

Return:
U. S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
FEDERAL & COURTS BLDG., 650 CAPITOL MALL
P. O. BOX 1739, SACRAMENTO, CALIFORNIA 95808

Book C
OPERATIONS BRANCH
FLOOD CONTROL SECTION

*SUPP O&M
Manual*

Revised 29 Dec 2016

SUPPLEMENT TO STANDARD
OPERATION AND MAINTENANCE
MANUAL

SACRAMENTO RIVER
FLOOD CONTROL PROJECT

UNIT NO. 107
LEVEES AROUND
HASTINGS TRACT
RECLAMATION DISTRICT NO. 2060



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

CORPS OF ENGINEERS
U. S. ARMY

SUPPLEMENT TO STANDARD
OPERATION AND MAINTENANCE MANUAL
SACRAMENTO RIVER FLOOD CONTROL PROJECT

UNIT NO. 107
LEVEES AROUND
HASTINGS TRACT

RECLAMATION DISTRICT NO. 2060

Sacramento District
Corps of Engineers
U. S. Army
April 1959

**SUPPLEMENT TO STANDARD
OPERATION AND MAINTENANCE MANUAL
SACRAMENTO RIVER FLOOD CONTROL PROJECT**

UNIT NO. 107

LEVEES AROUND
HASTINGS TRACT
RECLAMATION DISTRICT NO. 2060

LOCATION	ADDITION OR REVISION	DATE
Exhibit F	Add copy of letter of transfer dated 4 Dec 1951	16 Dec 2010
Exhibit F	Add copy of letter of acceptance dated 18 Dec 1951	16 Dec 2010
Exhibit F	Add copy of letter of acceptance dated 2 Apr 1952	16 Dec 2010
Exhibit F	Add copy of letter of acceptance dated 11 Mar 1959	16 Dec 2010
1-04	Add subparagraph j.	16 Dec 2010
Exhibit B	Add Drawing No. 50-4-3626	16 Dec 2010
Exhibit F	Add copy of letter of transfer dated 9 Nov 1960	16 Dec 2010
Exhibit F	Add copy of letter of acceptance dated 23 Dec 1960	16 Dec 2010
1-04	Add subparagraph k	16 Dec 2010
Exhibit F	Add copy of letter of transfer dated 5 Oct 1962	16 Dec 2010
Exhibit F	Add copy of letter of acceptance dated 13 Nov 1962	16 Dec 2010
Exhibit F	Add copy of letter of acceptance dated 29 Nov 2016	29 Dec 2016

TABLE OF CONTENTS

<u>Paragraph</u>	<u>Subject</u>	<u>Page</u>
<u>SECTION I – INTRODUCTION</u>		
1-01	Location	1
1-02	Protection Provided	1
1-03	Project Works	1
1-04	Construction Data and Contractor	2
1-05	Flood Flows	3
1-06	Assurances Provided by Local Interests	3
1-07	Transfer to the State Reclamation Board	3
1-08	Superintendent	3
<u>SECTION II – FEATURES OF THE PROJECT SUBJECT TO FLOOD CONTROL REGULATIONS</u>		
2-01	Levees	4
2-02	Drainage and Irrigation Structures	4
2-03	Channels	5
2-05	Miscellaneous Facilities	6
<u>SECTION III – REPAIR OF DAMAGE TO PROJECT WORKS AND METHODS OF COMBATING FLOOD CONDITIONS</u>		
3-01	Repair of Damage	8
3-02	Applicable Methods of Combating Floods	8

EXHIBITS

<u>Exhibit</u>	<u>Description</u>	
A	Flood Control Regulations. (Contained in Standard Manual)	Unattached
A-1	Location Map	1 Sheet
B	"As Constructed" Drawings.	Unattached
C	Plates of Suggested Flood Fighting Methods (Contained in Standard Manual)	Unattached
D	Check List No. 1 - Levee Inspection Report (Contained in Standard Manual)	Unattached
E	Check Lists - Levees, Channels and Structures	Sheets 1 thru 7
F	Letters of Transfer to the State Reclama- tion Board	Sheets 1 thru 7
G	Suggested Semi-Annual Report Form. . . .	Sheets 1 and 2

SUPPLEMENT TO STANDARD
OPERATION AND MAINTENANCE MANUAL
SACRAMENTO RIVER FLOOD CONTROL PROJECT
UNIT NO. 107
LEVEES AROUND HASTINGS TRACT
RECLAMATION DISTRICT NO. 2060

SECTION I
INTRODUCTION

1-01. Location. The improvement covered by this manual is that part of the Sacramento River Flood Control Project which comprises the levee and channel that surrounds the Hastings Tract. The levee of this unit lies within Reclamation District No. 2060 and is located about 6.4 miles north of Rio Vista, California, as shown on the location map, Exhibit A-1.

1-02. Protection Provided. The levee of this unit is an essential feature of the Sacramento River Flood Control Project. It provides direct protection to Hastings Tract against floodwaters of Ulatis Creek, Barker Slough, Cache Slough and Lindsey Slough. The adopted flood plane profile of Ulatis Creek and Cache Slough is level at elevation 18.4. Along Lindsey and Barker Sloughs the adopted flood plane profile is level at elevation 17.3. Along the Yolo Bypass from Cache Slough to Lindsey Slough the grade of the adopted flood plane profile varies from elevation 18.4 to 17.3. Elevations are referred to U. S. Corps of Engineers' datum. The reaches of Cache, Lindsey and Barker Sloughs and Ulatis Creek upstream from Yolo Bypass are subject to backwater from tidal fluctuations and the levees have been designed accordingly. •

1-03. Project Works. The flood control improvement covered by this manual is a part of the Sacramento River Flood Control Project authorized by the Flood Control Act of 1917, as modified by the Acts of 1928, 1937 and 1941, and consists of the south levee (right bank) of Ulatis Creek and bypass that borders the Hastings Tract for a distance of about 4.8 miles; the southerly levee (right bank) of Cache Slough from Ulatis Creek to Yolo Bypass for a distance of about 3 miles; the right bank of Wright Cut for a length of about 0.6 miles; and the left bank of Lindsey and Barker Sloughs from the westerly end of Hasting Tract to Yolo Bypass, a distance of about 8.0 miles. The above described levee was originally constructed by local interests and portions as shown on the drawings of Exhibit B were enlarged, setback or repaired by the Corps of Engineers to project standards.

1-04. Construction Data and Contractor. Construction required by the Corps of Engineers to bring levees of this unit to project standards and to perform repair work to locally built levees was accomplished under the following job orders and contracts:

- a. Raising existing levee on Lower and Upper Hastings Tract at Barker and Lindsey Sloughs was completed on December 1938 under Job Order No. 432.
- b. Constructing north levee of Barker Slough and south levees of Ulatis Creek and Cache Slough on Upper Hastings Tract was completed on 10 May 1943 under Job Order No. 855.
- c. Earth dams were constructed across the upper and lower ends of Hastings Cut and completed on 30 June 1943 under Job Order No. 856.
- d. Levee setback on Upper Hastings Tract along Barker Slough was accomplished under Job Order No. 858 and completed on 30 June 1943.
- e. Levee enlargement along Cache Slough on Lower Hastings Tract was accomplished under Job Order No. 1102 and completed on 7 October 1947.
- f. Shaping levees on Hastings Tract along Lindsey and Cache Sloughs was accomplished under Contract No. DA-04-167-eng-1184 by Cecil Hulse during the period from 16 July 1954 to 29 December 1954.
- g. Construction of a patrol road on the Lindsey and Cache Slough levees on Hastings Tract was accomplished under Contract No. DA-04-167-eng-1224 by Asta Construction Company during the period from 18 October 1954 to 13 July 1955.
- h. Levee enlargement from Hastings Cut upstream was accomplished under Contract No. DA-04-167-CIVENG-56-164 by Elmer G. Wendt during the period from 10 April 1956 to 31 October 1956.
- i. Construction of a patrol road on the right bank of Yolo Bypass on Hastings Tract was accomplished under Contract No. DA-04-167-CIVENG-59-71 by Delta Construction Company during the period from 3 November 1958 to 10 November 1958.
- j. Levee construction and bank revetment, left bank of Lindsey Slough, Mile 2.48 to 2.67, and Mile 3.22 to 3.55, was completed on 11 October 1960 under Contract No. DA-04-167-CIVENG-60-94. Specification No. 2645, Drawing No. 50-4-3626.

