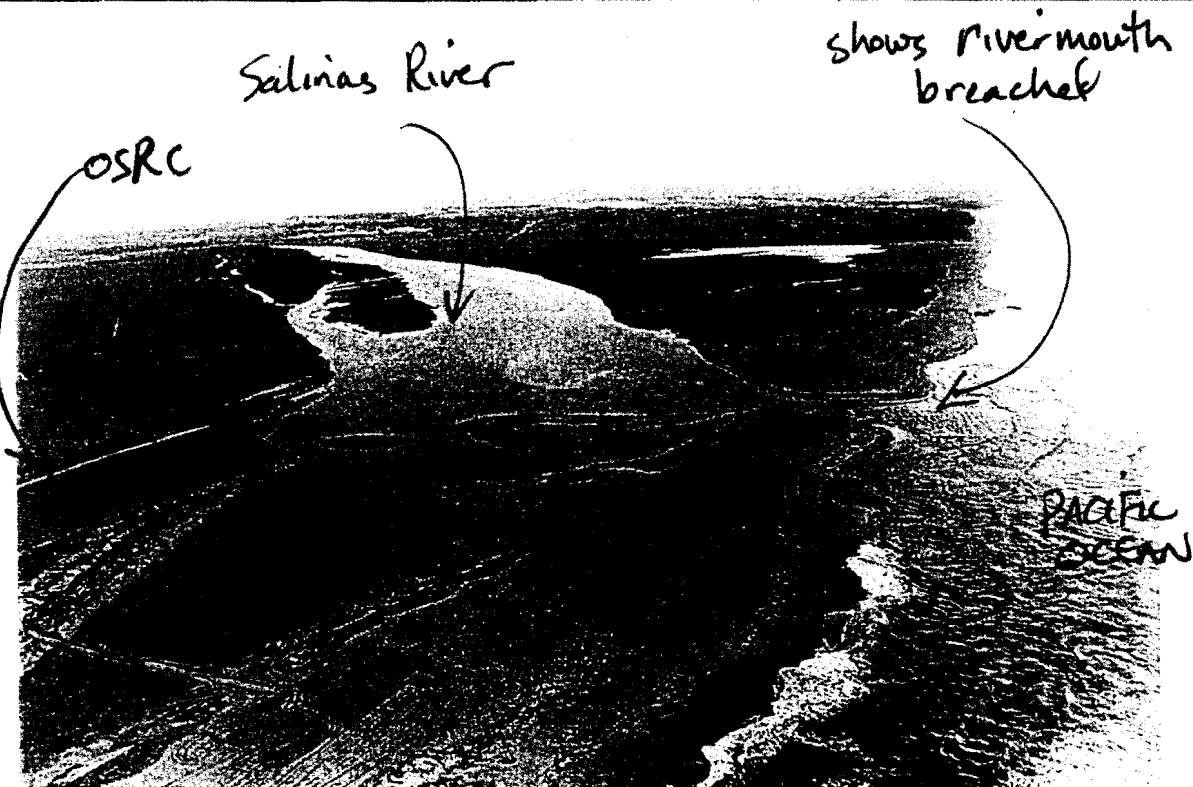
← To Pacific Ocean

slidegate/culvert
Salinas River Lagoon

Photo By: F. PIERCE
Photo Date: 1-26-00
River Mile: LAG00N - 052.25

7

Photo Number



Salinas River

shows river mouth breach

OSRC

PACIFIC OCEAN

Photo By: F. PIERCE
Photo Date: 1-26-00
River Mile: LAG00N

8

Photo Number

Old Salinas River Channel
Maintenance Program
Photo Sheet

LEE & PIERCE inc.
consulting engineers

546 Abbott St #20 Salinas, CA93901
Phone (831) 758-0096

Job # 98557

Date 2-1-00

By LRM

Figure

F

13 of 13

3-01-019 (OSRC)

OLD SALINAS RIVER CHANNEL
POST DREDGING MANAGEMENT STANDARDS

RECEIVED

NOV 13 2000

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

LUIS SCATTINI AND SONS
Marie King Estate

SEAMIST FARMS
Hugh Bruno Tottino, David Tottino,
Gloria Cole/Hugo Tottino, Henry Bellone/Gloria Cole

MONTEREY COUNTY
Water Resources Agency

September 16, 1998
Revised October 23, 1998
Revised November 5, 1998
Revised November 5, 2000

ED Approval
12/04/00

3-01-019
(Old Salinas River Channel Dredging)


EXHIBIT NO. 6
APPLICATION NO.
Exhibit 6
1 of 23
 California Coastal Commission

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6.0	AGRICULTURAL PRACTICES	9
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Sheet 2 -	Location Map - Work Area, Old Salinas River Channel
Sheet 3 -	Site Plan Photo
Sheet 4 -	Site Plan Photo
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Sheet 7 -	River Sections C-C

1.0 BACKGROUND

During the floods of March, 1995, the Old Salinas River Channel was inundated from surface runoff when waters breached containment levees for the Salinas River. This water, which passed over miles of farmlands as it worked its way to the sea, contained silt and other debris that was deposited in the Old Salinas River Channel. Historically, this the Old Salinas River Channel provided drainage for both the Salinas River Lagoon and surrounding agricultural fields. Local farm property owners or their tenants maintained the banks free of vegetation in order to eliminate weeds and control rodent populations, both which can adversely affect the nearby crops. Periodic dredging and removal of accumulated silt and sandbars that formed during wet periods was conducted by the Monterey County Water Resources Agency.

Successful farming on lands adjacent to the Old Salinas River Channel is highly dependent on maintaining the Old Salinas River Channel flow capacity and vegetation free banks. Not only does the Old Salinas River Channel provide for surface runoff collection but also serves as receiver for subterranean tile drain discharges which are installed to lower the local immediate water table. This water table is influenced by tidal action as well as water levels in the lagoon and reduced flows due to restrictions in the Old Salinas River Channel. In addition, the Old Salinas River Channel is a flood control channel passing water from the Salinas River Lagoon to Monterey Bay.

