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SUPPLEMENT TO STANDARD  
OPERATION AND MAINTENANCE  
MANUAL

**LOWER SAN JOAQUIN RIVER AND  
TRIBUTARIES PROJECT, CALIFORNIA**

UNIT NO. 3

NORTH LEVEE OF STANISLAUS RIVER  
AND EAST LEVEE OF SAN JOAQUIN RIVER  
WITHIN R. D. NOS. 2064, 2075, 2094 AND 2096



U. S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
SACRAMENTO, CALIFORNIA

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*Incl*

Corps of Engineers  
US Army

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Sacramento District  
Corps of Engineers  
US Army  
December 1968

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<b>LOCATION</b>	<b>ADDITION OR REVISION</b>	<b>DATE</b>
Exhibit F	Add copy of letter of acceptance dated 20 Jan 1969	Jan 1970
Paragraph 1-04 h.	Add contract no. DACW05-71-C-0125	Nov 1971
Exhibit B	Add drawing no. 7-4-1789	Nov 1971
Exhibit F	Add copy of letter of transfer dated 6 Dec 1962	24 May 2011
Exhibit F	Add copy of letter of transfer dated 11 Jan 1963	24 May 2011
Exhibit F	Add copy of letter of transfer dated 11 Sep 1968	24 May 2011
1-04	Add subparagraph i	24 May 2011
Exhibit F	Add copy of letter of transfer dated 6 Jan 1981	24 May 2011
1-04	Add subparagraph j	24 May 2011
Exhibit F	Add copy of letter of transfer dated 13 May 1983	24 May 2011
1-04	Add subparagraph k	24 May 2011
Exhibit B	Add drawing no. SJ-4-114	24 May 2011
Exhibit F	Add copy of letter of transfer dated 26 Jan 2001	24 May 2011
Exhibit F	Add copy of letter of transfer dated 11 Apr 2001 (RD 2064)	24 May 2011
Exhibit F	Add copy of letter of transfer dated 11 Apr 2001 (RD 2094)	24 May 2011
Exhibit F	Add copy of letter of acceptance dated 15 Feb 2002	24 May 2011

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A	Flood Control Regulations - - - - - Unattached
A-1	Location Map - - - - - 1 Sheet
B	"As Constructed" Drawings - - - - - Unattached
C	Plates of Suggested Flood Fighting Methods - - - Unattached (Contained in Standard Manual)
D	Suggested Check List No. 1 - Levee Inspection Report - - - - - Unattached (Contained in Standard Manual)
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SECTION I

INTRODUCTION

1-01. Location. The improvement covered by this manual is that part of the San Joaquin River and Tributaries Project levee and channel that is located along the right bank of the Stanislaus from high ground to the San Joaquin River and the right bank of the San Joaquin River from the Stanislaus River to Walthall Slough. The area lies about 4 miles south from the town of Lathrop and 7 miles west from the town of Ripon. Location by levee mileage along the right bank of the San Joaquin River is from mile 0.00 at Weatherbee Lake to 0.17 within R.D. 2096; from mile 0.00 to mile 2.82 within R.D. 2094; from mile 0.00 to mile 7.58 within R.D. 2075; and from mile 0.00 to mile 5.45 (mouth of Stanislaus River) (Unit 1) within R.D. 2064 and mile 0.00 to mile 6.06 within R.D. 2064 (Unit 2) along the right bank of the Stanislaus River to high ground. All mileages listed above progress going upstream. The total is 22.08 miles. The area lies within the above mentioned Reclamation Districts in the county of San Joaquin, California and in the general vicinity as shown on the Location Map, EXHIBIT A-1.

1-02. Project Works. The project works covered by this manual is a part of the Lower San Joaquin River and Tributaries Project as authorized by the Flood Control Act of 22 December 1944, Public Law 534, Seventy-Eighth Congress, Second Session, Section 10, and consists of the right bank and levee of the San Joaquin River from Weatherbee Lake to the mouth of the Stanislaus River; and the right bank and channel of the Stanislaus River from its mouth upstream to high ground; a total distance of about 22.08 miles.

1-03. Protection Provided. Levees along the San Joaquin and Stanislaus Rivers, as described in this unit, provide direct protection to adjacent agricultural land within Reclamation Districts No. 2064, 2075, 2094 and 2096. Along the San Joaquin River right bank levee the grade of the adopted flood plane varies from elevation 23.2 at the lower end (Weatherbee Lake) to elevation 36.2 at the mouth of the Stanislaus River. Along the Stanislaus River the grade of the adopted flood plane varies from elevation 36.2 at the mouth to elevation 49.4 at high ground. All elevations are referred to mean sea level datum (1929 adjustment). Levee grade within this unit provides for a freeboard of at least 3 feet above the adopted flood plane profile. Within this unit the project design flood for the San Joaquin River is 52,000 cubic feet per second and for the Stanislaus River 12,000 cubic feet per second.

1-04. Construction Data and Contractor. Work required by the Corps of Engineers to bring levees of this unit to project standards was accomplished under the following contracts:

a. Emergency levee repairs, right and left banks of the Stanislaus River was accomplished under Contract No. DA-04-167-CIVENG-56-216 during the period from 1 May 1956 to 1 August 1956. Specification No. 2137 and Drawing No. 7-4-1495.

b. Emergency levee repairs, right and left banks of the San Joaquin River was accomplished under Contract No. DA-04-167-CIVENG-59-44 by Lee Stephens, during the period from 13 October 1958 to 9 November 1958. Specification No. 2488, Drawing No. 7-4-1568.

c. Bank protection and levee construction along the right and left banks of the San Joaquin River at priority site was accomplished under Contract No. DA-04-167-CIVENG-59-131 by A. Teichert & Son, Inc., during the period from 1 June 1959 to 20 November 1959. Specification No. 2565, Drawing No. 7-4-1588.

d. Levee construction and bank protection, right bank San Joaquin River at mile 62.2 was accomplished under contract No. DA-04-167-CIVENG-63-34 by M. Malfitano & Son, Inc., during the period from 24 September 1962 to 6 November 1962. Specification No. 2895, Drawing No. 7-4-1671.

e. Levee construction and bank protection on the right bank of the San Joaquin River from north levee of R.D. 2075 to Walthall Slough was accomplished under Contract No. DA-04-167-CIVENG-62-68 by Jack Campbell, Inc, during the period from 8 June 1962 to 30 August 1963. Specification No. 2735, Drawing No. 7-4-1643.

f. Levee construction, right and left banks of the San Joaquin River between Stanislaus River and north line of R.D. 2075 was accomplished under contract No. DA-04-167-CIVENG-66-103 by Elmer G. Wendt, Inc., during the period from 28 March 1966 to 10 March 1968. Specification No. 3042, Drawing No. 7-4-1685.

g. Completion Phase, right and left banks of the San Joaquin River and Stanislaus River was accomplished under Contract No. DACW05-68-C-0086 by Elmer G. Wendt, Inc., and completed on 14 November 1968. Specification No. 3455, Drawing No. 7-4-1710.

h. Stone protection on the right bank of the San Joaquin River at Site Mile 71.6, Reclamation District 2064 (under Authority PL 99) was accomplished under Contract No. DACW05-71-C-0125 by Wayne Bailey Trucking, Inc. during the period from 12 July 1971 to 27 July 1971. Specification No. 4113, Drawing No. 7-4-1789.

i. Emergency repairs (PL 84-99) to the right bank of the San Joaquin River consisting of reconstruction of approximately 1000 feet of levee in Reclamation District 2064 were completed on 20 November 1980 under Contract No. DACW05-81-C-0021. Specification No. 5985, Specification No. 5985.

j. Levee restoration along the right bank of the San Joaquin River upstream of Airport Way was completed on 11 April 1983 under Contract No. DACW05-83-C-0084.

k. Emergency levee repairs at various locations on the right bank of the San Joaquin River in Reclamation Districts 2064, 2075 and 2094 was completed on 29 October 1997 by Ford, contractor, under Contract No. DACW05-97-C-0130. Specification No. 9896E, Drawing No. SJ-4-114.

1-06. Assurances Provided by Local Interest. Assurance of cooperation by local interests is provided by State Legislation as contained in Chapters 1 and 2, Part 4, Division 5 of the State Water Code (see paragraph 2-02a of the Standard Manual).

1-07. Transfer to or Acceptance by Local Interests. Responsibility for operating and maintaining portions of this unit was transferred to the State Reclamation Board by letter dated 7 December 1959. Other portions were officially accepted by the State Reclamation Board by letters dated 21 December 1962, 18 January 1963 and 2 December 1968.

1-08. Inspection Procedure. Since the enactment by State Legislation of Chapter 1528, Statutes of 1947, the Department of Water Resources, State of California, has made semi-annual inspections of all levees of authorized flood control projects in the Sacramento-San Joaquin Drainage basin pursuant to the Federal Regulations of 16 August 1944 (Title 33), and reports its findings to the local agency, the State Reclamation Board and the Sacramento District, Corps of Engineers, US Army. This activity, initiated pursuant to section 208.10(a) of the Federal Regulations, has in effect provided for transfer from the local agencies to the State Department of Water Resources the obligation of compliance with Sections 8371, 8372, and 8373 of the Water Code of the State of California. These sections of the Code require the local responsible agencies to submit a report to the State Department of Water Resources on or before 1 June of each year on the condition of the levees within their jurisdiction. Supervisory powers and duties of the Department are applicable to all works of the Lower San Joaquin River and Tributaries Flood Control Project maintained and operated by the local agencies without regard to status of completion, or expenditure of Federal funds on the construction of such works.

