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UNIT NO. 11 OF THE SACRAMENTO RIVER FLOOD CONTROL PROJECT

SUPPLEMENT TO STANDARD OPERATION AND MAINTENANCE MANUAL

EAST LEVEE SACRAMENTO RIVER ISLETON BRIDGE TO WALNUT GROVE

SACRAMENTO DISTRICT

CORPS OF ENGINEERS

U. S. ARMY

SACRAMENTO, CALIFORNIA

FILE COPY

Unit No. 11 of the

Sacramento River Flood Control Project

East Levee of the Sacramento River, Isleton Bridge to Walnut Grove, California

Supplement to Standard Operation and Maintenance Manual

Sacramento District
Corps of Engineers
U. S. Army
Sacramento, California

Unit No. 11 of the

Sacramento River Flood Control Project

East Levee of the Sacramento River, Isleton Bridge to Walnut Grove, California

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Exhibits

"B"	As constructed Drawings No. 50-4-2277, in 5 sheets, dated March 1946
"E"	Check List No. 2, in 1 sheet
"F"	Resolution adopted by The Reclamation Board 2 July 1947

UNIT NO. 11 OF THE
SACRAMENTO RIVER FLOOD CONTROL PROJECT
SUBJECT TO FLOOD CONTROL REGULATIONS

1. Levees

(a) Description. Unit No. 11 of the flood control works described below forms an integral part of the Sacramento River Flood Control Project. It consists of a portion of the East Levee of the Sacramento River from Isleton Bridge to Walnut Grove as shown on the attached Drawings 50-4-2277, 5 sheets, and dated March 1946, Exhibit "B".

Under the program provided by the Sacramento River Flood Control Project a portion of this levee has been enlarged and a set back portion has been constructed. A gravel road surface was applied to realigned road and required turnouts and road approaches constructed. These items are shown in Exhibit "B", plates 1 to 5 inclusive. Structures are listed in Exhibit "E".

(b) Location. The levee is located within the boundaries of Reclamation Districts Numbers 406 and 556 and traverses the easterly bank of the Sacramento River upstream from Isleton Bridge to Walnut Grove, California. The project is approximately 24 miles southerly of Sacramento, California. It extends from Station 210+00 "G" to Station 249+00 "J", a total distance of 42,153 feet, accomplished through several equations.

(c) Protection Afforded. The levee provides direct protection against high water of the Sacramento River and its tributaries in this area. The grade of the adopted flood profile along the main channel of the Sacramento River varies from Elevation 17.7 at the lower end to Elevation 19.1 at the upper end. (All elevations are referred to U.S.C.E. Datum.) The levee grade provides a freeboard of 5 feet above the flood profile. It is estimated that a flood flow somewhat in excess of 36,000 second feet will produce the adopted flood profile. Such a flow is not expected to occur more than once in 100 years or more.

(d) Contractor. The levee enlargement and setback described above was performed by H. Earl Parker, Contractor, under Contract No. W-04-167-eng-1162, a copy of which is on file in the U. S. Corps of Engineers' Office, Sacramento District, Sacramento, California.

(e) Beginning and Completion of Construction. Construction was started on 12 June 1946, and completed on 27 May 1947.

(f) Outstanding Construction Features. In general, all construction features are based on Standard plans and specifications, and the details are fully covered in the attached drawings listed below. (See Exhibit "B".