After the 1995 flood, the Monterey County Water Resources Agency (MCWRA) was requested by county landowners and farmers to act as the lead agency in securing regulatory permits to allow owners and operators affected by the flood to conduct channel clearing, sandbar removal, levee repairs and farmland restoration. Because the Old Salinas River Channel is located in the coastal zone, emergency channel dredging and clearing of vegetation required a Coastal

Development Permit (CDP) which was issued by the California Coastal Commission, Central Coast District Office, Santa Cruz, California. Included in Section III, Special Conditions, was the requirement that the Monterey County Water Resources Agency and private property owners develop and submit a Post Dredging Management Standards report. This document has been prepared and submitted to the Coastal Commission to meet this requirement.

2.0 MANAGEMENT WORK AREA DEFINED

2.1 Location *[See Sheet Nos. 1 and 2]*

The extent of the work area as defined by the U.S. Army Corps of Engineers 404 Permit and the Coastal Commission CDP consists of the Old Salinas River Channel beginning at the Salinas River Lagoon slide gate and continuing down stream to the confluence of the Tembladero Slough. All activities subject to these standards are limited to this area, which does not include agricultural drains or tail ditches that either parallel or intersect the Old Salinas River Channel.

2.1.1 Channel Base Area *[see Sheet Nos. 3,4,5 (Site Plan) and Sheets 6 and 7 (Sections)]*

The channel base area consists of its length between the right bank toe to the left bank toe a maximum width of 16-feet at the channel base. This area is subject to periodic maintenance as may be required to keep it free from any obstructions that may impede free flow of water.

2.1.2 Channel Banks *[see Sheet Nos. 6 and 7 (Sections A-A, B-B, C-C)]*

Channel banks consist of the area between the toe of the bank and the top uppermost elevation where the slope generally becomes horizontal. This only applies to slopes greater than 22.5 degrees from horizontal.

2.1.3 Undisturbed Existing Vegetated Areas *[see Sheet 7 (Section C-C)]*

The existing vegetated area immediately north and south of the Monterey Dunes Way Road bridge crossing the Old Salinas River Channel is to remain undisturbed by management activities. This area is defined in the Coastal Commission CDP and U.S. Army Corps of Engineers 1995 404 Dredging Permit.

3.0 VEGETATION CONTROL

3.1 Control of Vegetation within the Bounds of the Channel Area (bank toe to bank toe)

3.1.1 Mechanical Removal

Periodic removal of vegetation growing within the bounds of the channel shall be conducted on an as-needed basis as determined by property owners after obtaining the appropriate agency permits. Equipment may enter the Old Salinas River Channel only when dry or devoid of water. Otherwise, equipment shall be operated from adjacent banks and/or field roads when flowing or standing water is present in the Old Salinas River Channel.

3.1.2 Chemical Application

Spraying of chemicals and/or herbicides within the Old Salinas River Channel will not be allowed.

3.2 Channel Banks

The Old Salinas River Channel banks other than those defined as undisturbed vegetation on Sheet #5, Site Photo Plan, shall be maintained free from all vegetation.

3.2.1 Mechanical Eradication

The use of heavy mechanical equipment for the control of bank vegetation shall not be allowed. Only hand removal is authorized (no backhoes or graders shall be used for removing vegetation. Care shall be exercised during the removal of vegetation in order to preclude soil from entering running or standing water. In the event that the operation will generate floating material that will migrate downstream, cross channel screens shall be installed. These screens will be placed to capture and allow removal of floating matter. Adjacent fields with slopes less than 22.5 degrees may be plowed or disced as part of normal tillage practice only in the event that the channel remains in its current configuration and only if slopes were in production prior to the approval of the coastal development permit.

3.2.2 Chemical Eradication

No herbicides can be used in areas draining into channels except for eradication of the following species:

COMMON NAME	SCIENTIFIC NAME
Kikuyu Grass	Pennisetum clandestinum
Bermuda Grass	Cynodon dactylon
Andean Pampas Grass	Cortaderia jubata
Giant Reed/Bamboo	Arundo donax

Use of chemical herbicides for the control and/or removal of these species shall be limited to hand application methods only. Care shall be exercised during application to minimize over spray and/or drift of Rodeo 1% mixture and surfactant approved by EPA for aquatic use.

3.2.3 Burning

The Old Salinas River channel is bounded by farm roads and burning on them could put contaminants onto the banks and therefore possibly into the channel. Therefore, burning of removed vegetation shall be allowed only on farm fields outside of channel boundaries, and never within 100 feet of the channel banks. Ignition methods shall be limited to liquid petroleum gas-fired torches. All burning shall be conducted in accordance with Monterey Bay Unified Air Pollution Control District regulations.

3.3 Designated Undisturbed Vegetated Area

No work shall be conducted in the undisturbed vegetated area identified in Section 2.1.3.

4.0 SILT AND SANDBAR REMOVAL

4.1 Mechanical Removal *[see Sheets 6 and 7]*

Periodic removal of accumulated silt and sand shall be conducted as required in order to maintain the flow capacity of the channel after all appropriate Coastal Development, Department of Fish and Game and other agency permits are obtained.

4.1.1 Annual Maintenance

Prior to August of each year, the landowner/s shall conduct an inspection of the channel and identify areas that contain accumulations of silt and sand. If these accumulations appear to restrict the normal flows or reduce the channel base width to less than 16-feet, and after receipt of all permits, maintenance work may be scheduled. Work shall be scheduled between April 1 and October 15.

4.1.2 Spoils Disposal

Sediment removed during Old Salinas River Channel management activities shall be returned to adjacent fields only when residual levels of persistent agricultural chemicals, analyzed using EPA Method 8080, are below limits established by the State of California Department of Fish and Game. If residual levels are less than those found in adjacent fields and when approved by the State of California Department of Fish and Game, sediments may be placed on adjacent fields. Test results must be submitted to and approved by the Department of Fish and Game prior to the start of maintenance activities requiring disposal of sediment on adjacent fields.