The following procedure is used in inspecting the levees of the responsible maintaining agency:

The personnel of the State Department of Water Resources make a detailed inspection in the spring and fall of each year and make a report on any required maintenance. The inspection objectives are to determine if the following items, which are a condensation of Federal Regulations, are being adhered to:

- a. That all brush, trees and wild growth other than sod are removed from the levee crown and slopes.
- b. That all weeds, grass and debris on the levee have been burned during the appropriate season, where not dangerous or impractical.
- c. That all grass and weeds on the levee have been mowed where removal by burning is dangerous or impracticable. This applies only on peat levees or where burning would constitute a hazard to improvements.

- d. That all burrowing animals have been exterminated.
- e. That all caves, sloughs, burrows, holes, slips or other damaged portions of the levee have been repaired.
- f. That all irrigation and drainage structures through the levee are in good working condition.
- g. That no revetment work or riprap have been displaced, washed out or removed.
- h. That the crown of the levee is well shaped and maintained and that unauthorized vehicular travel is restricted.
- i. That stock grazing on the levee is restricted to conditions and seasons when the levee would not be seriously scarred or otherwise damaged thereby.
- j. That encroachments are not being erected on the levee which would hinder travel by authorized patrol vehicles.
- k. Prevent the erection of structures on, additions to, or alterations of, the levee unless authorized by permit from the State Reclamation Board.

Following this detailed inspection a joint field inspection is made with representatives of the responsible maintaining agency and the State Department of Water Resources to review and discuss the inspection report.

Upon completion of the fall inspection, the State Department of Water Resources publishes an annual report entitled, "Status of Project Levee Maintenance" which indicates the degree of proficiency attained by each obligated local agency in providing required maintenance.

SECTION II  
FEATURES OF THE PROJECT SUBJECT TO FLOOD CONTROL REGULATIONS

2-01. Levees.

a. The levees described in this manual lie along the right bank of the San Joaquin River from Walthall Slough to the mouth of the Stanislaus River; and along the right bank of the Stanislaus River from its mouth to high ground, a total distance of about 22.08 miles. The levee has been reconstructed to project standards with a minimum crown width of 12 feet. The necessary drainage structures, road approaches, bank protection, and appurtenances were also included in the work. For more complete detail in construction of the above-mentioned levees, refer to the "As Constructed" drawings of EXHIBIT B.

b. For pertinent Requirements of the Code of Federal Regulations and other requirements, see the following:

- (1) Maintenance - paragraph 4-02 of the Standard Manual.
- (2) Suggested Check Lists - EXHIBIT E of this Supplement Manual.
- (3) Operation - paragraph 4-04 of the Standard Manual.
- (4) Special Instructions - paragraph 4-05 of the Standard Manual.

2-02. Drainage and Irrigation Structures. Drainage and irrigation structures which extend through the levees are listed as follows:

Levee Mile	Size of Pipe	Other Description	Feet Below Crown
<u>R.D. 2096</u>			
0.03	3-36"	Automatic pumping plant L.S.	3.5
<u>R.D. 2094</u>			
0.66	14"	Steel pipe - pump W.S. - Riser Unit	10.0
1.27	20"	Steel pipe - pump W.S. - Riser Unit	10.0
2.30	20"	Steel pipe - pump W.S. - Riser Unit	6.0
<u>R.D. 2075</u>			
0.12	12"	Pump L.S.	4.0
2.30	16"	Pump L.S. - Riser Unit W.S.	4.5
4.34	16"	Slant pump W.S.	2.0
5.16	2-18"	Pumps W.S.	8.0
5.52	16"	Pump L.S.	8.0
6.40	18"	Slant pump W.S.	4.0
6.79	10	Pump L.S.	5.5

Drainage and Irrigation Structures, Con't

Levee Mile	Size of Pipe	Other Description	Feet Below Crown
7.37	12"	Pump W.S.	4.5
<u>R.D. 2064 - Unit No. 1</u>			
0.07	36"	Square culvert - Riser unit, Flapgate W.S.	21.0
1.24	12"	Pump W.S.	3.5
1.24	16"	Pump W.S.	4.0
1.65	30"	Square culvert - Riser unit, Flapgate W.S.	15.0
1.93	30"	Square culvert - Riser unit, Flapgate W.S.	14.7
2.20	18"	Pump W.S.	4.8
3.55	12"	Pump and gate valve L.S.	-
4.69	1-18" & 1-24"	Pumps W.S.	3.5
5.16	20"	Pump W.S.	4.0
<u>R.D. 2064 - Unit No. 2</u>			
0.33	16"	Pump W.S. - Riser unit L.S.	5.5
1.95	16"	Pump W.S.	4.0
2.51	30"	Concrete culvert - Pump W.S.	14.5
4.15	24"	Pump W.S. - Riser unit W.S.	6.0
"	24"	Pump W.S. - Riser unit W.S.	6.5
to	21"	Pump W.S. - Riser unit W.S.	7.0
"	15"	Pump W.S. - Riser unit W.S.	8.0
"	2-20"	Pump W.S.	8.0
4.17	36"	Pump W.S. - Riser unit W.S.	6.0
4.20	30" x 30"	Concrete culvert - Riser unit W.S.	21.0
4.37	30"	Flapgate W.S.	10.5
4.47	30"	Flapgate W.S.	10.0
4.59	30"	Flapgate W.S.	8.5
4.73	30"	Flapgate W.S.	8.5
4.88	30"	Flapgate W.S.	8.0
5.05	30"	Flapgate W.S.	8.0
5.48	30"	Riser unit W.S.	10.0
5.69	20"	Riser unit W.S.	13.0
6.03	24"	Riser unit W.S.	10.0

Note on abbreviations:

L.S. = Landside  
W.S. = Waterside

b. For pertinent Requirements of the Code of Federal Regulations and other requirements, see the following:

- (1) Maintenance - paragraph 5-02 of the Standard Manual.
- (2) Suggested Check Lists - EXHIBIT E of this Supplement Manual.

- (3) Operation - paragraph 5-04 of the Standard Manual.
- (4) Additional Requirements - paragraph 5-05 of the Standard Manual.
- (5) Safety Requirements - paragraph 5-06 of the Standard Manual.

#### 2-03. Channels.

a. Description. The main channels and floodways of the San Joaquin and Stanislaus Rivers for this unit lie adjacent to the levees as described in paragraph 1-02. The project design capacities of said channels are listed in paragraph 1-03 of this manual.

b. For pertinent Requirements of the Code of Federal Regulations and other requirements, see the following:

- (1) Maintenance - paragraph 6-02 of the Standard Manual.
- (2) Suggested Check Lists - EXHIBIT E of this Supplement Manual.
- (3) Operation - paragraph 6-04 of the Standard Manual.
- (4) Safety Requirements - paragraph 6-05 of the Standard Manual.

It shall be the duty of the local agency responsible for maintenance to keep in contact with the State Department of Water Resources' Flood Operation Center during all periods of flood danger, and maintain a patrol of the project works in their area during periods of flood in excess of a reading of 30.5 on the Vernalis gage.

The Flood Operation Center is responsible for Data Collection and issuance of a joint river forecast with the US Weather Bureau and coordinates with the Sacramento District Engineer and other agencies to keep apprised of the current situation in accordance with terms of the Memorandum of Understanding dated 1 November 1956, between the Division Engineer, US Army Engineer Division, South Pacific and the Director, Department of Water Resources, State of California for cooperative action during flood emergencies.

#### 2-04. Miscellaneous Facilities

a. Description. Miscellaneous structures or facilities which were constructed as a part of, or in conjunction with, the protective works, and which might affect their functioning, include the following:

- (1) Utility Relocation. Because of the nature of the construction of structures by local interests, records of utility relocations are not available.

- (2) Hydrologic Facilities. Hydrologic facilities for this unit consists of the existing San Joaquin River Stream Gaging Station near Vernalis located on the left bank of the river 80 feet upstream from the Durham Ferry road bridge. This station is equipped with a staff gage and a continuous water stage recorder with an on-call type radio system for reporting stages to the Federal-State Control Center in Sacramento.

b. For pertinent Requirements of the Code of Federal Regulations and other requirements see the following:

- (1) Maintenance - paragraph 7-02 of the Standard Manual.
- (2) Suggested Check Lists - paragraph 7-03 of the Standard Manual.
- (3) Operation - paragraph 7-04 of the Standard Manual.