- k. Correction of seepage and construction of a relief well on the left levee of Lindsey Slough, approximately 2400 feet upstream from Hastings Ferry was completed on 11 September 1962.

1-05. Flood Flows. For purposes of this manual, the term “flood” or “high water period” shall refer to flows when the water surface reaches or exceeds a reading of 12.0 on the State Department of Water Resources continuous water stage recorder and staff gage located on the right bank of Lindsey Slough at California Packing Corp. headquarters, 1.1 miles upstream from Yolo Bypass. Gage set at 0.00 feet U. S. Corps of Engineers datum and minus 2.92 U.S.G.S. datum.

1-06. Assurances Provided by Local Interests. Assurance of cooperation by local interests is provided by State Legislation as contained in Chapter 3, Part 2, Division 5 of the State Water Code (see paragraph 2-02a of the Standard Manual.)

1-07. Transfer to the State Reclamation Board. The levee within this unit was transferred to the State Reclamation Board for maintenance and operation by letters dated 8 December 1951, 12 July 1955, 5 December 1956 and 26 November 1958, all as shown on copies of letters of transfer, Exhibit F.

1-08. Superintendent. The name and address of the Superintendent appointed by local interests to be responsible for the continuous inspection, operation and maintenance of this project works shall be furnished by the District Engineer, and in case of any change of Superintendent, the District Engineer shall be so notified.

SECTION II
FEATURES OF THE PROJECT SUBJECT TO
FLOOD CONTROL REGULATIONS

2-01. Levee.

a. Description. The levee along the right bank of Ulatis Creek, the right bank of Cache Slough, right bank of Yolo Bypass (Wright Cut) and left levee of Lindsey and Barker Sloughs that borders on the Hastings Tract is located as described in paragraphs 1-01 and 1-03 of this manual. A patrol road traverses the crown of the levee for the full distance around Hastings Tract. For more complete detail in construction of the above-mentioned levee, 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) 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.

a. Drainage and irrigation structures which extend through the levee are located and described as follows:

Location	Size	Gate		Invert-Ft.
Levee	of	Loca-		below
Mileage	Pipe	gion	Other Structure Description	crown
<u>Lower Hastings Tract-Miles Downstream along Cache Slough from Hastings</u>				
<u>Cut</u>	:	:	:	:
0.0	:2-48"	: R.S.	: Drainage	: 25.0
0.4	: 10"	: R.S.	: Pump L.S.	: 2.8
2.9	: 24"	: -	: Pump R.S.	: 7.0
2.9	: 36"	: R.S.	: Drainage	: 15.0

Location	Size	Gate		Invert-Ft.
Levee	of	Loca-		below
Mileage	Pipe	tion	Other Structure Description	crow
<u>Left Bank Lindsey Slough-Miles Upstream from Yolo Bypass</u>				
1.4	: 24"	: -	: Drainage - Pump L.S.	: 4.0
1.4	: 36"	: -	: Drainage - Pump L.S.	: 4.0
5.2	: 24"	: R.S.	: Drainage	: 17.0
6.2	: 48"	: R.S.	: Drainage	: 14.0
8.1	: 30"	: R.S.	:	: 12.5
<u>Right Bank Ulatis Creek - Miles Upstream from Hastings Cut</u>				
0.5	: 30"	: R.S.	: Pump R.S.	: 6.5
2.2	: 18"	: R.S.	: Pump R.S.	: 4.5
2.4	: 30"	: R.S.	: City of Vallejo Water Line	: -
2.6	: 18"	: R.S.	: Drainage	: 10.5
2.7	: 24"	: R.S.	: Drainage	: 16.0

Note on abbreviations:

L.S. = Landside
R.S. = Riverside

b. For pertinent Requirements, see the following:

- (1) Maintenance - paragraph 5-02 of the Standard Manual.
- (2) 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. Channel.

a. Description. The floodways of Cache Slough and Lindsey Slough are confined between levees along both banks. Ulatis Creek has a levee on the right bank and Barker Slough has a levee

on the left bank, both constructed to protect the Upper Hastings Tract. The flood plane profiles are as indicated in paragraph 1-02 of this manual.

Since the channel of Lindsey Slough is utilized for navigable purposes, the responsibility for inspection, the responsibility for inspection, maintenance and operation shall be limited to flood control.

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) 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 Superintendent to maintain a patrol of the project works during all periods of flood in excess of a reading of 12.0 on the gage located on the right bank of Lindsey Slough at the California Packing Corporation headquarters, 1.1 miles upstream from the Yolo Bypass. The Superintendent shall dispatch a message by the most suitable means to the District Engineer whenever the water surface reaches the gage reading indicated above and record the time of observations. One copy of the readings shall be forwarded to the District Engineer following the flood, and a second copy transmitted as an inclosure to the semi-annual report in compliance with paragraph 3-05 of the Standard Manual.

2-04. Miscellaneous Facilities.

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

(1) Ferry. A ferry crossing Lindsey Slough near its confluence with Yolo Bypass.

(2) Utility Relocations. Because of the nature of the construction of the levee by local interests, no records of any utility relocations are available.

(3) Hydrographic Facilities. A continuous water stage recorder and staff gage located on the right bank of Lindsey Slough at the California Packing Corporation headquarters. This gage to be maintained by the State Department of Water Resources.

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

(1) Maintenance - paragraph 7-02 of the Standard Manual.

(2) 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 Superintendent will contact a representative of the Department of Water Resources, State of California, who coordinates maintenance of project works of the Sacramento River Flood Control Project. The State representative will give assistance or advice, 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, revised May 1955, where the subject is fully covered.

EXHIBIT A

FLOOD CONTROL REGULATIONS

(See Standard Manual)

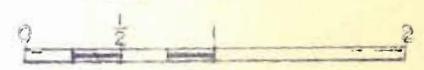
EXHIBIT A
Unattached



LEGEND

--- Extent of Levees in this Unit.