Placement of soils containing residuals of agricultural pesticides that are less than those found in adjacent fields provides for an overall reduction in concentrations.

If concentrations of chemicals are found to be greater than allowed by the Department of Fish and Game, the materials will be removed from the immediate area.

4.1.3 Channel Profile

The minimum channel profile for its length shall consist of a base width of 16-feet as measured perpendicular to the channel centerlines. Bank outward slope shall not exceed 60 degrees from horizontal. Existing bank height varies from less than one foot to over eight feet at the highest side. Slopes of less than 22.5 degrees are not classified as banks and therefore are not subject to these management standards.

5.0 ROAD AND FIELD DRAINS

5.1 Field Roads Adjacent to the Channel [see Sheets 6 and 7]

Field roads immediately adjacent and paralleling the channel area are outside of the bounds of the channel management area. However, because of their potential to impact the channel when graded, runoff will be directed towards adjacent fields. Prior to any Old Salinas River Channel work involving dredging or removal of silt or sandbars and the deposit of spoils for dewatering on the field road, the road in the work area must be graded to insure that water will not flow back into the channel.

5.2 Field Drains

All field drains that discharge through a pipe into the Old Salinas River Channel area as defined in Section 1.0 are subject to these Management Standards. They shall continue to be allowed to discharge surface drainage into the Old Salinas River Channel.

5.2.1 Field Inlet Silt Control

Field inlets to pipes crossing under field roads and discharging into the channel shall be provided with silt control during channel maintenance activities. Silt control may consist of fabric dams or straw bales installed in field drains or at drain discharge inlets.

5.2.2 Field Drain Discharge - Erosion Control

Drain piping discharging at a height greater than 12-inches above the normal flow surface level shall extend a minimum of 24-inches beyond the normal toe of the bank. This is to prevent localized bank erosion from pipe discharge. Drain pipe discharges slightly above or at the normal flow surface level shall be provided with erosion control. This may include plastic or geofabric sheeting, rip rap or other accepted materials or flow energy dissipaters.

6.0 AGRICULTURAL PRACTICES

6.1 Field Preparation

Tillage methods presently employed in the preparation of fields including cultivation practices and the application of agricultural chemicals will continue without change.

6.1.1 Leveling and Regrading

Slope changes or regarding of the adjacent fields shall be conducted in such a manner as to not affect or change the alignment of the existing Old Salinas River Channel course. If channel banks are impacted by leveling or regarding activities they shall be returned to original condition and location.

6.1.2 Tile Drain Installation

All fields adjacent to the channel either are presently tiled or scheduled for the addition of subsurface drains. Prior to any bank disturbance for installation of new tile drain discharge points or maintenance of existing points, proper permits and authorizations shall be obtained from the California Department of Fish and Game, Coastal Commission and other agencies with jurisdiction over this activity. Emergency repairs to existing discharge points also require approval of emergency permits. Routine repair and maintenance of tile drain discharge points shall be allowed. Any banks disturbed during routine maintenance or new installation of drain discharge points shall be returned to their original condition and location. Installation of new discharge points shall be in accordance with Section 5.3.

6.2 Crop Production

None of the Management Standards or requirements identified in this document shall in any way be applied to the production or harvesting of crops in fields adjacent to the Old Salinas River Channel.

6.2.1 Cultural Practices

Planting, tillage, harvest and post harvest activities shall be conducted as appropriate for the grower selected crop.

5.3 Tile Drain Discharge - Erosion Control

Tile drain flows shall continue to be allowed to be discharged into the Old Salinas River Channel. Any repair, modification and/or upgrade as needed to meet the requirements for good farming practice shall be subject to the requirements of Section 5.2.2, unless discharging through existing structures designed to provide erosion control.

5.4 Tributary Drains

Agricultural drain channels that provide discharge for the general area are not subject to these Management Standards except at the point of discharge into the Old Salinas River Channel.

5.4.1 Drain Intersection Erosion Control

Intersection points with the main channel shall be maintained on an annual basis. Erosion control shall be provided and may include plastic or geofabric sheeting, rip-rap or other accepted materials or control structures.

6.3 Agricultural Chemical Application

6.3.1 Fertilizer and Soil Amendment

Application of fertilizer and soil amendments, both natural and manufactured, shall be conducted as presently practiced. No open ground storage of these materials adjacent to the Old Salinas River Channel shall be permitted.

6.3.2 Insect and Rodent Control

Approved chemicals for insects and rodents shall be applied in accordance with regulations and past practices on farmed fields. Care shall be exercised during application to minimize over spray and/or drift that may impact the channel or banks.

7.0 WATER QUALITY

7.1 Channel Flows

Water flow in the Old Salinas River Channel originates from several sources. These sources include surface runoff, discharge from subsurface tile drains and discharge from the Salinas River Lagoon.

7.1.1 Minimal Flow

Minimal flows are generated by a fluctuating water table influenced by tidal action and the discharge from subsurface tile drains. These drains are installed to control the water table and salt levels in the root zones of adjacent fields. Additionally, some surface discharges may be generated during normal farming operations.

7.1.2 Normal Flow

Normal flows are generated by flows of water from the Salinas River Lagoon which augments the locally generated minimal flow. The flow is controlled by the MCWRA operated slide gate which is opened when the mouth of the Salinas River is naturally closed by sand buildup and ocean action, normally about eight months each year. During periods when the Salinas River flows directly to the ocean, slide gate is closed.

7.1.3 High Flows

High flows may be generated during periods of moderate or heavy rainfall when surface runoff from nearby fields combines with flows generated by elevated water levels in the Salinas River Lagoon.

7.2 Other Issues

7.2.1 Habitat Enhancement

The increase in low flow water surface area of the channel created by maintaining a maximum 16-foot base width provides additional surface habitat for avian species.

7.2.2 Trash Disposal

As much as practical, special care shall be taken to reduce or eliminate trash disposal within the Old Salinas River Channel boundary. Trash receptacles should be provided for thinning and harvest crews. Also, periodic sweeps of the Old Salinas River Channel should be conducted and any trash or debris should be removed and disposed of in accordance with local regulations.