### SECTION III

#### REPAIR OF DAMAGE TO PROJECT WORKS AND METHODS OF COMBATING FLOOD CONDITIONS

3-01. Repair of Damage. In the event of serious damage to the project works, whether due to flood conditions or other causes, and which may be beyond the capability of local interests to repair, the local agency responsible for maintenance will contact a representative of the Department of Water Resources, State of California, who coordinates maintenance of project works of the Lower San Joaquin River and Tributaries Flood Control Project. The State representative will give assistance or advise, or will determine appropriate action to be taken.

3-02. Applicable methods of combating floods. For applicable methods of combating flood conditions, reference is made to Section VIII of the Standard Operation and Maintenance Manual where the subject is fully covered.

EXHIBIT A

FEDERAL FLOOD CONTROL REGULATIONS

(SEE STANDARD MANUAL)

EXHIBIT A

TITLE 33 - NAVIGATION AND  
NAVIGABLE WATERS  
(as of 1 January 1962)

Chapter II - Corps of Engineers  
Department of the Army

PART 208 - Flood Control Regulations  
MAINTENANCE AND OPERATION OF FLOOD  
CONTROL WORKS

Pursuant to the provisions of section 3 of the Act of Congress approved June 22, 1936, as amended and supplemented, (Sec. 3, 49 Stat. 1871 as amended; 33 U.S.C. 701c), the following regulations are hereby prescribed to govern the maintenance and operation of flood control works:

**AUTHORITY:** §§ 208.10 to 208.91 issued under sec. 7, 58 Stat. 890; 33 U.S.C. 709. Additional authority is cited in parentheses following the sections affected.

§ 208.10 Local flood protection works; maintenance and operation of structures and facilities.

(a) *General.* (1) The structures and facilities constructed by the United States for local flood protection shall be continuously maintained in such a manner and operated at such times and for such periods as may be necessary to obtain the maximum benefits.

(2) The State, political subdivision thereof, or other responsible local agency, which furnished assurance that it will maintain and operate flood control works in accordance with regulations prescribed by the Secretary of the Army, as required by law, shall appoint a permanent committee consisting of or headed by an official hereinafter called the "Superintendent," who shall be responsible for the development and maintenance of, and directly in charge of, an organization responsible for the efficient operation and maintenance of all of the structures and facilities during flood periods and for continuous inspection and maintenance of the project works during periods of low water, all without cost to the United States.

(3) A reserve supply of materials needed during a flood emergency shall be kept on hand at all times.

(4) No encroachment or trespass which will adversely affect the efficient operation or maintenance of the project works shall be permitted upon the right-of-way for the protective facilities.

(5) No improvement shall be passed over, under, or through the walls, levees, improved channels or floodways, nor shall any excavation or construction be permitted within the limits of the project right-of-way, nor shall any change be made in any feature of the works without prior determination by the District Engineer of the Department of the Army or his authorized representative that such improvement, excavation, construction, or alteration will not adversely affect the functioning of the protective facilities. Such improvements or alterations as may be found to be desirable and permissible under the above determination shall be constructed in accordance with standard engineering practice. Advice regarding the effect of proposed improvements or alterations on the functioning of the project and information concerning methods of construction acceptable under standard engineering practice shall be obtained from the District Engineer or, if otherwise obtained, shall be submitted for his approval. Drawings or prints showing such improvements or alterations as finally constructed shall be furnished the District Engineer after completion of the work.

(6) It shall be the duty of the superintendent to submit a semiannual report to the District Engineer covering inspection, maintenance, and operation of the protective works.

(7) The District Engineer or his authorized representatives shall have access at all times to all portions of the protective works.

(8) Maintenance measures or repairs which the District Engineer deems necessary shall be promptly taken or made.

(9) Appropriate measures shall be taken by local authorities to insure that the activities of all local organizations operating public or private facilities connected with the protective works are coordinated with those of the Superintendent's organization during flood periods.

(10) The Department of the Army will furnish local interests with an Operation and Maintenance Manual for each completed project, or separate useful part thereof, to assist them in carrying out their obligations under this part.

(b) *Levees—(1) Maintenance.* The Superintendent shall provide at all times such maintenance as may be required to insure serviceability of the structures in time of flood. Measures shall be taken to promote the growth of sod, exterminate burrowing animals, and to provide for routine mowing of the grass and weeds, removal of wild growth and drift deposits, and repair of damage caused by erosion or other forces. Where practicable, measures shall be taken to retard bank erosion by planting of willows or other suitable growth on areas riverward of the levees. Periodic inspections shall be made by the Superintendent to insure that the above maintenance measures are being effectively carried out and, further, to be certain that:

(i) No unusual settlement, sloughing, or material loss of grade or levee cross section has taken place;

(ii) No caving has occurred on either the land side or the river side of the levee which might affect the stability of the levee section;

(iii) No seepage, saturated areas, or sand boils are occurring;

(iv) Toe drainage systems and pressure relief wells are in good working condition, and that such facilities are not becoming clogged;

(v) Drains through the levees and gates on said drains are in good working condition;

(vi) No revetment work or riprap has been displaced, washed out, or removed;

(vii) No action is being taken, such as burning grass and weeds during inappropriate seasons, which will retard or destroy the growth of sod;

(viii) Access roads to and on the levee are being properly maintained;

(ix) Cattle guards and gates are in good condition;

(x) Crown of levee is shaped so as to drain readily, and roadway thereon, if any, is well shaped and maintained;

(xi) There is no unauthorized grazing or vehicular traffic on the levees;

(xii) Encroachments are not being made on the levee right-of-way which might endanger the structure or hinder its proper and efficient functioning during times of emergency.

Such inspections shall be made immediately prior to the beginning of the flood season; immediately following each major high water period, and otherwise at intervals not exceeding 90 days, and such intermediate times as may be necessary to insure the best possible care of the levee. Immediate steps will be taken to correct dangerous conditions disclosed by such inspections. Regular maintenance repair measures shall be accomplished during the appropriate season as scheduled by the Superintendent.

(2) *Operation.* During flood periods the levee shall be patrolled continuously to locate possible sand boils or unusual wetness of the landward slope and to be certain that:

(i) There are no indications of slides or sloughs developing;

(ii) Wave wash or scouring action is not occurring;

(iii) No low reaches of levee exist which may be overtopped;

(iv) No other conditions exist which might endanger the structure.

Appropriate advance measures will be taken to insure the availability of adequate labor and materials to meet all

contingencies. Immediate steps will be taken to control any condition which endangers the levee and to repair the damaged section.

(c) *Flood walls—(1) Maintenance.* Periodic inspections shall be made by the Superintendent to be certain that:

(i) No seepage, saturated areas, or sand boils are occurring;

(ii) No undue settlement has occurred which affects the stability of the wall or its water tightness;

(iii) No trees exist, the roots of which might extend under the wall and offer accelerated seepage paths;

(iv) The concrete has not undergone cracking, chipping, or breaking to an extent which might affect the stability of the wall or its water tightness;

(v) There are no encroachments upon the right-of-way which might endanger the structure or hinder its functioning in time of flood;

(vi) Care is being exercised to prevent accumulation of trash and debris adjacent to walls, and to insure that no fires are being built near them;

(vii) No bank caving conditions exist riverward of the wall which might endanger its stability;

(viii) Toe drainage systems and pressure relief wells are in good working condition, and that such facilities are not becoming clogged.

Such inspections shall be made immediately prior to the beginning of the flood season, immediately following each major high water period, and otherwise at intervals not exceeding 90 days. Measures to eliminate encroachments and effect repairs found necessary by such inspections shall be undertaken immediately. All repairs shall be accomplished by methods acceptable in standard engineering practice.

(2) *Operation.* Continuous patrol of the wall shall be maintained during flood periods to locate possible leakage at monolith joints or seepage underneath the wall. Floating plant or boats will not be allowed to lie against or tie up to the wall. Should it become necessary during a flood emergency to pass anchor cables over the wall, adequate measures shall be taken to protect the concrete and construction joints. Immediate steps shall be taken to correct any condition which endangers the stability of the wall.

(d) *Drainage structures—(1) Maintenance.* Adequate measures shall be taken to insure that inlet and outlet channels are kept open and that trash, drift, or debris is not allowed to accumulate near drainage structures. Flap gates and manually operated gates and valves on drainage structures shall be examined, oiled, and trial operated at least once every 90 days. Where drainage structures are provided with stop log or other emergency closures, the condition of the equipment and its housing shall be inspected regularly and a trial installation of the emergency closure shall be made at least once each year. Periodic inspections shall be made by the Superintendent to be certain that:

(i) Pipes, gates, operating mechanism, riprap, and headwalls are in good condition;

(ii) Inlet and outlet channels are open;

(iii) Care is being exercised to prevent the accumulation of trash and debris near the structures and that no fires are being built near bluminous coated pipes;

(iv) Erosion is not occurring adjacent to the structure which might endanger its water tightness or stability.

Immediate steps will be taken to repair damage, replace missing or broken parts, or remedy adverse conditions disclosed by such inspections.

(2) *Operation.* Whenever high water conditions impend, all gates will be inspected a short time before water reaches the invert of the pipe and any object which might prevent closure of the gate shall be removed. Automatic gates shall be closely observed until it has been ascertained that they are securely closed. Manually operated gates and valves shall be closed as necessary to prevent inflow of flood water. All drainage structures

in levees shall be inspected frequently during floods to ascertain whether seepage is taking place along the lines of their contact with the embankment. Immediate steps shall be taken to correct any adverse condition.