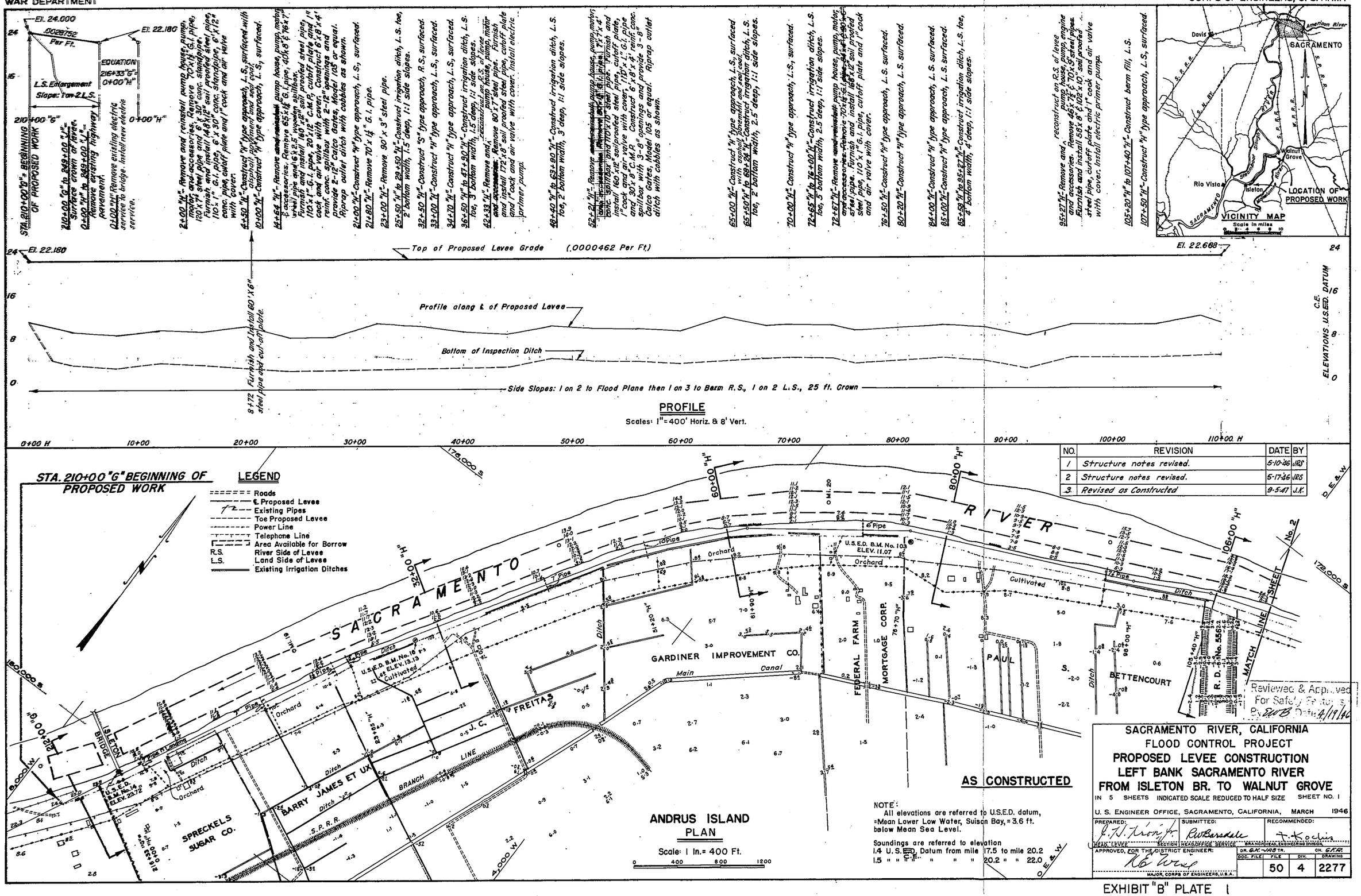
File No.	Title
50-4-2277 (in 5 sheets)	Levee construction, left bank Sacramento River from Isleton Bridge to Walnut Grove.

2. Maintenance and Operation. The levee and drainage structures referred to above should be maintained and operated in accordance with the provisions covered under the Standard Operations and Maintenance Manual for the Sacramento River Flood Control Project, copies of which may be obtained from the Office of the District Engineer, Corps of Engineers, Sacramento, California.

The responsibility for the maintenance and operation of this unit of levee was accepted by the Reclamation Board of the State of California on 2 July 1947, as shown on the attached resolution, Exhibit "F".