8.0 OBSERVATIONS

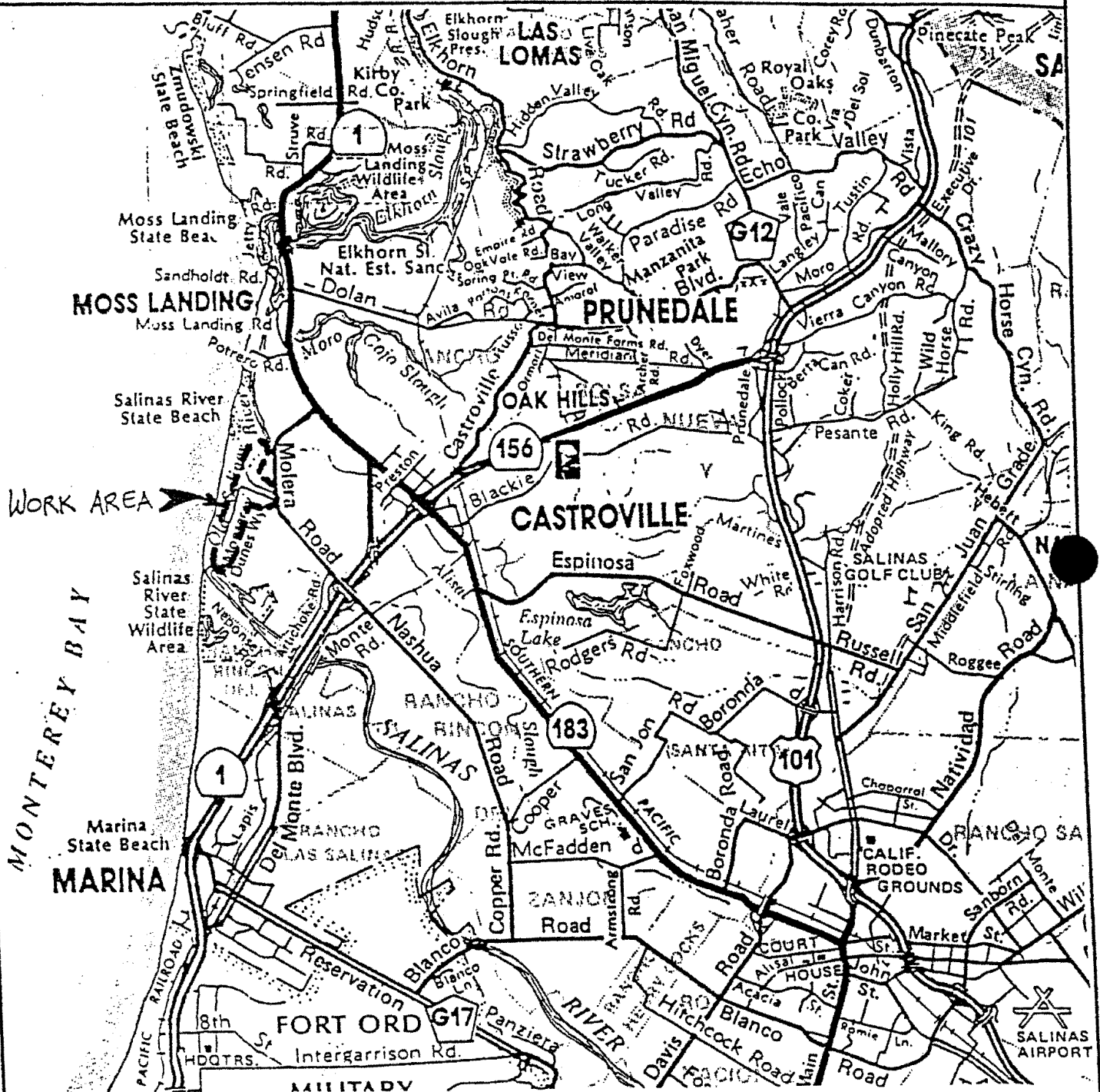
Periodic observations of the Old Salinas River Channel condition shall be made by the property owners. Any proposed maintenance activity that is proposed under this plan that may affect property not under control of the party conducting the work shall require notification and approval of the affected party. Any apparent decrease in channel capacity shall be brought to the attention of MCWRA.

9.0 APPENDIX

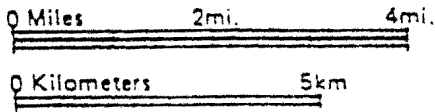
OLD SALINAS RIVER CHANNEL POST-DREDGING MANAGEMENT STANDARDS

SEPTEMBER 19

Purpose: Provide standards for removal of channel and bank vegetation and accumulations of silt, sandbars, and other debris as may be required to maintain a clear channel.



COUNTY MAP SCALE



3-01-019
(OSRC)