(e) *Closure structures*—(1) *Maintenance*. Closure structures for traffic openings shall be inspected by the superintendent every 90 days to be certain that:

- (i) No parts are missing;
- (ii) Metal parts are adequately covered with paint;
- (iii) All movable parts are in satisfactory working order;
- (iv) Proper closure can be made promptly when necessary;
- (v) Sufficient materials are on hand for the erection of sand bag closures and that the location of such materials will be readily accessible in times of emergency.

Tools and parts shall not be removed for other use. Trial erections of one or more closure structures shall be made once each year, alternating the structures chosen so that each gate will be erected at least once in each 3-year period. Trial erection of all closure structures shall be made whenever a change is made in key operating personnel. Where railroad operation makes trial erection of a closure structure infeasible, rigorous inspection and drill of operating personnel may be substituted therefor. Trial erection of sand bag closures is not required. Closure materials will be carefully checked prior to and following flood periods, and damaged or missing parts shall be repaired or replaced immediately.

(2) *Operation*. Erection of each movable closure shall be started in sufficient time to permit completion before flood waters reach the top of the structure sill. Information regarding the proper method of erecting each individual closure structure, together with an estimate of the time required by an experienced crew to complete its erection will be given in the Operation and Maintenance Manual which will be furnished local interests upon completion of the project. Closure structures will be inspected frequently during flood periods to ascertain that no undue leakage is occurring and that drains provided to care for ordinary leakage are functioning properly. Boats or floating plant shall not be allowed to tie up to closure structures or to discharge passengers or cargo over them.

(f) *Pumping plants*—(1) *Maintenance*. Pumping plants shall be inspected by the Superintendent at intervals not to exceed 30 days during flood seasons and 90 days during off-flood seasons to insure that all equipment is in order for instant use. At regular intervals, proper measures shall be taken to provide for cleaning plant, buildings, and equipment, repainting as necessary, and lubricating all machinery. Adequate supplies of lubricants for all types of machines, fuel for gasoline or diesel powered equipment, and flash lights or lanterns for emergency lighting shall be kept on hand at all times. Telephone service shall be maintained at pumping plants. All equipment, including switch gear, transformers, motors, pumps, valves, and gates shall be trial operated and checked at least once every 90 days. Megger tests of all insulation shall be made whenever wiring has been subjected to undue dampness and otherwise at intervals not to exceed one year. A record shall be kept showing the results of such tests. Wiring disclosed to be in an unsatisfactory condition by such tests shall be brought to a satisfactory condition or shall be promptly replaced. Diesel and gasoline engines shall be started at such intervals and allowed to run for such length of time as may be necessary to insure their serviceability in times of emergency. Only skilled electricians and mechanics shall be employed on tests and repairs. Operating personnel for the plant shall be present during tests. Any

equipment removed from the station for repair or replacement shall be returned or replaced as soon as practicable and shall be trial operated after reinstallation. Repairs requiring removal of equipment from the plant shall be made during off-flood seasons insofar as practicable.

(2) *Operation*. Competent operators shall be on duty at pumping plants whenever it appears that necessity for pump operation is imminent. The operator shall thoroughly inspect, trial operate, and place in readiness all plant equipment. The operator shall be familiar with the equipment manufacturers' instructions and drawings and with the "Operating Instructions" for each station. The equipment shall be operated in accordance with the above-mentioned "Operating Instructions" and care shall be exercised that proper lubrication is being supplied all equipment, and that no overheating, undue vibration or noise is occurring. Immediately upon final recession of flood waters, the pumping station shall be thoroughly cleaned, pump house sumps flushed, and equipment thoroughly inspected, oiled and greased. A record or log of pumping plant operation shall be kept for each station, a copy of which shall be furnished the District Engineer following each flood.

(g) *Channels and floodways*—(1) *Maintenance*. Periodic inspections of improved channels and floodways shall be made by the Superintendent to be certain that:

- (i) The channel or floodway is clear of debris, weeds, and wild growth;
- (ii) The channel or floodway is not being restricted by the depositing of waste materials, building of unauthorized structures or other encroachments;
- (iii) The capacity of the channel or floodway is not being reduced by the formation of shoals;
- (iv) Banks are not being damaged by rain or wave wash, and that no sloughing of banks has occurred;
- (v) Riprap sections and deflection dikes and walls are in good condition;
- (vi) Approach and egress channels adjacent to the improved channel or floodway are sufficiently clear of obstructions and debris to permit proper functioning of the project works.

Such inspections shall be made prior to the beginning of the flood season and otherwise at intervals not to exceed 90 days. Immediate steps will be taken to remedy any adverse conditions disclosed by such inspections. Measures will be taken by the Superintendent to promote the growth of grass on bank slopes and earth deflection dikes. The Superintendent shall provide for periodic repair and cleaning of debris basins, check dams, and related structures as may be necessary.

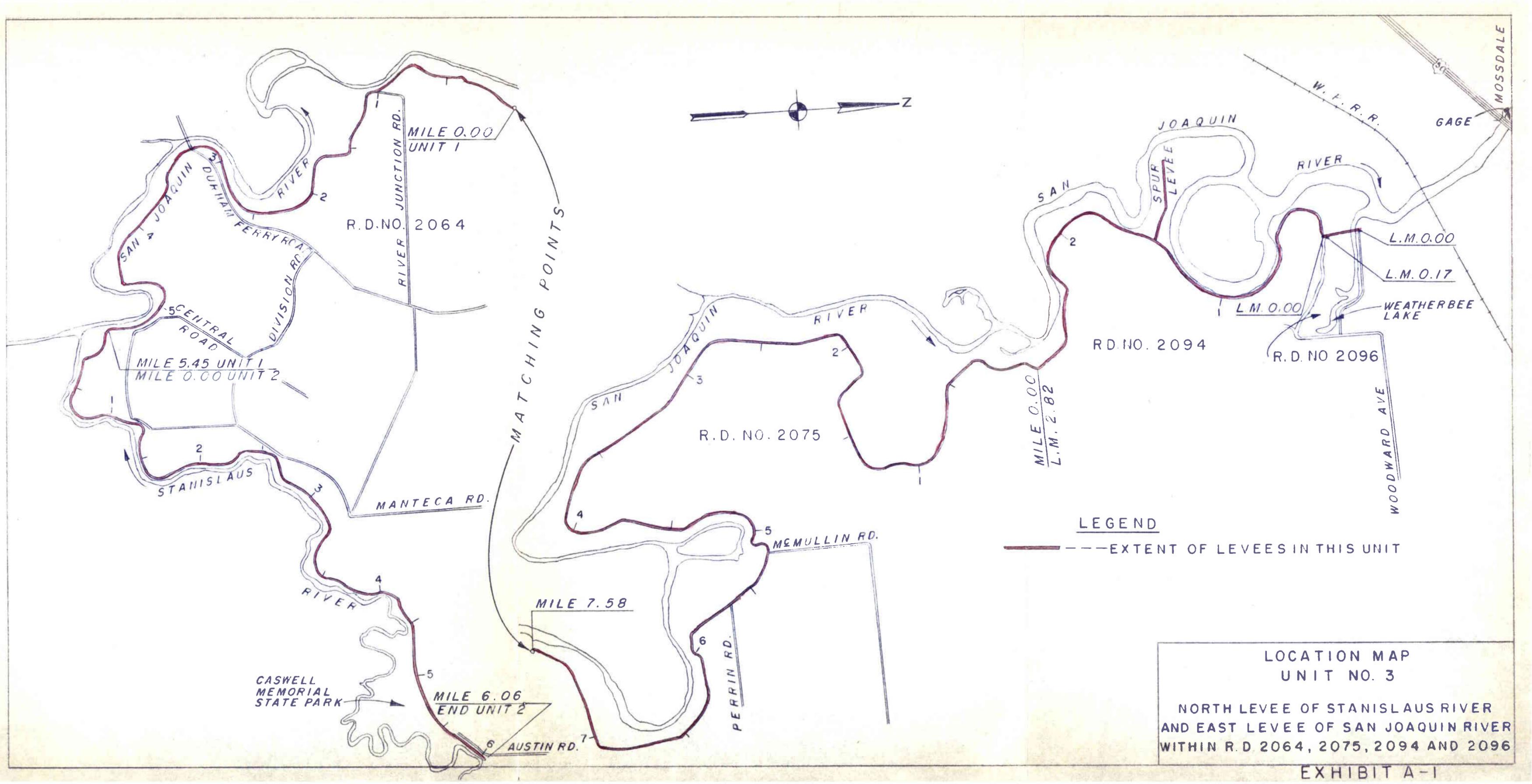
(2) *Operation*. Both banks of the channel shall be patrolled during periods of high water, and measures shall be taken to protect those reaches being attacked by the current or by wave wash. Appropriate measures shall be taken to prevent the formation of jams of ice or debris. Large objects which become lodged against the bank shall be removed. The improved channel or floodway shall be thoroughly inspected immediately following each major high water period. As soon as practicable thereafter, all snags and other debris shall be removed and all damage to banks, riprap, deflection dikes and walls, drainage outlets, or other flood control structures repaired.