SCALE IN MILES



LOCATION MAP

UNIT NO. 107

LEVEES AROUND
HASTINGS TRACT
R. D. NO. 2060



EXHIBIT B

“AS CONSTRUCTED”
DRAWINGS

See separate folder for the following drawings:

<u>Drawing No.</u>	<u>Title</u>	
50-4-1653	Construct New and Raise Existing Levee – Lower and Upper Hastings Tract at Barker and Lindsey Slough.	1 sheet
50-4-2003	Construct North Levee Barker Slough and South Levee Ulatis Creek on Upper Hastings Tract.	2 sheets
50-4-2004	Earth Dam across Upper and Lower Ends of Hastings Cut.	2 sheets
50-4-1996	Setback Levee on Upper Hastings Tract – Part B.	4 sheets
50-4-2349	Enlarge Levee – Lower Hastings Tract – on Cache Slough to Hastings Cut.	5 sheets
50-4-3033	Patrol Road on Lindsey and Cache Slough Levees.	1 sheet
50-4-3068	Levee Enlargement – Hastings Tract from Hastings Cut Upstream.	10 sheets
50-4-3569	Surfacing Patrol Road – Right Bank Yolo Bypass on Hastings Tract.	2 sheets
50-4-3626	Bank Protection and Levee Construction at Critical Locations – Left Bank Sacramento River, Left Bank Lindsey Slough, Right Bank Threemile Slough.	9 sheets

EXHIBIT C

PLATES OF SUGGESTED FLOOD FIGHTING METHODS

(See Standard Manual)

EXHIBIT C
Unattached

EXHIBIT D

CHECK LIST NO. 1

LEVEE INSPECTION REPORT
(See Standard Manual)

EXHIBIT D
Unattached

EXHIBIT E

CHECK LISTS OF LEVEES,
CHANNEL AND STRUCTURES

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

EXHIBIT E
Sheet 1 of 7

CHECK LIST NO. 2

UNIT NO. 107

Inspector's Report Sheet No. _____

Inspector _____

Date _____

Superintendent _____

Item	Remarks
(a) Location by Station	
(b) Settlement, sloughing, or loss of grade	
(c) Erosion of back slope of levee	
(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	

INSTRUCTIONS 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.

CHECK LIST NO. 3

CHANNEL AND RIGHT-OF-WAY

UNIT NO. 107

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 of 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.

CHECK LIST NO. 4

DRAINAGE AND IRRIGATION STRUCTURES
UNIT NO. 107

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 Pipen or Conduit	(e) Condition of concrete headwall or invert paving	(f) Condition of right-of-way adjacent to structure	(g) Repair Measures Taken since last Inspection	(h) Comments
0.0	Right						<u>Cache Slough from Hastings Cut</u>
0.4	"						
2.9	"						
2.9	"						
1.4	Left						
1.4	"						
5.2	"						
6.2	"						
8.1	"						
0.5	Left						
2.2	"						
2.4	"						
2.6	"						
2.7	"						

Lindsey Slough-Miles Upstream from Yolo Bypass

Ulatis Creek-Miles Upstream from Hastings Cut

INSTRUCTIONS 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, of 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
THE STATE RECLAMATION BOARD

EXHIBIT F



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

NOV 29 2016

Ms. Leslie M. Gallagher
Executive Officer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, CA 95821

Dear Ms. Gallagher:

The purpose of this letter is to notify the Central Valley Flood Protection Board of the completion of an effort to update the Operation and Maintenance Manual Supplements for the Sacramento River Flood Control Project and the Lower San Joaquin River Levees and Lower San Joaquin River and Tributaries Project. These updates are a compilation of revisions made to the project over time and where we had record of a transfer letter to the Board. These updated supplements are the most current version and should be utilized as the baseline version for any future project modifications.

This process and the compiled updates have been coordinated with the Central Valley Flood Protection Board and Department of Water Resources staffs for review and comment. All comments have been addressed or incorporated into the manuals.

The Board staff has been provided a copy of the manuals in electronic format. Future updates will include entire unit supplements so updates can be seen in context with the entire unit supplement. The list of completed supplements, by the unit number and title, are attached. If you have any questions regarding this transmittal, please contact Gary Kamei at 916-557-6845.

Sincerely,

A handwritten signature in black ink, appearing to read "D. G. Ray", written over a horizontal line.

David G. Ray, P.E.
Colonel, U.S. Army
District Commander

Enclosures

Standard O&M Manual Sacramento River Flood Control Project	
Unit No.	Project Name
101	RD 341 Sherman Island
102	E. Levee of Sac River, Isleton to Threemile Slough & N. Levee of Threemile Slough from Sac River to SJ River
103	Both Levees of Georgiana Slough & E. Levee of Sac River from Walnut Grove to Isleton
104	Levees around Grand Island
105	Levees Around Reyer Island
106	S. Levee Lindsey Slough & W. Levee of Yolo BP from Lindsey Slough to Watson Hollow and N. Levee of Watson Hollow Drain
107	Levees Around Hastings Tract
108	Levees Around Peters Tract
109	West Levee of Yolo Bypass & E. Levee of Cache Slough
110	Levees Around Sutter Island
111	E. Levee of Sac River from Freeport to Walnut Grove
112	Levees Around Merritt Island
113	E. Levee Yolo Bypass, N. Levee Miner Slough, W. Levees Sutter Slough, Elkhorn Slough & Sac River, All Bordering RD 999
114	W. Levee of Sac River from Northern Boundary of RD 765 to Southern Boundary of RD 307
115	E. Levee of Sac River from Sutterville Rd to Northern Boundary of RD 744
116	W. Levee of Sac River from Sac Weir to Mi 51.2 & S. Levee of Sac Bypass & E. Levee of Yolo Bypass from Sac Bypass to Southern Boundary of RD 900
117	E. Levee Sac River through City of Sac from Tower Bridge to Sutterville Rd
118.1	E. Levee of Sac River from American River to Tower Bridge & S. Levee of American River from Mayhews Downstream to Sac River
118.2	N. Levee American River, E. Levee Natomas Canal, Both Levees Arcade Creek, S. Levee Linda Creek, & Magpie Creek Diversion Channel
118.2 Sup	Vegetation on Mitigation Sites E. Levee of Sac River from American River to Tower Bridge & S. Levee of American River from Mayhews Downstream to Sac River
119	Putah Creek Channel & Levees & W. Levee of Yolo Bypass from Yolo Causeway Downstream 3 mi. Includes O&M manual for the Yolo Basin wetlands, and South Fork Putah Creek Preserve Restoration Section 1135 Authorization.
120	Relocated Willow Slough Channel & Levees & W. Levee Yolo Bypass from mouth of Relocated Willow Slough to Yolo Causeway
121	R. Levee of Yolo Bypass from Willow Slough Bypass to Woodland Rd RD2035
122.1	W. Levee of Sac River from Mi 70.8 to Sac Weir & N. Levee of Sac Bypass & E. Levee of Yolo Bypass from Woodland Hwy to Sac Bypass
123	W. Levee of Sac River from East End of Fremont Weir to Mi 70.8 & E. Levee of Yolo Bypass from East End Fremont Weir to Woodland Hwy RD 1600