WAR DEPARTMENT

CORPS OF ENGINEERS, U. S. ARMY



NO.	REVISION	DATE	BY
1	Structure notes revised.	5-10-46	JRS
2	Structure notes revised.	5-17-46	JRS
3	Revised as Constructed	9-5-47	J.K.

SACRAMENTO RIVER, CALIFORNIA
FLOOD CONTROL PROJECT
PROPOSED LEVEE CONSTRUCTION
LEFT BANK SACRAMENTO RIVER
FROM ISLETON BR. TO WALNUT GROVE

IN 5 SHEETS INDICATED SCALE REDUCED TO HALF SIZE — SHEET NO. 1

U. S. ENGINEER OFFICE, SACRAMENTO, CALIFORNIA, MARCH 1946

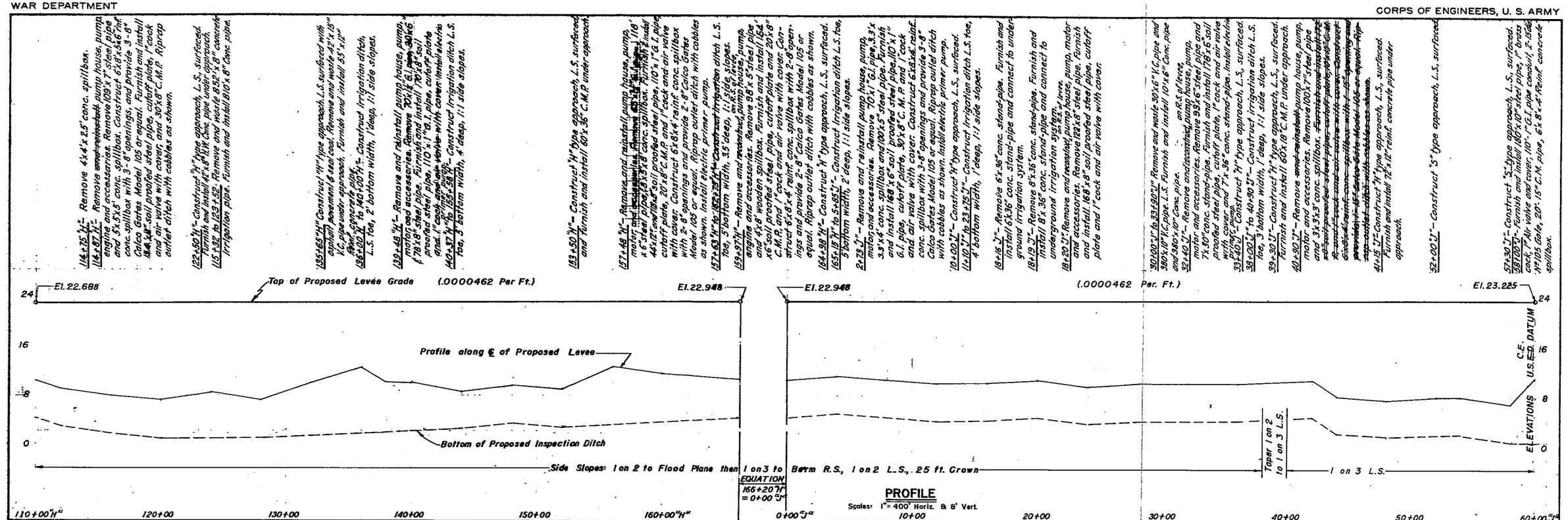
PREPARED: J. H. Troin Jr. — HEAD, LEVEE SECTION
SUBMITTED: R. W. Barsdale — HEAD, OFFICE SERVICE BRANCH
RECOMMENDED: T. Kochis — HEAD, ENGINEERING DIVISION
APPROVED, FOR THE DISTRICT ENGINEER: R. W. Wise — MAJOR, CORPS OF ENGINEERS, U.S.A.
DR. G.A.C. JRS TR. CH. G.A.C.