(h) *Miscellaneous facilities*—(1) *Maintenance*. Miscellaneous structures and facilities constructed as a part of the protective works and other structures and facilities which function as a part of, or affect the efficient functioning of the protective works, shall be periodically inspected by the Superintendent and appropriate maintenance measures taken. Damaged or unserviceable parts shall be repaired or replaced without delay. Areas used for ponding in connection with pumping plants or for temporary storage of interior run-off during flood

periods shall not be allowed to become filled with silt, debris, or dumped material. The Superintendent shall take proper steps to prevent restriction of bridge openings and, where practicable, shall provide for temporary raising during floods of bridges which restrict channel capacities during high flows.

(2) *Operation*. Miscellaneous facilities shall be operated to prevent or reduce flooding during periods of high water. Those facilities constructed as a part of the protective works shall not be used for purposes other than flood protection without approval of the District Engineer unless designed therefor.

(Sec. 3, 49 Stat. 1571, as amended; 33 U.S.C. 701c) [9 F.R. 9959, Aug. 17, 1944; 9 F.R. 10299, Aug. 22, 1944]



LOCATION MAP  
 UNIT NO. 3  
 NORTH LEVEE OF STANISLAUS RIVER  
 AND EAST LEVEE OF SAN JOAQUIN RIVER  
 WITHIN R.D. 2064, 2075, 2094 AND 2096

EXHIBIT B

“AS CONSTRUCTED”  
DRAWINGS

<u>File No.</u>	<u>Title</u>
7-4-1495	Emergency Repairs, Right and Left Banks Stanislaus River, in 1 sheet.
7-4-1568	Emergency Repairs, Right and Left Banks San Joaquin River, in 1 sheet.
7-4-1588	Bank Protection and Levee Construction, Right and Left Bank San Joaquin River at Priority Sites, in 10 sheets.
7-4-1671	Levee Construction, Right Bank San Joaquin River At Mile 62.2, in 2 sheets.
7-4-1643	Levee Construction, Right Bank San Joaquin river from North Levee R.D. 2075 to Walthall Slough, in 37 sheets.
7-4-1685	Levee Construction, Right and Left Banks San Joaquin River between Stanislaus River and North Line of R.D. 2075, in 72 sheets.
7-4-1710	Completion Phase, Right and Left Banks San Joaquin and Stanislaus River, in 5 sheets.
7-4-1789	Stone Protection, Right Bank San Joaquin River, Reclamation District 2064, Mile 71.6, in one sheet.
SJ-4-114	PL 84-99 – Phase III Emergency Levee Repair RD 2064, RD 2075 and RD 2094 For Wavewash and Boils, San Joaquin County, California, in 31 sheets.

EXHIBIT C

PLATES OF SUGGESTED FLOOD FIGHTING METHODS

(SEE STANDARD MANUAL)

EXHIBIT C  
Unattached

EXHIBIT D

SUGGESTED CHECK LIST NO. 1

LEVEE INSPECTION REPORT

(SEE STANDARD MANUAL)

EXHIBIT D

EXHIBIT E

SUGGESTED CHECK LISTS OF LEVEES

CHANNEL AND STRUCTURES

For definition of "flood" or "high water period", see paragraph 1-05 this manual.

SUGGESTED CHECK LIST NO. 2  
UNIT NO. 3  
SAN JOAQUIN RIVER

Inspector's Report Sheet No. \_\_\_\_\_ Inspector \_\_\_\_\_

Date \_\_\_\_\_ Superintendent \_\_\_\_\_

Item	Remarks
(a) Location by Station	
(b) Settlement, sloughing, or loss of grade	
(c) Erosion of both levee slopes	
(d) Condition of roadways, including ramps	
(e) Evidence of seepage	
(f) Condition of farm gates and fencing	
(g) Maintenance measures taken since last inspection	
(h) Comments	

Instruction for Completing Sheet 2, Exhibit E  
(To be printed on back of Sheet 2)

- Item (a) Indicate levee station of observation, obtained by pacing from nearest reference point; indicate right or left bank.
- Item (b) If sufficient settlement of earthwork has taken place to be noticeable by visual observation, indicate amount of settlement in tenths of a foot. If sloughing has caused a change in slope of the embankment sections, determine the new slope. Note areas where erosion or gulying of the section has occurred.
- Item (c) If sufficient erosion or gulying of back face of back toe of levee has taken place to be noticeable by visual inspection, indicate area affected and depth.
- Item (d) Note any natural change in any section of roadway or ramps. Indicate any inadequacy in surface drainage system.
- Item (e) Indicate any evidence of seepage through the embankment section.
- Item (f) Indicate the serviceability of all farm gates across the embankments and roadway, and indicate if repainting is required.
- Item (g) Indicate maintenance measures that have been performed since last inspection and their condition at the time of this inspection.
- Item (h) Record opinion, if any, of contributory causes for conditions observed and also any observations not covered under other columns.

NOTE: One copy of the Inspector's Report is to be mailed to the District Engineer immediately on completion, and one copy is to be attached to and submitted with the Superintendent's semi-annual report.

SUGGESTED CHECK LIST NO. 3  
 CHANNEL AND RIGHT-OF-WAY  
 UNIT NO. 3  
 SAN JOAQUIN RIVER

Inspector's Report Sheet No. \_\_\_\_\_ Inspector \_\_\_\_\_

Date \_\_\_\_\_ Superintendent \_\_\_\_\_

Item	Remarks
(a) Name of Channel and location by Stations	
(b) Vegetal growth in channel	
(c) Debris and refuse in channel	
(d) New construction within right-of-way	
(e) Extent of aggradation or degradation	
(f) Condition or riprapped section	
(g) Condition of bridges	
(h) Measures taken since last inspection	
(i) Comments	

Instructions for Completing Sheet 4, Exhibit E  
(To be printed on back of Sheet 4)

- Item (a) Indicate station of observation obtained by pacing from nearest reference point.
- Item (b) Note nature, extent, and size of vegetal growth within the limits of flood flow channel.
- Item (c) Note nature and extent of debris and refuse that might cause clogging of the conduits of the irrigation intake works, fouling of the tainter gates, or the bridges over the channel.
- Item (d) Report any construction along the diversion channel or above the diversion channel or above the diversion works that has come to the attention of the inspector and that might affect the functioning of the project.
- Item (e) Indicate any change in grade or alignment of the channels, either by deposition or sediment or scour, that is noticeable by visual inspection. Estimate amount and extent.
- Item (f) Indicate any change that has taken place in the riprap such as disintegration of the rock, erosion, or movement of the rock. Note the presence of vegetal growth through the riprap.
- Item (g) Note any damage or settlement of the footings of the bridges. Indicate condition of wooden structures and if repainting is required. Indicate condition of bridge approaches, headwalls, and other appurtenances.
- Item (h) Indicate maintenance measures that have been performed since the last inspection and their condition at time of this inspection.
- Item (i) Record opinion, if any, of contributory causes for conditions observed, also any observations not covered under other columns.

NOTE: One copy of the Inspector's Report is to be mailed to the District Engineer immediately on completion and one copy is to be attached to and submitted with the superintendent's semi-annual report.

SUGGESTED CHECK LIST NO. 4  
DRAINAGE AND IRRIGATION STRUCTURES  
UNIT NO. 3  
SAN JOAQUIN RIVER

Inspector's Report Sheet No. \_\_\_\_\_ Inspector \_\_\_\_\_

Date \_\_\_\_\_ Superintendent \_\_\_\_\_

(a) Location by Levee Mileage							
(b) Bank							
(c) Debris or other obstruction to flow							
(d) Damage or Settlement of Pipe or conduit							
(e) Condition of concrete head-wall or invert paving			San Joaquin River - Right Bank (As listed in Paragraph 2-02)				
(f) Condition of right-of-way adjacent to structure						Stanislaus River - Right Bank (As listed in Paragraph 2-02)	
(g) Repair Measures taken since last inspection							
(h) Comments							

Instruction for Completing Sheet 6, Exhibit E  
(To be printed on back of Sheet 6)

- (1) Enter station of all structures under Column (a) for check list.
- (2) Inspect inlet, barrel, and outlet for accumulation of sediment, rubbish, and vegetal matter. Note condition under Column (c).
- (3) If any settlement or damage to the pipe, barrel, or invert of the drain has occurred, estimate the location and amount. Note particularly if any backfill has come into the pipe or been disturbed. Record observations under Column (d).
- (4) Inspect the concrete portions of the structures for evidence of settlement, cracks, "pop-outs", spaces, abrasive wear, or other deterioration. Record conditions under Column (e).
- (5) Inspect backfill area adjacent to structure for evidence of erosion caused by overflow of the drainage structure and note conditions in Column (f).
- (6) Under Column (g) indicate physical measures that have been taken to correct conditions reported in last inspection, and their condition at time of this inspection.
- (7) Under Column (h) record opinion, if any, of contributory causes for conditions observed, also any observations not covered under other columns.
- (8) A copy of the inspector's report is to be mailed to the District Engineer immediately on completion, and a record copy shall be attached to the Superintendent's semi-annual report.