124	N. Levee of American River from Natomas E. Canal to Sac River & E. Levee of Sac River from Natomas Cross Canal to American River. Includes supplement, Vegetation on Mitigation Sites.
125	Back Levee of RD 1000
126	Cache Creek Levees & Settling Basin Yolo Bypass to High Ground
127	Knights Landing Ridge Cut & Sac River & Yolo BP Levees of RD's 730 and 819 & S. Levee of Sycamore Slough
128	E. Levee of Sac River from Sutter Bypass to Tisdale Weir all within RD 1500
129	S. Levee of Tisdale By-Pass from E. Levee Sac River to W. Levee Sutter BP & W. Levee of Sutter BP Downstream to E. Levee of Sac River
130	W. Levee Sac River from Sycamore Slough to Wilkins Slough (Mi. 89.9 to Mi. 117.8)
131	W. Levee Sac River from Wilkins Slough to Colusa (Mi. 117.8 to Mi. 143.5)
132	Back Levees of RD 108
133	E. Levee of Sac River from Winship School to Tisdale BP & N. Levee of Tisdale BP & W. Levee of Sutter BP from Long Bridge to Tisdale BP
134	Levees of RD 70, E. Levee of Sac River from Butte Slough Outfall Gates to Winship School & W. Levee of Sutter BP from Butte Slough Outfall Gates to Long Bridge
135	E. Levee of Sutter BP from Sutter Buttes Southerly to Junction with Feather River & E. & W. Levees of Wadsworth Canal & Levee of Intercepting Canals
136	E. Levee of Sac River from Butte Slough Outfall Gates to the Princeton-Afton Rd (Mi. 138.3 to Mi. 164.4)
137	W. Levee of Sac River from North End of Princeton Warehouse to Colusa Bridge
138	E. Levee of Sac River from Parrott-Grant Line to Princeton-Afton Rd
139	W. Levee of Sac River from N. Boundary of LD 2 to North End of Princeton Warehouse
140	W. Levee of Sac River in LD 1 (Mi. 170.5 to Mi. 184.7). Includes mitigation site O&M manual, Yuba County
141.1	E. Levee of Feather River from Bear River to Natomas CC & S. Levee of Bear River & Both Levees of Yankee Slough. Parts 1 and 2
141.2	E. Levee of Feather River from Bear River to Natomas CC & S. Levee of Bear River & Both Levees of Yankee Slough. Parts 1 and 2
142	Back Levee of RD 1001
143	W. Levee of Feather River from North Boundary of RD 823 to E. Levee of Sutter Bypass
144	W. Levee of Feather River from North Boundary of LD 1 to North Boundary of RD 823
145	E. Levee of Feather River, S. Levee of Yuba River, Both Levees of WPRR Intercepting Channel, W. Levee of South Dry Creek & N. Levee of Bear River
146	N. Levee of Bear River & S. Levee of South Dry Creek RD 817 & Vicinity of Wheatland
147	Levee Around the City of Marysville & N. Levee of Yuba River to a Point 1.8 Mi. Upstream from Marysville

148	W. Levee of Feather River from North Boundary of RD 777 to North Boundary of LD 1
149	S. Levee of Yuba River Maintenance Area No. 8
151	E. Levee Feather River from Honcut Creek to Marysville & S. Levee of Honcut Creek & E. Levee of RD 10
152	W. Levee of Feather River from N. Boundary of RD 777 to Western Canal Intake (Levee of Drainage District No. 1)
153	Lower Butte Creek Channel Improvement, Colusa, Glenn & Butte Counties
154	Moulton Weir & Training Levee Sacramento River
155	Colusa Weir & Training Levee Sacramento River
156	Tisdale Weir & Bypass
157	Fremont Weir, Sacramento River
158	Sacramento Weir, Sacramento River
159	Pumping Plants No. 1, 2 & 3, Sutter Bypass
160	Sutter Butte Canal Headgate
161	Butte Slough Outfall Gates
162	Knights Landing Outfall Gates, Sacramento River

Standard O&M Manual San Joaquin River

Unit No.	Project Name
1	Right Bank Levee of the San Joaquin River & French Camp Slough within RD 404
2	Right Bank Levee of the San Joaquin River & French Camp Slough within RD 17
3	North Levee of Stanislaus River & East Levee of the San Joaquin River within RD 2064, 2075, 2094 and 2096
4	East Levee of San Joaquin River within RD 2031
5	East Levee of the San Joaquin River Within RD No. 2092
6	East Levee of the San Joaquin River in RD Nos. 2063 & 2091
7	West Levee of San Joaquin River & North Levee of Old River RD Nos. 524 & 544
8	Right Banks of Old River & Salmon Slough Within RD No. 1 & RD No. 2089
9	Levees Around RD No. 2062 & San Joaquin County Flood Control District Area No.2
10	West Levee of Paradise Cut RD No. 2058 & SJ County Flood Control District, Area No.2
11	West Levee of San Joaquin River from Durham Bridge to Paradise Dam Within RD No. 2085 & 2095
12	West Levee of San Joaquin River From Opposite Mouth of Tuolumne River Downstream to Stanislaus County Line Within RD Nos. 2099, 2100, 2101, & 2102
13	West Levee of the San Joaquin River in RD No. 1602

C
O
P
Y

SPKKA 824.3(Sac.Riv.F.C.P.)

C
O
P
Y

8 December 1951

The Reclamation Board
State of California
1100 O Street
Sacramento 14, California

Gentlemen:

Reference is made to your letter of 22 June 1951 acknowledging that certain reaches of the levees of the Sacramento River Flood Control Project and the waterway bank contiguous to said levee reaches meet the requirements of the project as authorized prior to the Flood Control Act of 1944.

The levee reaches in question are located as follows:

- a. _____
- t. That portion of the back or westerly levee of Hastings Tract which runs east and west along the County Road for distance of approximately one mile.
- u. _____
- v. _____

The records of this office show that your Board has accepted the levees and/or works covered by Items b.(1), b.(2), b.(3), c.(2), c.(4), c.(8), c.(11), c.(12), c.(14), d.(1), d.(3), d.(4), f.(3), f.(5), g., h., i., l., m., n.(1), n.(2), n.(3), n.(6), n.(7), n.(8), c., p., q., r. and c.(1) above, as complete. Accordingly the waterway bank contiguous to said Items is hereby transferred to the State of California for maintenance and operation.

The levee covered by Items a., b.(4), c.(1), c.(3), c.(5), c.(6), c.(7), c.(9), c.(10), c.(13), c.(15), d.(2), e., f.(1), f.(2), f.(4), f.(6), j., k., n.(4), n.(5), s.(2), s.(3), t., u. and v., above, although complete has not been formally transferred as contemplated by the Project documents. Accordingly the levee covered by said Items, together with the waterway bank contiguous thereto, is hereby transferred to the State of California for maintenance and operation.

C
O
P
Y

C
O
P
Y

SPKKA 824.3(Sac.Riv.F.C.P.)
The Reclamation Board

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with existing Flood Control Regulations 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. As provided under paragraph 209.10(10) of these regulations, a maintenance manual covering these works is in process of preparation and will be furnished your Board upon completion.

A copy of this letter is being transmitted to the State Engineer.

NOTE: Only portion pertaining to Unit No. 107 contained in this copy.

EXHIBIT F
Sheet 2 of 7

C
O
P
Y

C
O
P
Y

SPKKO-P 824.3(Sac.Riv.F.C.P.)

12 July 1955

The Reclamation Board
State of California
1100 O Street
Sacramento, California

Gentlemen:

Reference is made to inclosed Drawing No. 50-5-3033, showing the location of levee construction on Lower Hastings Tract which was completed on 12 July 1955. Reference is also made to the joint inspection of this work made on 22 November 1954 for the purpose of transferring said work, when completed, to the jurisdiction of the State of California for operation and maintenance.

The work referred to above was performed under Contract No. DA-04-167-eng-1224, Specification 1332, Drawing No. 50-5-3033. It forms an integral part of the Sacramento River Flood Control Project and meets the requirements of the project. It is further described as follows:

LEEVE SECTION NO.	DESCRIPTION
441	Left bank of Lindsey Slough, on Lower Hastings Tract, from Station 0+00 "A" at lower end of Wright Cut, near the ferry landing, to Station 268+00 "A", at the southerly end of Hastings Cut.
442	Right bank of Cache Slough, on Lower Hastings Tract, from Station 36+65 "B", at the upper end of Wright Cut, to Station 237+96 "B", at the northerly end of Hastings Cut.

In addition to the above, recent surveys indicate that the two fills across Hastings Cut and connecting levee sections listed below, also meet the requirements of the Sacramento River Flood Control Project:

EXHIBIT F
Sheet 3 of 7

C
O
P
Y

C
O
P
Y

SPKKO-P 824.3(Sac.Riv.F.C.P.)
The Reclamation Board

LEEVE SECTION NO.	DESCRIPTION
443	Fill across the southerly end of Hastings Cut and levee connecting to Levee Section No. 441 on the left bank of Lindsey Slough.
444	Fill across the northerly end of Hastings Cut and levee connecting to Levee Section No. 442 on the right bank of Cache Slough.