Exhibit G
17 of 23

Location Map
Castroville Area

Drawn By: D.P.
Checked By: F.P.
Ref: Date: 9-23-98

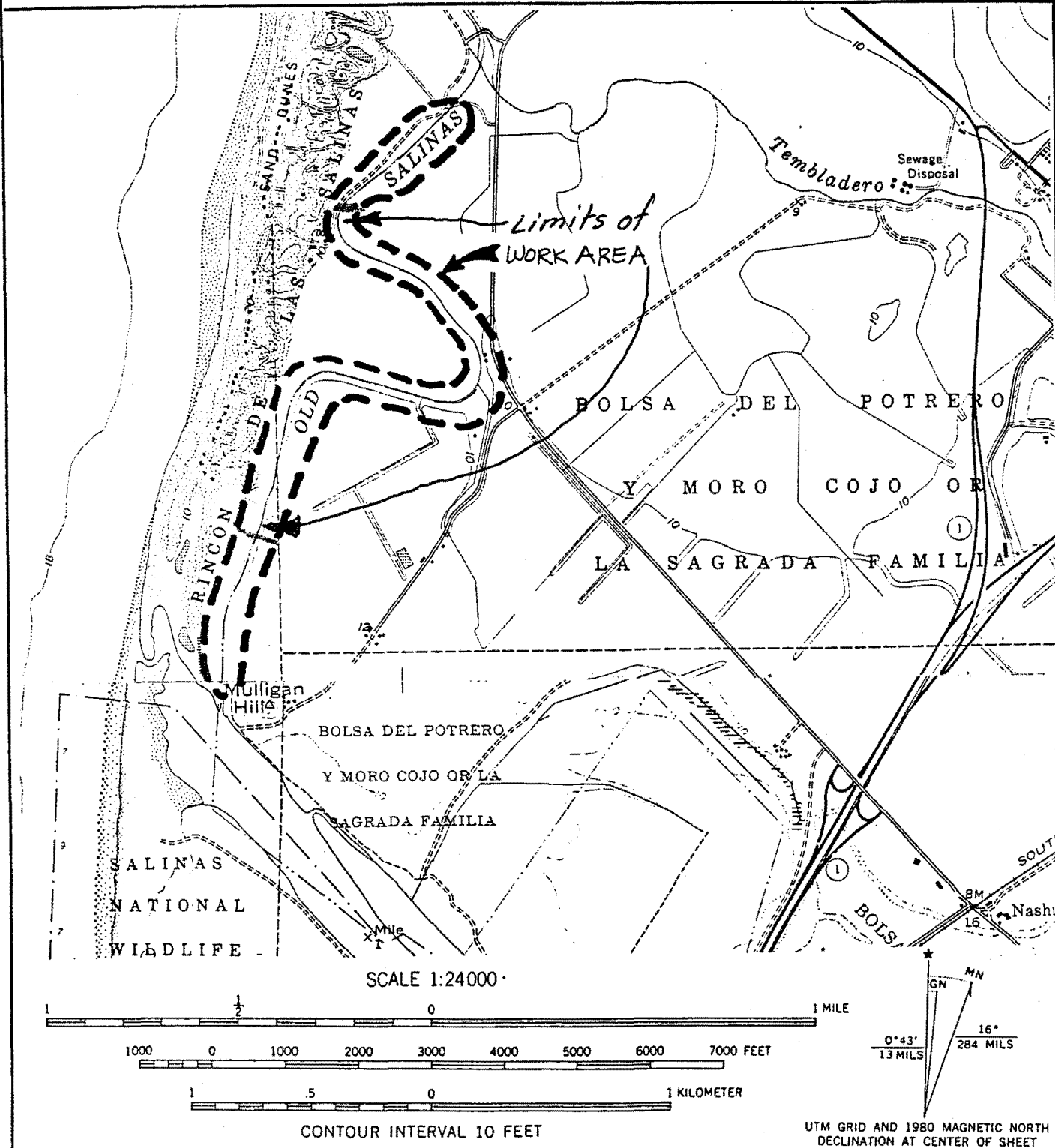
LEE & PIERCE inc.
consulting engineers
546 Abbott St #20 Salinas, CA93901
Phone (408) 758-0096

Sheet No.
1
of 2 Sheets

OLD SALINAS RIVER CHANNEL POST-DREDGING MANAGEMENT STANDARDS

SEPTEMBER 1998

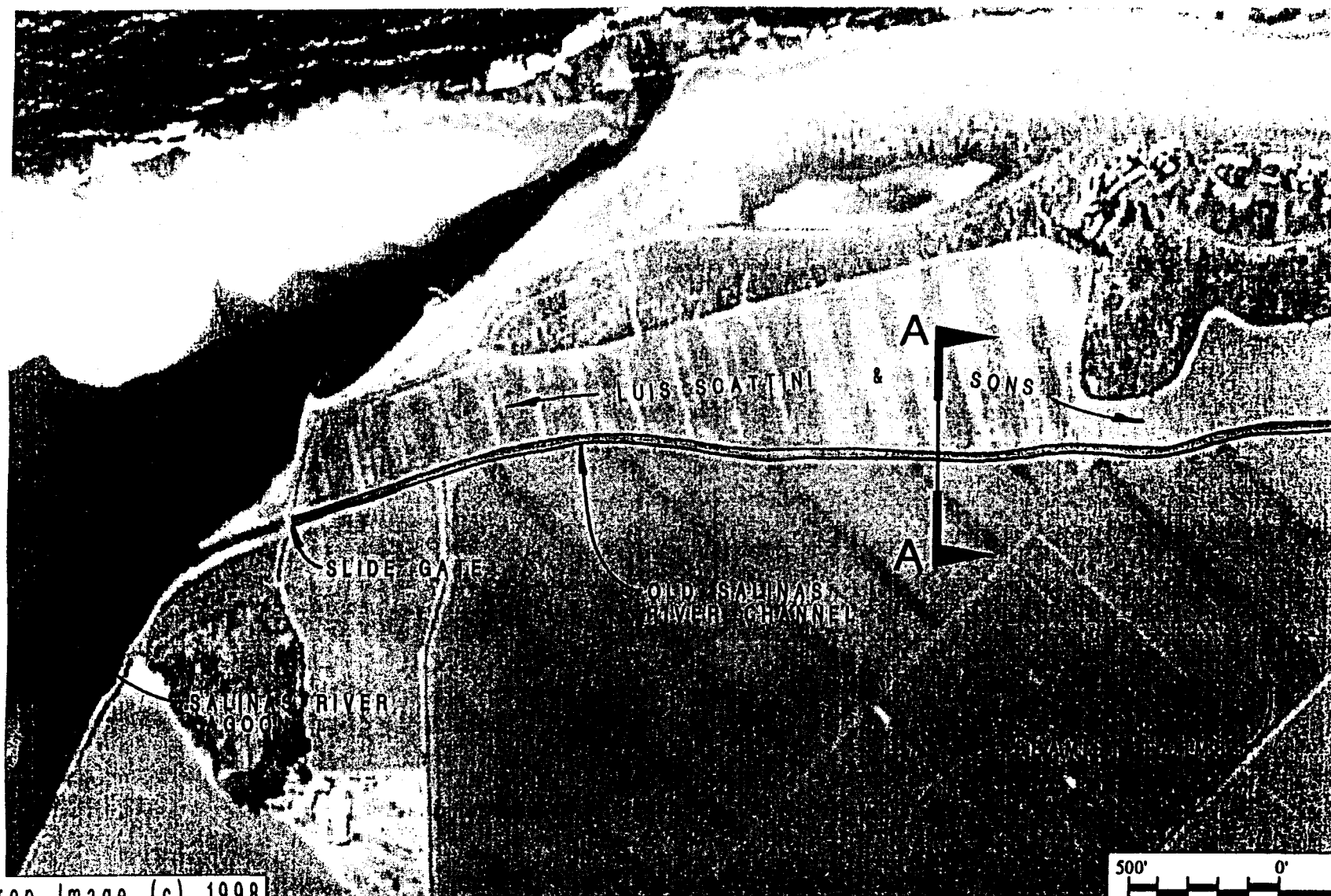
Purpose: Provide standards for removal of channel and bank vegetation and accumulations of silt, sandbars, and other debris as may be required to maintain a clear channel.