DOC. FILE	FILE	DIV.	DRAWING
	50	4	2277

EXHIBIT "B" PLATE 1

WAR DEPARTMENT

CORPS OF ENGINEERS, U. S. ARMY



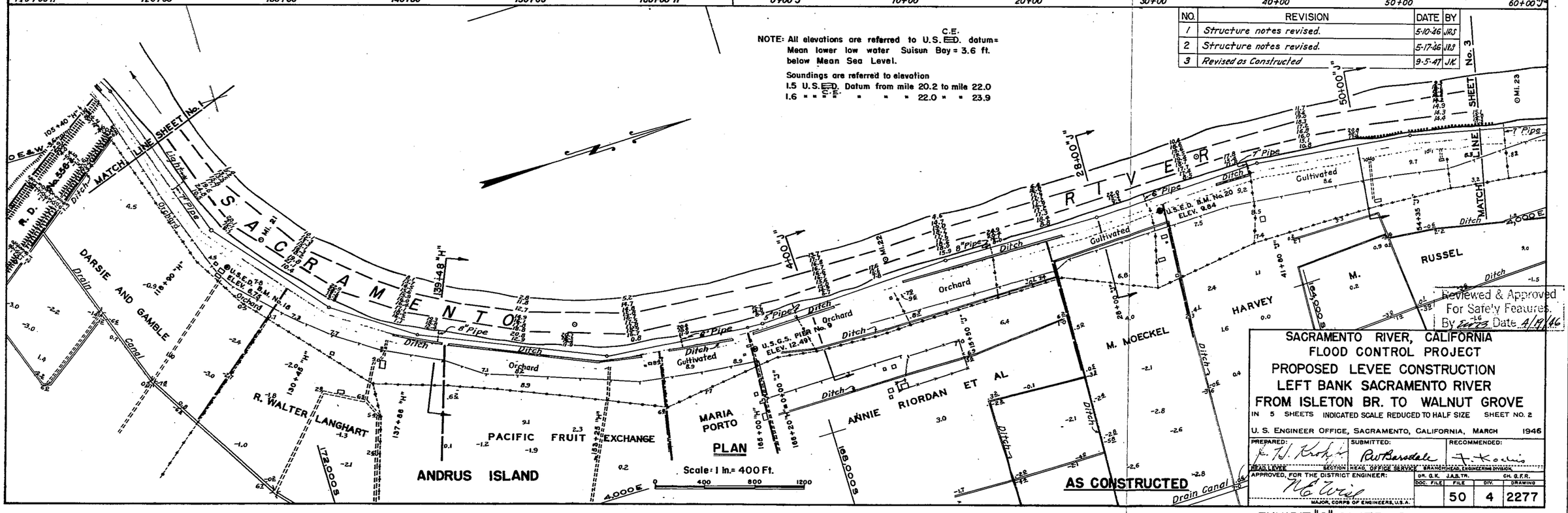
PROFILE

Scales: 1" = 400' Horiz. & 8' Vert.

NOTE: All elevations are referred to U.S. C.E. E.D. datum = Mean lower low water Suisun Bay = 3.6 ft. below Mean Sea Level.

Soundings are referred to elevation
1.5 U.S. C.E. E.D. Datum from mile 20.2 to mile 22.0
1.6 " " " " " " 22.0 " " 23.9

NO.	REVISION	DATE	BY
1	Structure notes revised.	5-10-46	JRS
2	Structure notes revised.	5-17-46	JRS
3	Revised as Constructed	9-5-47	JK



Reviewed & Approved For Safety Features. By [illegible] Date 4/9/46

SACRAMENTO RIVER, CALIFORNIA
FLOOD CONTROL PROJECT
PROPOSED LEVEE CONSTRUCTION
LEFT BANK SACRAMENTO RIVER
FROM ISLETON BR. TO WALNUT GROVE