Therefore, in accordance with above, said Levee Sections Nos. 441 to 444 inclusive, together with the waterway banks contiguous to Sections No. 441 and 442 are hereby transferred to the jurisdiction of the State of California for operation and maintenance.

The maintenance work required under the provisions of the Sacramento River Flood Control 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 1956, as amended and supplemented by the current issue of the Standard Operation and Maintenance Manual for the Sacramento River Flood Control 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 is in process of preparation and will be furnished to you upon completion.

A copy of this letter is being transmitted to the State Engineer.

EXHIBIT F
Sheet 4 of 7

C
O
P
Y

C
O
P
Y

SPKKO-P 824.3(Sac.Riv.F.C.P.)

5 December 1956

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

Gentlemen:

Reference is made to the District Engineer's letter dated 5 October 1956 suggesting a joint inspection of certain levee sections pertaining to the Sacramento River Flood Control Project for the purpose of transferring them to the jurisdiction of the State of California for operation and maintenance. Reference is also made to the joint inspection of these levee sections made on 15 October 1956.

The required work consisting of levee enlargement on the levee sections referred to above was completed on 31 October 1956 in accordance with Specification No. 2013, Contract No. DA-04-167-CIVENG-56-164 and Drawing No. 50-4-3068. These levee sections are on Hastings Tract upstream from Hastings Cut and are listed as follows:

<u>Levee</u>	<u>Station</u>	
<u>Section No.</u>	<u>From</u>	<u>To</u>
554	-2+00	140+50
555	190+60	325+31

The levee sections, Nos. 554 and 555 described above, now meet the requirements of the Sacramento River Flood Control Project; therefore said levee sections, together with the waterway banks contiguous thereto are hereby transferred to the State of California for operation and maintenance.

It is to be noted that the levee sections described above combined with other sections previously transferred to your jurisdiction now form a continuous completed levee around Hastings Tract from Wright Cut at Lindsey Slough to Wright Cut at Cache Slough.

EXHIBIT F
Sheet 5 of 7

C
O
P
Y

C
O
P
Y

SPKKO-P 824.3(Sac.Riv.F.C.P.)
The Reclamation Board

The maintenance work required under the provisions of the Sacramento River Flood Control 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 the current issue of the Standard Operation and Maintenance Manual for the Sacramento River Flood Control 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 is in process of preparation and will be furnished to you upon completion.

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

EXHIBIT F
Sheet 6 of 7

C
O
P
Y

C
O
P
Y

SPKKO-P 824.3(Sac.Riv.F.C.P.)

26 November 1958

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

Gentlemen:

The following work consisting of the construction of a patrol road from Station 404+41 to Station 442+00 on the right bank of the Yolo Bypass on Hastings Tract, was completed 10 November 1958 in accordance with Specification No. 2535, Contract No. DA-04-167-CIVENG-59-71 and Drawing No. 50-5-3569.

This completes a levee unit designated as No. 628, pertaining to the Sacramento River Flood Control Project, that now meets the requirements of the Project; therefore said levee unit, together with the waterway bank contiguous thereto, is hereby transferred to the State of California for operation and maintenance.

The maintenance work required under the provisions of the Sacramento River Flood Control 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 the current issue of the Standard Operation and Maintenance Manual for the Sacramento River Flood Control 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 is in process of preparation and will be furnished to you upon completion.

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

EXHIBIT F
Sheet 7 of 7

REGISTERED MAIL
Return Receipt
Requested

Letter No. 3

3

C. de. ARRIETA

SPKKA 824.3(Sac.Riv. F.C.P.)

4 DEC 1951

Refer. Recl. Board letter dated 2 April 1952.

The Board accepted Item No. 9 on 18 Dec. 1951 with the condition that the Federal Gov. complete the enlargement of the levee with no obligation for the state to maintain the banks along the Sacramento Deep Water Channel.

The Board also accepted Items No. 10 and 11 on 18 Dec. 1951, without reservations other than an statement indicating that flatter slopes on this levees are not required.

The Reclamation Board
State of California
1100 "O" Street
Sacramento 14, California

Item No. 9 was previously accepted on 6 June 1951,

Gentlemen:

Reference is made to your letter of 18 May 1951 acknowledging that certain reaches of the levees of the Sacramento River Flood Control Project and the waterway bank contiguous to said levee reaches meet the requirements of the project as authorized prior to the Flood Control Act of 1944.

The levee reaches in question are located as follows:

- Reach No. 32 **9** a. Westerly levee of the Yolo Bypass from Fremont Weir to Miner Slough. 127, 126, 121, 120, 119, 109, 107, 105 accepted 6-6-51
- Reach No. 32 **10** b. Northerly levee of Sacramento Bypass. 122
- Reach No. 33 **11** c. Southerly levee of Sacramento Bypass. 116

The records of this office show that on 6 June 1951 your Board accepted the levee covered by Item a, above as complete. Accordingly, the waterway bank contiguous to said Item a, is hereby transferred to the State of California for maintenance and operation.

The levee covered by Items b, and c, above although complete has not been formally transferred as contemplated by the Project documents. Accordingly, the levee covered by said Items b, and c., together with the waterway bank contiguous thereto, is hereby transferred to the State of California for maintenance and operation.

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with existing

Reaches 32 and 33
Items 9 to 11

3

Mile 0 to 50
" 50 to 106

SPEKA 824.3(Sac.Riv.F.C.P.)
The Reclamation Board

Letter No. 3

3

Flood Control Regulations 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. As provided under paragraph 206.10(10) of these regulations, a maintenance manual covering these works is in process of preparation and will be furnished your Board upon completion.

A copy of this letter is being transmitted to the State Engineer.

Sincerely yours,

Copy Furnished:
Office, Chief of Engrs.
So. Pac. Div. Engr.
State Engineer
Engr. Div. (2)
D. de Arrieta

C. C. Haug
Colonel, Corps of Engineers
District Engineer

This copy was furnished on 24 Feb. 1953 B. de A.

Accepted items

December 18, 1951

The Board accepted the transfer from the Corps of Engineers, in letters of dates listed below, the following reaches of levees and their contiguous waterway banks where applicable for flood control operation and maintenance, as complete and meeting the requirements of the Sacramento River Flood Control Project.

No.	Date of Letter	Levee Location	Remarks
1-2	1 Dec. 1951	N. and S. Training* Levees Moulton Weir*	Maintained by State
3-4	Do	N. and S. Training* Levees Colusa Weir*	Maintained by State
6	3 Dec. 1951	W. Levee Sacramento River, Mile 177.5 Mile 174.1	Maintained as Maintenance Area No. 2
9	4 Dec. 1951	E. Levee Yolo By-pass Fremont* Weir to Miner Slough*	N. 2 mi. maintained by State. Remainder by local districts. Conditioned upon completion of levee section and no acceptance of banks of Sacramento Deep Water Channel.
10 11	Do	N.&S. Levees Sacra- mento By-pass*	Maintained by State. Waterward slopes on 4 to 1 not required.
21a	6 Dec. 1951	Back levee Egbert District*	Maintained by R. D. No. 536
22	6 Dec. 1951	W. Levee Yolo By-pass Lindsey* Slough to Watson Hollow Drain*	Maintained by R. D. No. 536
24	Do	N. Levee Watson Hollow Drain*	Do
16	6 Dec. 1951	W. Levee Sacramento River Mile 59.0 to Lake Wash- ington Barge Canal	Maintained by R. D. No. 900
18	Do	W. Levee Sacramento Riv. Mile 50.8 to 50.5	Bank protection contract. Maintained by R. D. No. 765

Copy to USED.