Prepared By: D.P.	Date 9-23-98	Checked by: F.P.	Date 9-23-98
U. S. G. S. 7.5 min Series Quadrangle Sheet		LEE & PIERCE inc.	
Location Map Showing Work Area		consulting engineers	
Old Salinas River Channel		546 Abbott St #20 Salinas, CA93901	
Date 09/21/98		Phone (408) 758-0096	
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		of 2 Sheets	

3-01-019(OSRC)

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Crop Image (c) 1998

Site Plan Photo adr715_2.sc.049 - July 1998

Purpose: Provide standards for removal of channel and bank vegetation and accumulations of silt, sandbars, and other debris as may be required to maintain a clear channel.

Drawn By: LRM

Checked By:

Date: 09-17-98

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File 7-01.ged

(Old Salinas River Channel Dredging)

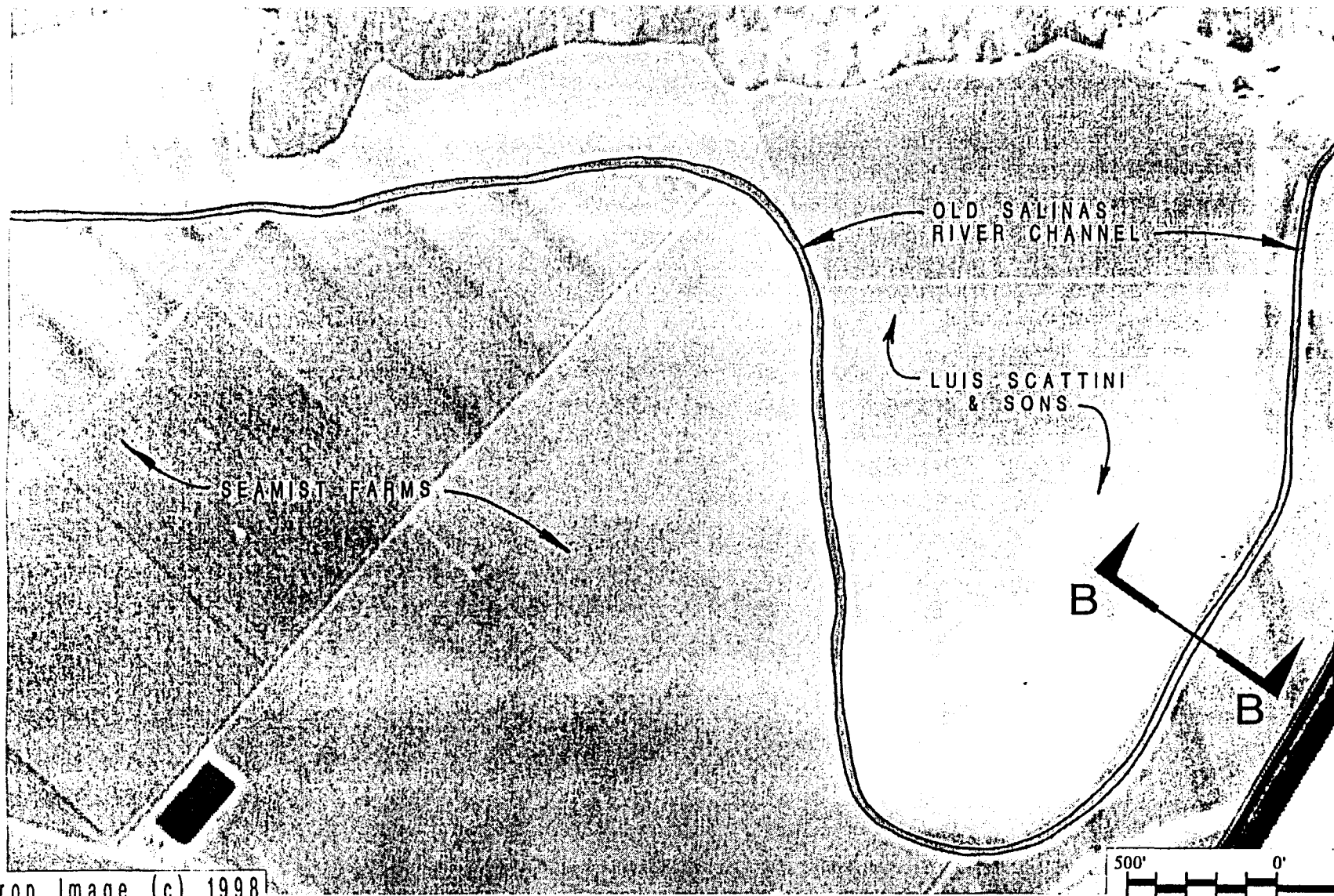
3-01-019

Exhibit 5

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OLD SALINAS RIVER CHANNEL POST-DREDGING MANAGEMENT STANDARDS

SEPTEMBER 1998



Crop Image (c) 1998

Site Plan Photo

adr715_2.sc.049 - July 1998

Purpose: Provide standards for removal of channel and bank vegetation and accumulations of silt, sandbars, and other debris as may be required to maintain a clear channel.