EXHIBIT F

LETTERS OF TRANSFER TO OR  
ACCEPTANCE BY LOCAL INTERESTS

EXHIBIT F

SPKKO-P

7 DEC 1959

The Reclamation Board  
State of California  
1215 "O" Street  
Sacramento 14, California

Gentlemen:

Reference is made to the joint inspection made on 16 November 1959 of certain levee sections pertaining to the Lower San Joaquin River and Tributaries Project for the purpose of transferring them to the State of California for operation and maintenance.

The required work, consisting of levee construction and bank protection, is completed in accordance with Specification 2565, Contract No. DA-04-167-CIVENG-59-131 and Drawing No. 7-4-1588. The levee sections referred to above, located on the San Joaquin River at Priority sites, are listed as follows:

<u>LEVEE SECT NO.</u>	<u>SITE NO.</u>	<u>BANK</u>	<u>RIVER MILE POINTS</u>
35	E	Right	61.35 to 61.52 and 61.67 to 61.82
36	B	Left	65.63 to 65.84
37	C	Right	66.02 to 66.15

The levee sections Nos. 35 to 37 inclusive, described above, now meet the requirements of the Lower San Joaquin River and Tributaries Project. Therefore, said levee sections, together with the waterway banks contiguous thereto, are hereby transferred to the State of California for operation and maintenance.

The maintenance work required under the provisions of the Lower San Joaquin River and Tributaries Project shall be performed in accordance with existing Flood Control Regulations, inclosed herewith, which have been prescribed by the Secretary of the Army pursuant to Section 3 of the Act of Congress, approved 22 June 1936, as amended and supplemented by a

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SPKKO-P  
The Reclamation Board

7 DEC 1959

Standard Operation and Maintenance Manual for the Lower San Joaquin River and Tributaries Project which is being prepared. As provided under Paragraph 208.10(10) of these regulations, a supplement to the Standard Operation and Maintenance Manual covering these units of work will be furnished to you upon completion.

A copy of this letter is being transmitted to the Department of Water Resources.

Sincerely yours,

/s/ H. A. Morris

EXHIBIT F  
Sheet 2 of 5

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Y

THE RECLAMATION BOARD  
State of California

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P  
Y

December 21, 1962

District Engineer  
Corps of Engineers  
U. S. Army  
P. O. Box 1739  
Sacramento, California

Dear Sir:

Reference is made to your letter of December 6, 1962 concerning transfer to the State of California of levee construction and bank protection work on the right bank of the San Joaquin River from mile 62.02 to 62.21 which was constructed under Specification No. 2895.

The Reclamation Board at its meeting of December 20, 1962 formally accepted the above-referred-to levee construction and bank protection work for operation and maintenance.

Sincerely yours,

/s/A. E. McCOLLAM  
A. E. McCOLLAM  
General Manager

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THE RECLAMATION BOARD  
State of California

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P  
Y

January 18, 1963

District Engineer  
Corps of Engineers  
U.S. Army  
P.O. Box 1739  
Sacramento, California

Dear Sir:

Reference is made to your letter of January 11, 1963 concerning transfer to the State of California of Unit No. 68 on the Lower San Joaquin River and Tributaries Project, consisting of levee construction, bank protection and patrol road surfacing on the right bank of the San Joaquin River from mile point 57.15 to 62.02 under Specification 2735.

The Reclamation Board at its meeting of January 17, 1963 formally accepted the above-referred-to levee and bank protection work for operation and maintenance.

Sincerely yours,

/s/ A. E. McCOLLAM  
A. E. McCOLLAM  
General Manager

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Y

THE RECLAMATION BOARD  
State of California

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Y

December 2, 1968

District Engineer  
Corps of Engineers  
US Army  
650 Capitol Mall  
Sacramento, California 95814

Dear Sir:

Reference is made to your letter of September 11, 1968 concerning transfer to the State of California of the San Joaquin River Flood Control Project, right bank Stanislaus River to the San Joaquin River, and right bank of the San Joaquin River to the northerly line of Reclamation District 2075, in accordance with Specification No. 3042.

The Reclamation Board, at its meeting of October 18, 1968, formally accepted the above-referred to work for operation and maintenance.

Sincerely yours,

/s/ A. E. McCOLLAM  
A. E. McCOLLAM  
Chief Engineer and  
General Manager

SPKKO-C

6 DEC 1962

The Reclamation Board  
State of California  
1215 "O" Street  
Sacramento 14, California

Gentlemen:

Reference is made to the joint inspection made on 19 November 1962, of flood control work pertaining to the Lower San Joaquin River and Tributaries Project for the purpose of transferring it, upon completion, to the State of California for operation and maintenance.

The above work, designated as Unit No. 67, consists of levee construction and bank protection on the right bank of San Joaquin River from mile point 62.02 to 62.21, including shaping and surfacing 300 feet of levee crown. This work was completed on 6 November 1962, in accordance with Specification No. 2895, Contract No. DA-04-167-CIVIERI-63-34, and Drawing No. 7-4-1671.

The flood control work described above now meets the requirements of the Lower San Joaquin River and Tributaries Project. Therefore, said flood control work together with the waterway banks contiguous thereto, are hereby transferred to the State of California for operation and maintenance.

The maintenance work required under the provisions of the Lower San Joaquin River and Tributaries Project shall be performed in accordance with existing Flood Control Regulations, inclosed herewith, which have been prescribed by the Secretary of the Army pursuant to Section 3 of the Act of Congress approved 22 June 1936, as amended and supplemented by a Standard Operation and Maintenance Manual for the Lower San Joaquin River and Tributaries Project. As provided under Paragraph 208.10(10) of these regulations, a supplement to the Standard Operation and Maintenance Manual covering these units of work will be furnished to you upon completion.

*Unit 3*

REGISTERED  
RETURN RECEIPT REQUESTED

SPKHO-C  
The Reclamation Board

6 DEC 1962

A copy of this letter is being transmitted to the Department of  
Water Resources.

Sincerely yours,

1 Incl  
F.C. Reg.

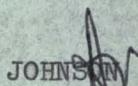
C. R. TEAGLE  
Major, CE  
Acting District Engineer

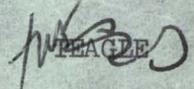
Copy furnished:  
Dept Water Resources  
23rd & "N" Streets  
Sacramento, Calif.  
O.C.E.  
S.P.D.

cc: Engr Div-Prog Dev Br  
Engr Div-Lev & Chan  
Northern Area Ofc  
F & A Branch

LJK  
12/5/62  
KRISTOF/pnp

  
THOMPSON

  
JOHNSON

  
TEAGLE

Unit 3

11 January 1963

The Reclamation Board  
State of California  
1215 "O" Street  
Sacramento 14, California

Gentlemen:

Reference is made to the joint inspection made on 19 November 1962 of flood control work pertaining to the Lower San Joaquin River and Tributaries Project for the purpose of transferring it, upon completion, to the State of California for operation and maintenance.

The above work, designated as Unit No. 68, consists of levee construction, bank protection and surfacing of levee crowns on the right bank of San Joaquin River from mile point 57.15 to 62.02. This work was completed on 10 January 1963, in accordance with Specification 2735, Contract No. DA-04-167-CIVENG-62-68, and Drawing No. 7-4-1643. The navigation and pumping plant structure on Walthall Slough is not included in this transfer. This structure will be transferred at a later date upon its completion.

The flood control work described above now meets the requirements of the Lower San Joaquin River and Tributaries Project. Therefore, said flood control work together with the waterway banks contiguous thereto, are hereby transferred to the State of California for operation and maintenance.

The maintenance work required under the provisions of the Lower San Joaquin River and Tributaries Project shall be performed in accordance with existing Flood Control Regulations, inclosed herewith, which have been prescribed by the Secretary of the Army pursuant to Section 3 of the Act of Congress approved 22 June 1936, as amended and supplemented by a Standard Operation and Maintenance Manual for the Lower San Joaquin River and Tributaries Project. As provided under Paragraph 208.10(10) of these regulations, a supplement to the Standard Operation and Maintenance Manual covering these units of work will be furnished to you upon completion.

Unit 3  
Received

REGISTERED  
RETURN RECEIPT REQUESTED



SPKHO-C  
The Reclamation Board

A copy of this letter is being transmitted to the Department of Water Resources.

Sincerely yours,

C. R. TEAGLE  
Major, CE  
Acting District Engineer

Copy furnished:  
Dept Water Resources  
23rd & "R" Streets  
Sacramento, California

O.C.E.  
S.P.D.

cc: Engr Div-Prog Dev Br  
Engr Div-Lev & Channels  
Northern Area Office  
F. & A. Branch

OPERATIONS BRANCH  
CHANNELS & LEVEES SECTION

LHK  
KRISTOF/pnp

*[Signature]*  
THOMPSON

*[Signature]*  
JOHNSON

*[Signature]*  
TEAGLE

Unit 3

SPIKCO-F

11 September 1968

The Reclamation Board  
State of California  
1416 - 9th Street, Room 1335  
Sacramento, California 95814

Gentlemen:

Reference is made to the joint inspection of 26&27 February 1968, made for the purpose of transferring a completed portion of the flood control work on the Lower San Joaquin River and Tributaries Project to the State of California for operation and maintenance.