1 2

Accepted
Items

No. Date of Letter Levee Location Remarks

6 6 Dec.1951 Levees of Wadsworth Canal* South levees of E. and W. Intercepting Canals. Maintained by State. Waterward slopes on 4 to 1 not required.
(12) (13) (14) (15)

7 7 Dec.1951 Site 2 Part A. W. Levee Sacramento River-Mile 28.5 -Grand Island. Maintained by R.D. No. 3. Completed contract.
= 329 (87-A)

Site 1, Part B. E. levee Sacramento River-Mile 15.0 Brannan Island. Maintained by R.D.No. 2067 Completed contract.
= 331 (89-A)

8 8 Dec.1951 W. levee Sacramento River Mile 163.8 to Mile 143.5 except 320 ft. at Colusa Warehouse & Mile 146.1 to Mile 146.4. Maintained as Maintenance Area No. 1.
(51) (52) (53) (54) (55) (56) (57)

8 Do E. levee Sacramento River, Mile 153.3 to Mile 152.7; Mile 149.9 to Mile 149.7; Mile 149.4 to Mile 149.0; at Colusa Weir; Mile 143.3 to Mile 140.2; Mile 139.3 to Mile 138.2. Maintained by State Separate completed contracts.
(58) (59) (60) (61) (62) (63)

8 Do E. levee Sacramento River Mile 138.2 to Mile 137.9; Mile 136.9 to Mile 133.8; Mile 133.2 to Mile 132.3; Mile 131.8 to Mile 125.9; Mile 125.8 to Mile 123.1; Mile 122.6 to Mile 122.0. Maintained by R.D.No. 70, Completed contracts.
(64) (65) (66) (67) (68) (69) (70)

(71) (72) (73) 8 Do West levee, Sutter By-pass* Maintained by R.D.Nos. 70, 1660, 1500. Condition upon completion of remaining part to standard section.

(74) 8 Do North levee Tisdale By-pass* Maintained by R.D.No. 1660. Waterward slope of 4 to 1 not required.

(75) 8 Do South levee Tisdale By-pass* Maintained by R.D.No.1500. Waterward slope of 4 to 1 not required.

(76) 8 Do East levee Sutter By-pass*. Maintained by State.

(81) 9 Do W. levee Sacramento River Mile 35.15 to 35.86. Maintained by R.D.No. 150 (Merritt Island). Completed contract bank protection.

Accepted
Items

4

No.	Date of Letter	Levee Location	Remarks
(91) 10	8 Dec. 1951	Cross levee Steamboat Slough to Sacramento River.*	Maintained by R.D. No. 3 (along U.S.spoil bank).
(140) 11	Do	N. levee American River from Jibboom St. Bridge to Sacramento River.	Maintained by R.D. No. 1000.
(141) 11	Do	E. levee Sacramento River American River to Natomas Cut.	Maintained by R.D.No. 1000.
(142) 11	Do	E. bank Sacramento River At Moulton Weir.	Maintained by State.
(143) 11	Do	E. Levee Sacramento River Mile 158.5 to Mile 164.4.	Maintained partly by State; remainder by Levee District.No. 3, Glenn County, Completed Contract.
(146) 11	Do	W. levee Sacramento River Mile 61.8 to Mile 62.65.	Maintained by Maintenance Area No. 4. Completed contract.
(147) 11	Do	W. Levee Sacramento River Mile 62.65 to Mile 63.1.	Maintained by R.D. No. 537 Completed contract.
(148) 11	Do	Sacramento Weir.	Maintained by State.
(152) 11	Do	Fremont Weir.	Maintained by State.
(153) (156) (157) 11	Do	W. Levee Sacramento River Mile 87.6 to Mile 88.4; Mile 89.2 to Sycamore Slough	Maintained by R.D. No. 730 Completed contracts.
(158) 11	Do	W. Levee Sacramento River Mile 100.6 to Mile 101.4	Maintained by Sacramento River West Side Levee District. Completed contract.
(160) (161) (162) (163) 11	Do	W. Levee Feather River except: 3.31 Mi. North from Nicolaus Bridge; 1400 ft. in Yuba City; from Sta.774+80 to Sta. 1188+00 of "Y.C.H.B" Traverse.	Maintained by Maintenance Area No. 3, Levee Dist. Nos. 1 & 9 of Sutter Co. Recl. Dist.No. 777 and State.
(164) 11	Do	E. Levee Sacramento River, Natomas Cut to Feather River	Maintained by Recl.Dist.No.1001.
(165) (166) (167) (168) (169) (170) 11	Do	E. Levee Feather River from mouth to Mile 26.5, except from 2.37 miles of Nicolaus Bridge to Bear River	Maintained by R.D. Nos. 1001 and 784.

21
3

Accepted
Items

5

<u>No.</u>	<u>Date of Letter</u>	<u>Levee Location</u>	<u>Remarks</u>
(171) (172) 11	8 Dec.1951	Marysville levees from W.P.R.R. at Simmerly Slough E. to Yuba River and from D St. Bridge on Yuba River upstream to Valley Meat Co.	Maintained by Marysville Levee Commission.
(173) (174) 11	Do	N. Levee Simmerly Slough from W.P.R.R. to S.P.R.R. and E. Levee Feather River from Simmerly Slough upstream 4.8 miles	Maintained by R.D. No. 10 Completed contract.
(175) 11	Do	N. Levee Yuba River from back levee of Marysville upstream 1.8 miles	Maintained by Marysville Levee Commission.
(176) 11	Do	S. Levee Yuba River from S.N.R.R. to S.P.R.R.	Maintained by R.D. No. 784.
(177) 11	Do	N. Levee Bear River from Feather River to W.P.R.R. Interceptor	Maintained by R.D. No. 784.
(178) 11	Do	E. Levee R.D. 784 (W. Levee W.P.R.R. Interceptor) Bear River to intersection with W.P.R.R. in S $\frac{1}{2}$ Sec. 17, T. 14 N., R. 4 E.	Maintained by R.D. No. 784.
(179) (180) 11	Do	S. Levee American River from 16th St. Bridge to Mayhew except from S.N.R.R. to a point 800 ft. E. of W.P.R.R.	Maintained by American River Flood Control District.
(181) (182) (183) (184) (185) (186) (187) (188) 11	Do	W. Levee Yolo By-pass from Sacramento River to Putah Creek except from N. line Cache Cr. Settling Basin to S.N.R.R. & from old Willow Slough pipes south 1.48 mi.*	Maintained by State and R. D. #2035.
(190) 11	Do	N.&S. levees Willow Slough Interceptor*	Maintained by State and R. D. No. 2035.
(191) (192) 11	Do	N.&S. levees of Putah Creek	Maintained by State.
(197) (198) 11	Do	N.&S. levees Sycamore Slough from Sacramento River to Knights Landing Outfall Gates	Maintained by R.D. 730 and Sacramento River West Side Levee District.

21

4

Accepted
Items

No.	Date of Letter	Levee Location	Remarks
-----	----------------	----------------	---------

12 8 Dec. 1951

Five reaches of Ryer Island levee along Miner Slough as follows:

- a. Junction Miner and Sutter Sloughs westerly 5000 feet.
- b. From State Highway Bridge West. 3035 ft.
- c. Spec. 1473, Sta. 53+00 to 64+00 about one mi. No. of Ryde Road. *Mile 29.4 to 29.6*
- d. Spec. 1473, Sta. 0+00 to 12+00 being 600 ft. each side of Ryde Road. *Mile 30.4 to 30.6*
- e. Ryer Island cut-off levee beginning at east bank of Cache Slough and extending upstream 3,300 feet at junction of Cache and Miner Sloughs.