Drawn By: LRM.

Checked By:

Date: 09-17-98

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File 98557-02.gcd

(Old Salinas River Channel Dredging)

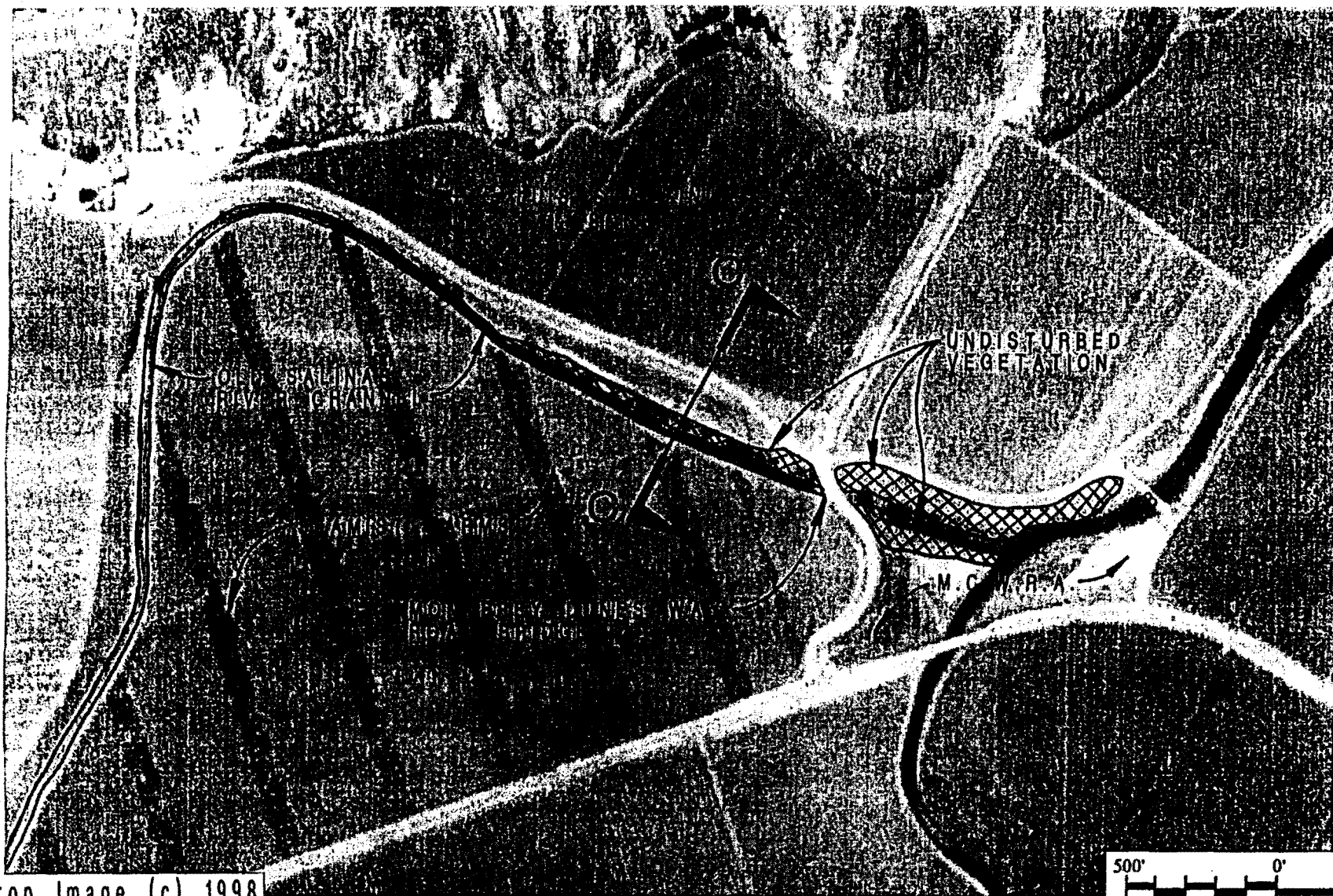
3-01-019

Exhibit G

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OLD SALINAS RIVER CHANNEL POST-DREDGING MANAGEMENT STANDARDS

SEPTEMBER 1998



Crop Image (c) 1998

Site Plan Photo

adr714_3.sc.005 - July 1998

Drawn By: LRM

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File 7-03.gcd

(Old Salinas River Channel Dredging)