The flood control work consists of levee enlargement, levee construction, levee setback, shaping levee crown, bank sloping and stone protection on the right bank of the San Joaquin River between approximate River Miles 62.21 & 74.75; and the right bank of the Stanislaus River between approximate River Miles 0.0 & 9.20. The work unit No. 82, as shown on the attached inclosure, was completed on 10 March 1968, in accordance with Specification No. 3042, Contract No. DA-04-167-CIVENG-66-103, and Drawing No. 7-4-1685.

The work was performed under the general authority of the Lower San Joaquin River and Tributaries Project, which was authorized by the Flood Control Act of 1944, 78th Congress, 2nd Session.

The completed flood control work as described in the attached inclosure now meets the requirements of the Lower San Joaquin River and Tributaries Project. Therefore, said flood control work, together with the waterway banks contiguous thereto, are hereby transferred to the State of California for operation and maintenance.

The maintenance work required under the provisions of the Lower San Joaquin River and Tributaries Project shall be performed in accordance with the inclosed Flood Control Regulations. These regulations have been prescribed by the Secretary of the Army pursuant to Section 3 of the Act of Congress approved 22 June 1936, as amended and supplemented by a Standard

Unit 3

SPIKO-F  
The Reclamation Board

11 September 1968

Operation and Maintenance Manual for the Lower San Joaquin River and Tributaries Project. As provided under Paragraph 208.19(10) of these regulations, a supplement to the Standard Operation and Maintenance Manual covering the above work will be furnished to you upon completion.

Sincerely yours,

2 Incl  
as stated

CRAWFORD YOUNG  
Colonel, CE  
District Engineer

*pull* Copy furnished:

DWR

OCE

SPD

cc:

Engr Div-Lev&Chan

Engr Div-Prog Dev

Valley Res Ofc

P&A (Cordano)

*JR*  
ROMPAIA / P

*MJB*  
*JL for*  
COLEMAN

*JH*  
HENSON

*CJ*  
YOUNG

*LK*

THE RECLAMATION BOARD  
STATE OF CALIFORNIA

COPY

20 January 1970

COPY

District Engineer  
Corps of Engineers  
U. S. Army  
650 Capitol Mall  
Sacramento, California 95814

Attention: Construction-Operations Division

Dear Sir:

Reference is made to the San Joaquin River Flood Control Project, and in particular to the Completion Phase, Right and Left Banks, San Joaquin River and Stanislaus River, Specification No. 3455, Contract No. DACW05-68-C-0086.

A review of this work was made in the field on December 27, 1968. The work was found to conform to the contract plans and specifications and the involved reclamation districts have been informed of the completion of project construction in this reach of the San Joaquin and Stanislaus Rivers.

Sincerely yours,

/s/ A. E. McCOLLAM  
A. E. McCOLLAM  
Chief Engineer and  
General Manager

EXHIBIT F

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

SPKCO-0

6 January 1981



The Reclamation Board  
1416 - Ninth Street, Room 335-18  
Sacramento, CA 95814

Gentlemen:

You are hereby notified that the Corps of Engineers has completed emergency repairs on the project levee in Reclamation District 2064 under the authority of Section 5 of the Flood Control Act of 18 August 1941, as amended (Public Law 99, 54th Congress, 1st Session). The work was completed on 20 November 1980 and consisted of reconstructing 1000'+ of the project levee along the right bank of the San Joaquin River, in accordance with Contract No. DACW05-81-C-0021, Drawing No. 7-4-1838 and Specification No. 5985.

The Lower San Joaquin River and Tributaries Project Standard Operation and Maintenance Manual and the Supplement thereto for Unit 3 covers this area. The completed work shall be maintained in accordance with the assurances which your Board provided for the Lower San Joaquin River and Tributaries Project.

Sincerely,

*R. G. P.*  
ROMPALA/lr/R

*M. J.*  
MCBRIDE

PAUL F. KAVANAUGH  
Colonel, CE  
District Engineer

*A. S.*  
A. SMITH

*H. E.*  
HELM

*F.*  
FAST

*L.*  
LEE

*K.*  
KAVANAUGH

Copy furnished:

DWR, ATTN: G. Piazza

SPKCO-0

cc:

Ops Br

Engr Div (Lev & Chan/Nolan)

Valley Res Ofc

Unit 3

*San Joaquin Riv Br ?*  
CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
*Not*  
*Bob file*

**CERTIFIED**  
No. *778816*  
**RETURN RECEIPT REQUESTED**

May 13, 1983

Navigation and Flood Control Unit

The Reclamation Board  
State of California  
1416-9th Street, Room 335  
Sacramento, California 95814

Members of the Board:

You are hereby notified that the Corps of Engineers has completed emergency work in R.D. 2064 under authority of Section 5 of the Flood Control Act of August 18, 1941, as amended (Public Law 99, 84th Congress, 1st Session). The work was completed on April 11, 1983 and consisted of restoring a levee break along the San Joaquin River, right bank, upstream of Airport Way in accordance with Contract Number DACW05-83-C-0075. Additional work was completed on May 3, 1983 for restoring a deliberate levee break along the same levee downstream of Airport Way in accordance with Contract Number DACW05-83-C-0084.

*JR MANN*  
ROMPALA/db

*PKC*  
KELLY

*AS*  
A. SMITH

*H*  
HELM

*DM*  
DENNIS

LEE *A*

*AW*  
WILLIAMS

This work shall be maintained in accordance with the assurance which your Board provided for the Lower San Joaquin River and Tributaries Project. This portion of the work will be added by amendment to the supplement to Standard Operation and Maintenance Manual, Unit Number Three, Lower San Joaquin River and Tributaries Project. Copies will be furnished your office at a later date.

Sincerely,

*Unit 3*

Arthur E. Williams  
Colonel, Corps of Engineers  
District Engineer

Copy Furnished:  
Commander, South Pacific Division, ATTN: SPDCO-0

cc:  
Ops Br  
EM Br (Garrett)  
Engr Div (Levees & Chan-Nolan)  
Val Res Ofc

*[Red X mark over routing slip area]*

Navigation and Flood Control Unit

JAN 26 2001

Mr. Peter D. Rabbon  
General Manager  
The Reclamation Board  
State of California  
1416 9<sup>th</sup> Street, Room 1601  
Sacramento, California, 95814

Dear Mr. Rabbon:

This letter is to transfer a portion of work on the right levee of the San Joaquin River from Levee Mile 0.00 at the north boundary of RD 2075 to L.M. 7.38 at the south boundary of RD 2075 in RD 2075, to the State of California for operation and maintenance.

The work consisted of restoring the following areas damaged by the January 1997 Flood. Wave wash damaged areas were excavated, levee fill was placed and compacted, and the slope was reshaped to pre-flood configuration from L.M. 0.00 to 1.36, L.M. 1.45 to 1.77, L.M. 2.26 to 2.73, L.M. 2.83 to 2.87, L.M. 3.77 to 4.17, and L.M. 6.97 to 7.05. The levee slope was restored to pre-flood condition between L.M. 1.77 and 2.26. Levee fill material was placed and compacted and the slope was restored to pre-flood configuration from L.M. 2.78 to 2.83, L.M. 2.87 to 3.77, L.M. 4.17 to 4.58, L.M. 5.05 to 5.27, and 5.88 to 5.93. The landside berm was repaired with gravel, extending 100-feet upstream and downstream from the existing berm, between L.M. 5.90 and 6.10. The work as listed in the enclosure was completed on Oct. 29, 1997 in accordance with Specification No. 9896E, Drawing File No. SJ-4-114, Contract No. DACW05-97-C-0130.

The work was performed under the general authority of 33 U.S.C. 701n (69 Stat. 186) PL 84-99 and now meets the requirements of the San Joaquin River in RD 2075. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of the date of this letter to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the Operation and Maintenance Manual, San Joaquin River Flood Control Project.

Sincerely,

Michael J. Walsh  
Colonel, Corps of Engineers  
District Engineer

*to* MINTON/dd  
TAVANA  
SANDNER  
WINTON  
DURHAM-AGUILERA  
DOYLE CIO  
KORMAN  
CHARLTON  
O'BRIEN  
WALSH

Enclosure

cc:  
CESPK-CO  
CESPK-CO-E  
CESPK-ED  
CESPK-ED-D  
CESPK-PM  
CESPK-CO-RV

*Unit 3*

APR 11 2001

Mr. Peter D. Rabbon, General Manager  
The Reclamation Board  
State of California  
1416 9<sup>th</sup> Street, Room 1601  
Sacramento, California, 95814

Dear Mr. Rabbon:

This letter is to transfer a portion of work on the right bank levee of the San Joaquin River from River Junction Road to the Stanislaus River in Unit 1 and a portion of the right bank of the Stanislaus River from its junction with the San Joaquin River to Austin Road in Unit 2, in RD 2064, to the State of California for operation and maintenance.