Maintained by R.D. No. 501. All are completed separate contracts.

Covered by letter dated 16 Nov. 1951

321 → (38) (79A)

303 Covered by letter dated 17 Nov. 1951

(53A) (54A)

(28) (50)

*No waterway banks contiguous to these levees.

EARL WARREN
GOVERNOR

A. R. GALLAWAY, JR., SACRAMENTO
PRESIDENT

GROVER SHANNON, YUBA CITY
VICE PRESIDENT

GEO. H. HOLMES, CLARKSBURG
SECRETARY

W. P. HARKEY, GRIDLEY
GEO. R. WILSON, WALNUT GROVE
GEO. E. LODI, ARBUCKLE
DOUGLAS B. COHEN, BANTA

A. M. BARTON
CHIEF ENGINEER AND GENERAL MANAGER

EDMUND G. BROWN, ATTORNEY GENERAL
LEGAL ADVISER

G. F. MELLIN
ASSISTANT ENGINEER AND APPRAISER

S. A. HONAKER
ASSISTANT SECRETARY

THE RECLAMATION BOARD

OF THE
STATE OF CALIFORNIA
1100 O STREET
SACRAMENTO 14, CALIFORNIA

April 2, 1952

District Engineer
Sacramento District
Corps of Engineers, U. S. Army
P.O. Box 1739
Sacramento 8, California

Dear Sir:

1. Reference is made to your letter of 4 December 1951, File SPKKA 824.3 (Sac. Riv. F.C.P.) transferring levee reaches and waterway banks contiguous thereto, to The Reclamation Board, located as follows:

- Item 9 a. Easterly levee of the Yolo By-pass from Fremont Weir to Miner Slough.
- Item 10 b. Northerly levee of Sacramento By-pass.
- Item 11 c. Southerly levee of Sacramento By-pass.

2. There are no contiguous waterway banks to the above reaches of levee other than the levees themselves and the adjoining by-pass areas. Since enactment of Chapter 774, California Statutes of 1927, maintenance of the by-pass areas has been an obligation of the State of California.

3. The easterly levee of the Yolo By-pass was principally constructed by local interest funds. The Federal work on this levee has been shaping of the same and providing uniform slopes, mainly three horizontal to one vertical on the waterward side. A short section of levee from Fremont Weir southerly, has been constructed to four to one waterward slopes. The remainder of the levee does not have this standard section. A considerable length of this levee will be the waterward bank of the Sacramento Deep Water Channel. The Reclamation Board can not assume any obligation as to that portion of the waterward bank of the Yolo By-pass east levee, which is also the waterward bank of the ship channel project. Maintenance of this levee has continuously since its construction been an obligation of local interests. The State of California under Section 8361 of the Water Code of California now maintains the northerly two miles of this levee. The remainder is maintained by the following local Reclamation Districts: 1600, 827, 785, 537, 900, 765, and 999. Formal acceptance of the levee by The Reclamation Board on December 18, 1951, is conditioned on the Federal obligation

Reaches 32 and 33
Items 9 to 11

-2-

District Engineer
April 2, 1952

to complete the levee to the authorized cross section and no State obligation to maintain any of the banks of the Sacramento Deep Water Channel.

4. The north and south levees of the Sacramento By-pass and the by-pass itself were entirely constructed by local interest monies. Maintenance and operation thereof is an obligation of the State under Section 8361 of the Water Code. No Federal funds have ever been spent upon this portion of the project. The Flood Control Act of 22 December 1944 calls for flattening of the slopes of these levees to the four to one and three to one authorized section. This work is not required. The Reclamation Board on December 18, 1951, formally accepted these levees and this by-pass as complete.

Yours very truly,

THE RECLAMATION BOARD

By 

A. M. BARTON

Chief Engineer and General Manager

AMB:FK

cc: Chief of Engineers
Washington, D. C.
Division Engineer
South Pacific Division
Corps of Engineers, U. S. Army
P. O. Box 3339, Rincon Annex
San Francisco 19, California

State Engineer
Sacramento, California

Items 9 to 11

6

5

EDMUND G. BROWN
GOVERNOR

A. R. GALLAWAY, JR., SACRAMENTO
PRESIDENT

GROVER SHANNON, YUBA CITY
VICE PRESIDENT

GEO. H. HOLMES, CLARKSBURN
SECRETARY

W. P. HARREY, GRIDLEY
GEO. R. WILSON, WALNUT GROVE
GEO. E. LOEH, ANPUELS
DOUGLAS B. COHEN, SANTA

THE RECLAMATION BOARD
OF THE
STATE OF CALIFORNIA

1215 O STREET
SACRAMENTO 14, CALIFORNIA
TELEPHONE: HI 9-4711

A. M. BARTON
CHIEF ENGINEER AND GENERAL MANAGER
STANLEY MOSE, ATTORNEY GENERAL
LEGAL COUNSEL
HOWARD B. MITCHELL
ASSISTANT CHIEF ENGINEER
WILLIAM A. CARVER
ASSISTANT SECRETARY
ROBERT W. JAMES
ASSISTANT COUNSEL

March 11, 1959

District Engineer
Sacramento District
U. S. Corps of Engineers
P. O. Box 1739
Sacramento 8, California

Dear Sir:

Reference is made to your letter of February 28, 1959 regarding the responsibility of operation and maintenance of Unit No. 628, located on the right bank of Yolo By-pass on Hastings Tract.

The Reclamation Board, at its meeting of March 4, 1959, formally accepted the maintenance responsibility of Unit No. 628 and patrol road in the area described in the first paragraph of your letter under the conditions outlined in your letter.

Yours very truly,

THE RECLAMATION BOARD
A. M. BARTON
Chief Engineer and General Manager

By WILLIAM A. CARVER
Assistant Secretary

WAC:lb

Unit 107

(For Filing
3-19-59)

9 NOV 1960

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

Supplement #2

Gentlemen:

Reference is made to the second supplement dated 5 June 1958, to Memorandum of Understanding entered into with the State of California under the dated of 30 November 1953, covering added items of work at critical locations required to complete the Sacramento River Flood Control Project.

The flood control work consisting of levee construction and bank revetment at four locations listed below was completed on 11 October 1960 in accordance with Specification No. 2645, Contract No. DA-04-167-CIVENG-60-94 and Drawing No. 50-4-3626.

<u>SITE</u>	<u>LOCATION</u>	<u>MILE POINTS</u>
M	Right Bank, Three Mile Slough (Sherman Island Side)	1.44 to 1.87, and 2.01 to 2.59 <i>101.01</i>
H	Left Bank, Lindsey Slough	2.48 to 2.67 <i>107 .19</i>
J	Left Bank, Lindsey Slough	3.22 to 3.55 <i>.33</i>
P	Left Bank, Sacramento River	88.28 to 88.51 <i>2 Orig Sac Riv Proj 128</i>

The foregoing supplemental work having been completed to current standards for the Sacramento River Flood Control Project is hereby transferred to the State of California for operation and maintenance. A maintenance manual for these sections of project levees has already been furnished which adequately covers operation and maintenance requirement for above items.