3-01-019

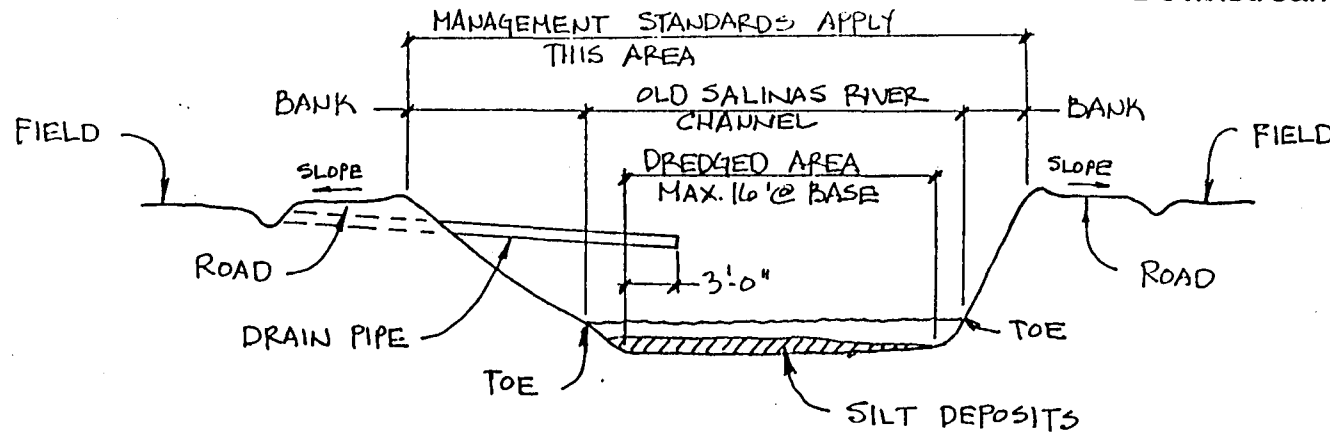
Exhibit C

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OLD SALINAS RIVER CHANNEL POST-DREDGING MANAGEMENT STANDARDS

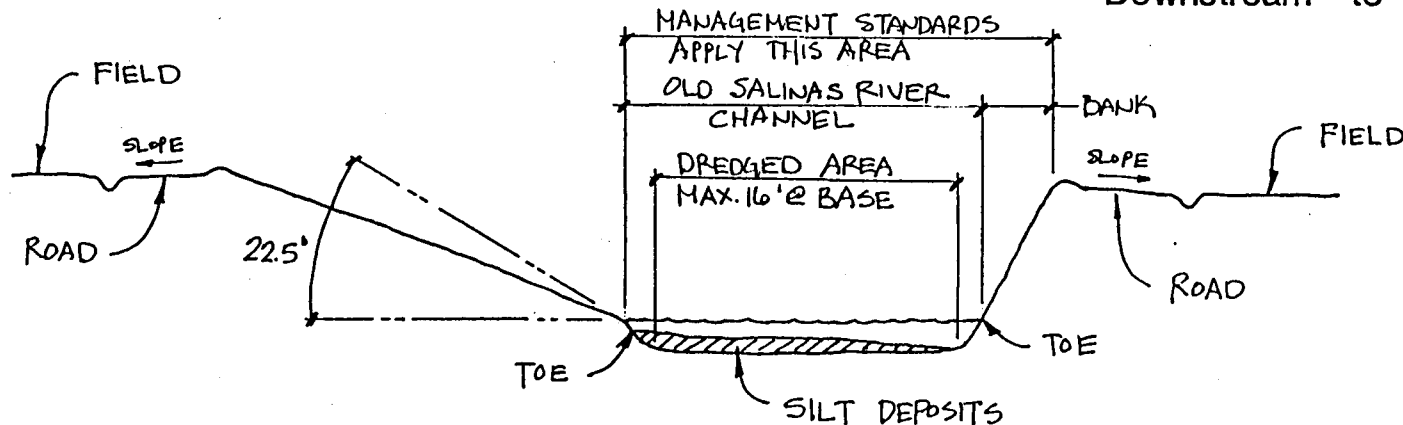
APRIL 1997

Old Salinas River Channel Looking Downstream to Moss Landing



SECTION A - A

Old Salinas River Channel Looking Downstream to Moss Landing



SECTION B - B

River Sections

Purpose: Provide standards for removal of channel and bank vegetation and accumulations of silt, sandbars, and other debris as may be required to maintain a clear channel.

Drawn By: L.R.M.

Checked By:

Date: 3-18-97

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3-01-019 (Old Salinas River Channel Dredging)

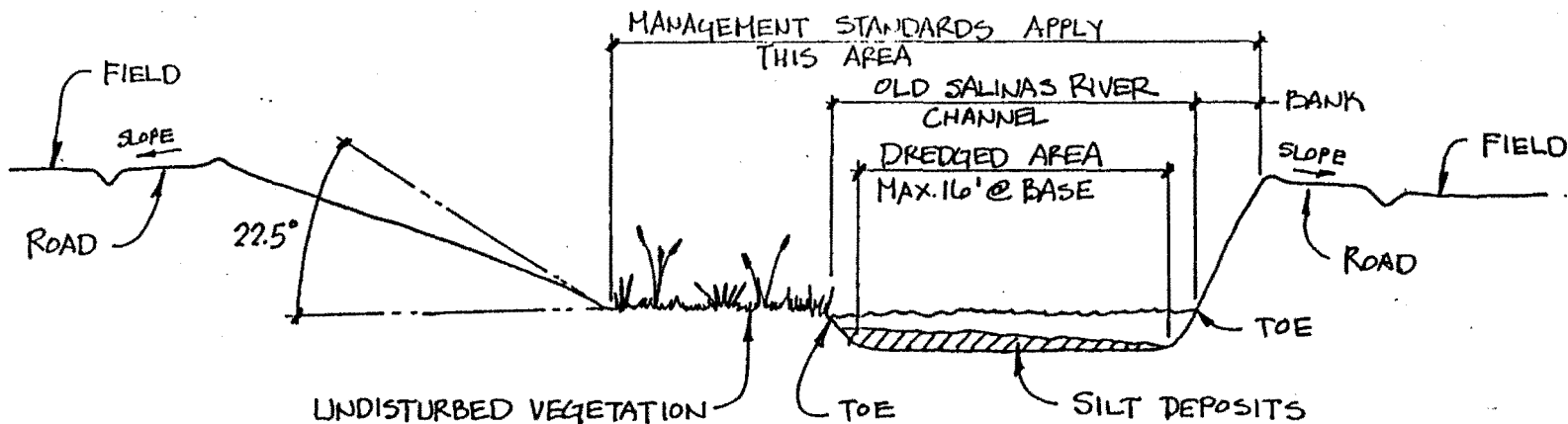
Exhibit G

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OLD SALINAS RIVER CHANNEL POST-DREDGING MANAGEMENT STANDARDS

APRIL 1997

Old Salinas River Channel Looking Downstream to Tembladero Slough



SECTION C - C

3-01-019
(Old Salinas River Channel Dredging)

Exhibit 6
23 of 23

River Sections

Purpose: Provide standards for removal of channel and bank vegetation and accumulations of silt, sandbars, and other debris as may be required to maintain a clear channel.

Drawn By: L.P.M.

Checked By:

Date: 3-18-97

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