The work consisted of restoring areas damaged by the January 1997 Flood, all on the landside. The right levee of the San Joaquin River in Unit 1 was restored by excavating the levee section to a depth of 10-feet and placing and compacting levee fill at Levee Mile 0.04-0.49 and 0.66-0.69. Levee fill material was placed and compacted and the slopes were restored to pre-flood configuration at Levee Mile 0.69-1.11, 1.11-1.17, 2.18-2.69, 3.43-3.50, 3.60-3.91, and 4.19-5.00. Unit 2 was restored by excavating the levee section to a depth of 8½-feet, placing and compacting levee fill material, and reshaping slopes to pre-flood configuration. In addition, the landside berm in Unit 1 was repaired with gravel installed over geotextile at Levee Mile 2.55-2.74 and 3.12-3.51 to an average thickness of 2½-feet-deep and 50-feet-wide, and in Unit 2 to a width of 40-feet at Levee Mile 0.55-0.80 and to a width of 50-feet at Levee Mile 1.84-1.93 and 3.29-3.51. The work, as listed in the enclosure, was completed on October 29, 1997 in accordance with Specification No. 9896E, Drawing File No. SJ-4-114, Contract No. DACW05-97-C-0130.

The work was performed under the general authority of 33 U.S.C. 701n (69 Stat. 186) PL 84-99 and now meets the requirements of the Operations and Maintenance Manual for the San Joaquin River Flood Control System in RD 2064. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of the date of this letter to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the Operation and Maintenance Manual, San Joaquin River Flood Control Project.

Sincerely,

Michael J. Walsh  
Colonel, Corps of Engineers  
District Engineer

Enclosure  
cc:  
CESPK-CO-E  
CESPK-ED  
CESPK-ED-D  
CESPK-PM  
CESPK-CO-RV

*Unit 3*

*JM*  
MINTON/dd  
*MTA*  
TAVANA  
*JK*  
SANDNER  
*JK*  
WINTON  
*JK*  
DURHAM-AGUILERA  
*ED*  
DOYLE  
*JK*  
KORMAN  
*JK*  
WELTON  
O'BRIEN  
*JK*  
WALSH

Navigation and Flood Control Unit

APR 11 2001

Mr. Peter D. Rabbon, General Manager  
The Reclamation Board  
State of California  
1416 9<sup>th</sup> Street, Room 1601  
Sacramento, California, 95814

Dear Mr. Rabbon:

This letter is to transfer a portion of work on the right levee of the San Joaquin River from Levee Mile 0.00 (boundary of RD 2096) to Levee Mile 2.82 in Unit 1 in RD 2094, to the State of California for operation and maintenance.

The work consisted of restoring areas damaged by the January 1997 Flood, all on the landside of the right levee of the San Joaquin River in Unit 1. Levee fill material was placed and compacted in wavewash-damaged areas to restore the slopes to pre-flood configuration on L.M. 0.23-0.35 and L.M. 0.35-0.50. Levee fill material was excavated to 6-feet-deep, placed and compacted to restore the slope to 2 horizontal to 1 vertical on L.M. 0.73-0.85. The levee was excavated to 5-feet-deep, levee fill material was placed and compacted in wavewash damaged areas and the slopes were restored to 3 horizontal to 1 vertical on L.M. 0.85-0.92 and L.M. 1.01-1.51. The levee was excavated to 6.5-feet-deep, levee fill material was placed and compacted in wavewash damaged areas and the slopes were restored to 3.1 horizontal to 1 vertical on L.M. 1.51-2.20 and L.M. 2.20-2.24. Levee fill material was placed and compacted in wavewash-damaged areas and the slope was restored to pre-flood configuration on L.M. 2.24-2.75. The work as listed in the enclosure was completed on October 29, 1997 in accordance with Specification No. 9896E, Drawing File No. SJ-4-114, Contract No. DACW05-97-C-0130.

The work was performed under the general authority of 33 U.S.C. 701n (69 Stat. 186) PL 84-99 and now meets the requirements of the Operations and Maintenance Manual for the San Joaquin River Flood Control System in RD 2094. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of the date of this letter to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the Operation and Maintenance Manual, San Joaquin River Flood Control Project, which is being transferred under separate cover.

Sincerely,

Michael J. Walsh  
Colonel, Corps of Engineers  
District Engineer

Enclosure

cc:  
CESPK-CO-E  
CESPK-ED  
CESPK-ED-D  
CESPK-PM  
CESPK-CO-RV

*JM*  
MINTON/dd

*TD*  
TAVANA

*JM*  
SANDNER

*JM*  
WINTON

*JM*  
DURHAM-AGUILERA

*JM*  
DOYLE

*JM*  
KORMAN

*JM*  
CHARLTON

*JM*  
O'BRIEN

*JM*  
WALSH

**THE RECLAMATION BOARD**

1416 NINTH STREET, ROOM 1601  
SACRAMENTO, CA 95814  
(916) 653-5434 FAX: (916) 653-5805  
Permits: (916) 653-5726 FAX: (916) 653-5805



FEB 15 2002

Colonel Michael J. Conrad Jr.  
District Engineer  
Sacramento District  
U.S. Army Corps of Engineers  
1325 J Street  
Sacramento, California 95814-2922

Dear Colonel Conrad:

In Colonel Michael J. Walsh's letter of January 26, 2001 to The Reclamation Board, the U.S. Army Corps of Engineers transferred the repaired right-bank levee of the San Joaquin River at Levee Mile 0.00 to LM 7.38 (in Reclamation District No. 2075) to the State of California for operation and maintenance. You advised the Board that the completed repairs would be added by amendment to the Operation and Maintenance Manual, San Joaquin River Flood Control Project. We understand that the repairs were completed in accordance with the original plans and specifications. We acknowledge receipt of as-constructed plans and will forward a copy to RD 2075.

The Board, on behalf of the State of California, accepted the completed repairs at its February 15, 2002 meeting and transferred the San Joaquin River levee repairs to RD 2075. Until the Corps provides the O&M Manual amendment, RD 2075 will perform operation and maintenance according to the current manual.

If you have any questions, you may contact Peter Rabbon, General Manager of The Reclamation Board, at (916) 653-5434, or your staff may contact Mel Yarwood, Acting Chief of the Department of Water Resources' System Integrity Section of the Division of Flood Management, at (916) 574-0367.

Sincerely,

*Betsy A. Marchand*  
Betsy A. Marchand  
President

cc: Mr. Kell Cloward, Chief  
Readiness Branch  
Sacramento District  
U.S. Army Corps of Engineers  
1325 J Street  
Sacramento, California 95814-2922

Mr. Al Hoslett, Attorney  
Reclamation District No. 2075  
311 East Main Street, Suite 504  
Stockton, California 95202

*Unit 3*

EXHIBIT G

SUGGESTED SEMI-ANNUAL REPORT FORM

EXHIBIT G

TO: The District Engineer  
Sacramento District  
Corps of Engineers  
650 Capitol Mall  
Sacramento, California

( May 19\_\_ )  
( Nov 19\_\_ )

Dear Sir: ..

The semi-annual report for the period (1 May 19\_\_ to 31 October 19\_\_) (1 November 19\_\_ to 30 April 19\_\_) Unit No. 3 of the Lower San Joaquin River and Tributaries Project is as follows:

a. The physical condition of the protective works is indicated by the inspector's report, copies of which are inclosed, and may be summarized as follows:

(Superintendent's summary of conditions)

It is our intention to perform the following maintenance work in order to repair or correct the conditions indicated:

(Outline the anticipated maintenance operations for the following 6 months.)

b. During this report period, high water periods (water level in excess of 30.5 feet on the gage on the San Joaquin River at Vernalis) occurred on the following dates:

<u>Dates</u>	<u>Maximum Elevation</u>
_____	_____
_____	_____
_____	_____

Comments on the behavior of the protective works during such high water periods are as follows:

(Superintendent's log of flood observations)

During the high water stages when the water level at Vernalis gage reached a height of \_\_\_\_\_, on the gage or excess thereof (Dates) \_\_\_\_\_, it was necessary to organize and carry out flood operations as follows:

(See Maintenance Manual \_\_\_\_\_.)

c. The inspections have indicated (no) or (the following) encroachments or trespasses upon the project right-of-way.

d. (No) (\_\_\_\_\_) permits have been issued for (the following) improvements or construction within the project right-of-way.

Executed copies of the permit documents issued are transmitted for your files.

e. The status of maintenance measures, indicated in the previous semi-annual report as being required or as suggested by the representatives of the District Engineer, is as follows:

(Statement of maintenance operations, item by item with percent completion.)

f. The fiscal statement of the Superintendent's operations for the current report period is as follows::

	<u>Labor</u>	<u>Material</u>	<u>Equipment</u>	<u>Overhead</u>	<u>Total</u>
1. Inspection					
2. Maintenance					
3. Flood fighting operations					
TOTAL					

Respectfully submitted,

\_\_\_\_\_  
Superintendent of Works