*1.01
 .19
 .33
 1.53*

REGISTERED
 RETURN RECEIPT REQUESTED

LHK/ecg

SPKCO-C
The Reclamation Board

9 NOV 1960

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

Sincerely yours,

H.N. TURNER
Colonel, CE
District Engineer

M. R. BITTKOFER
Lt. Col, CE
Deputy District Engineer

Copy furnished:
Dept. Water Res.
23rd and N Sts.,
Sacramento, Calif.

O.C.E.
SPD

cc: Engr. Div - Levees & Channels
Engr Div - Program Develop. Br.
Northern Area Office

OPERATIONS BRANCH
CHANNELS & LEVEES SECTION

Concurrences	
Originator:	LHK
Date:	11/8/60
Dist. Engr.	2
Asst. D.E. (A)	
Asst. D.E. (O)	MS
Exec. Asst.	
Compt.	
Budget	
Fin. & Accg.	
Mgmt.	
Property Office	
Service	
Const. Opns.	
Engr'g	
R. E.	
Prsnl.	
Legal	
Supply	

UNRS
10/107, 128

REGISTERED
RETURN RECEIPT REQUESTED

mk

EDMUND G. BROWN
GOVERNOR

STANLEY W. KRONICK, SACRAMENTO
PRESIDENT
GROVER SHANNON, YUBA CITY
VICE PRESIDENT
J. J. MADIGAN, CHICO
SECRETARY

MAX S. VANN, SR., WILLIAMS
WALLACE MCCORMACK, RIO VISTA
GEORGE W. NICKEL, JR., LOS BANOS
HAROLD J. O'BANION, DOS PALOS
BOARD MEMBERS
A. N. MURRAY
GENERAL MANAGER AND CHIEF ENGINEER

THE RECLAMATION BOARD

OF THE
STATE OF CALIFORNIA

1215 O STREET
SACRAMENTO 14, CALIFORNIA
TELEPHONE: HI 5-4711

December 23, 1960

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

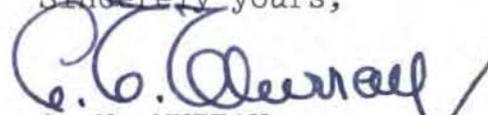
Dear Sir:

Reference is made to your letter of November 9, 1960, File SPKKO-C regarding transfer to the State of levee sections on the Sacramento River Flood Control Project at the locations listed below:

<u>SITE</u>	<u>LOCATION</u>	<u>MILE POINT</u>
M	Right Bank, Three Mile Slough (Sherman Island Side)	1.44 to 1.87, and 2.01 to 2.59 ¹⁰¹
H	Left Bank, Lindsey Slough	2.48 to 2.67 ¹⁰⁷
J	Left Bank, Lindsey Slough	3.22 to 3.55
P	Left Bank, Sacramento River	88.28 to 88.51 ¹²⁸

The Reclamation Board at its meeting of December 1, 1960, formally accepted these levee sections for operation and maintenance.

Sincerely yours,



A. N. MURRAY
General Manager and Chief Engineer

HSH:ED

*Jody sent to
Ed Jensen, Engin
Northern Area of
1/3/61
LHK*

5 October 1962

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

Gentlemen:

Reference is made to Supplement dated 29 November 1957 to the Memorandum of Understanding entered into with the State of California under date of 30 November 1953, covering added items of work required to complete the Sacramento River Flood Control Project.

A portion of the required flood control work referred to above, designated as Item 53a, correcting seepage endangering left levee Lindsay Slough, was completed on 11 September 1962 and is described as follows:

Construction of a relief well on the left levee of Lindsay Slough located approximately 2400 feet upstream from the Hastings Ferry, the elements of which are as follows:

Well hole, diameter	24 inches
Well hole, depth	34 feet
Well casing, length (overall tee and riser pipe)	31 feet
Length, blank section	6 feet
length, perforated section	25 feet
type, corrugated metal, #14 gage, capped top and bottom, asphalt dipped, diameter 8 inches	
Discharge Pipe, length (overall, blank tee and pipe)	26 feet
tee set 12" c to c from top of riser pipe	
invert at grade, L.S. toe road embankment	
Type, corrugated metal, #14 gage, asphalt dipped, diameter	8 inches
Well pack, overall length	27 $\frac{1}{2}$ feet
under bottom plate	12 inches
gravel encasement, length	26 $\frac{1}{2}$ feet
thickness pack	8 inches
gravel gradation #2" max.	specified
Sand filter, between gravel pack and concrete, length	12 inches

REGISTERED

RETURN RECEIPT REQUESTED

UNIT 107

ITEM 53a

Supplement #1



SFKKO-C
The Reclamation Board

Well riser concrete encased, thickness	8 inches
length	24 inches
Discharge pipe concrete encased, thickness	4 inches
length	26 feet
Discharge apron, length	44 inches

The foregoing supplemental work having been completed to current standards of the Sacramento River Flood Control Project is hereby transferred to the State of California for operation and maintenance. A maintenance manual for the above section of project levees has already been furnished which adequately covers operation and maintenance requirements for the above item.

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

Sincerely yours,

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

H. N. FUGHER
Colonel, CE
District Engineer

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

cc: Engr Div-Levees & Channels
Engr Div - Prog Devel Br.
F & A Br.
Northern Area Ofc.

LHK
KRISTOF/pnp

[Signature]
HENSON

[Signature]
JOHNSON

[Signature]
TURNER

Unit 107

[Handwritten mark]

OPERATIONS BRANCH
NAVIGATION & PERMITS SEC

EDMUND G. BROWN
GOVERNOR

STANLEY W. KRONICK, SACRAMENTO
PRESIDENT

J. J. MADIGAN, CHICO
VICE PRESIDENT

WALLACE MCCORMACK, RIO VISTA
SECRETARY

THE RECLAMATION BOARD

OF THE
STATE OF CALIFORNIA

1215 O STREET
SACRAMENTO 14, CALIFORNIA
TELEPHONE: HI 5-4711

November 13, 1962

MAX S. VANN, SR., WILLIAMS
CHARLES J. MATHEWS, MARYSVILLE
GEORGE W. NICKEL, JR., SAN FRANCISCO
HAROLD J. O'BANION, DOS PALOS
BOARD MEMBERS

A. N. MURRAY
GENERAL MANAGER AND CHIEF ENGINEER

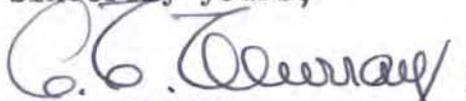
District Engineer
Corps of Engineers
U. S. Army
P. O. Box 1739
Sacramento, California

Dear Sir:

Reference is made to your letter of October 5, 1962 concerning transfer to the State of California of a relief well along the left levee of Lindsey Slough, approximately 2400 feet upstream from Hastings Ferry. This work is designated as Item 53a of the Supplement to the Memorandum of Understanding and is located within Reclamation District 2060.

The Reclamation Board at its meeting of November 1, 1962 formally accepted the above-referred-to flood control work for operation and maintenance.

Sincerely yours,



A. N. MURRAY
General Manager and Chief Engineer

HSH: jc

*Copy sent to -
Bardsdale
Northern Area O&E.
Unit 7107*

EXHIBIT G

SUGGESTED SEMI-ANNUAL REPORT FORM

EXHIBIT G

TO: The District Engineer
Sacramento District
Corps of Engineers
1209 - 8th Street
Sacramento, California

(1 May 19__)
(1 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. 107 of the Sacramento River Flood Control Project (Levee around Hastings Tract) 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, major high water periods (water level at 12.0 on the State Department of Water Resources gage located on the right bank of Lindsey Slough 1.1 miles upstream from Yolo Bypass) occurred on the following dates:

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

EXHIBIT G
Sheet 1 of 2

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 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