IN 5 SHEETS INDICATED SCALE REDUCED TO HALF SIZE SHEET NO. 2

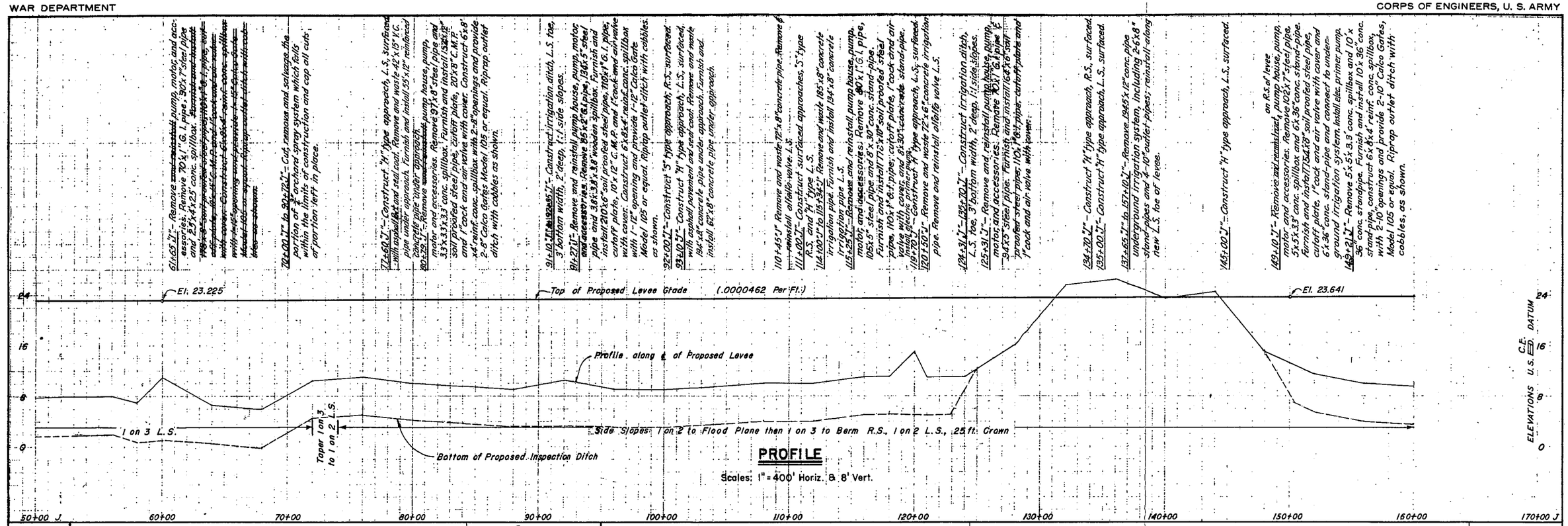
U. S. ENGINEER OFFICE, SACRAMENTO, CALIFORNIA, MARCH 1946

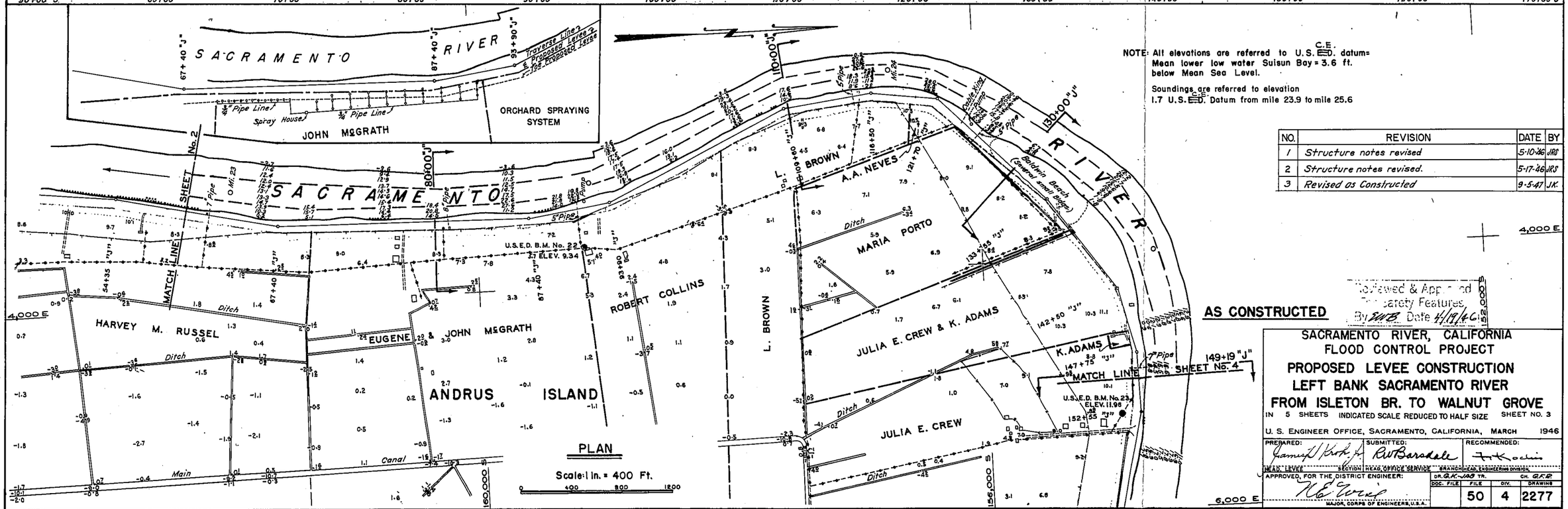
PREPARED: F. H. Krohn — HEAD, LEVEE SECTION
SUBMITTED: Rut Barsdale — HEAD, OFFICE SERVICE
RECOMMENDED: F. Koch — BRANCH HEAD, ENGINEERING DIVISION
APPROVED, FOR THE DISTRICT ENGINEER: M. E. Wise — MAJOR, CORPS OF ENGINEERS, U.S.A.

DR. G.K. J.A.S. TR. CH. G.F.R.

DOC. FILE	FILE	DIV.	DRAWING
	50	4	2277

EXHIBIT "B" PLATE 2





NOTE: All elevations are referred to U.S. C.E. D. datum= Mean lower low water Suisun Bay = 3.6 ft. below Mean Sea Level.

Soundings are referred to elevation 1.7 U.S. C.E. D. Datum from mile 23.9 to mile 25.6

NO.	REVISION	DATE	BY
1	Structure notes revised	5-10-46	JRS
2	Structure notes revised.	5-17-46	JRS
3	Revised as Constructed	9-5-47	J.K.

AS CONSTRUCTED

Reviewed & Approved
Safety Features
By EWB Date 4/19/46

SACRAMENTO RIVER, CALIFORNIA
FLOOD CONTROL PROJECT
PROPOSED LEVEE CONSTRUCTION
LEFT BANK SACRAMENTO RIVER
FROM ISLETON BR. TO WALNUT GROVE

IN 5 SHEETS INDICATED SCALE REDUCED TO HALF SIZE SHEET NO. 3

U. S. ENGINEER OFFICE, SACRAMENTO, CALIFORNIA, MARCH 1946

PREPARED: Samuel Kirk Jr. HEAD, LEVEE SECTION
SUBMITTED: R.W. Barsdale HEAD, OFFICE SERVICE BRANCH
RECOMMENDED: T. K. Cochin HEAD, ENGINEERING DIVISION
APPROVED, FOR THE DISTRICT ENGINEER: R. E. Crow MAJOR, CORPS OF ENGINEERS, U.S.A.
DR. G.A.K. - W.A.B. TR. CH. G.A.R.

DOC. FILE	FILE	DIV.	DRAWING
	50	4	2277

EXHIBIT "B" PLATE 3

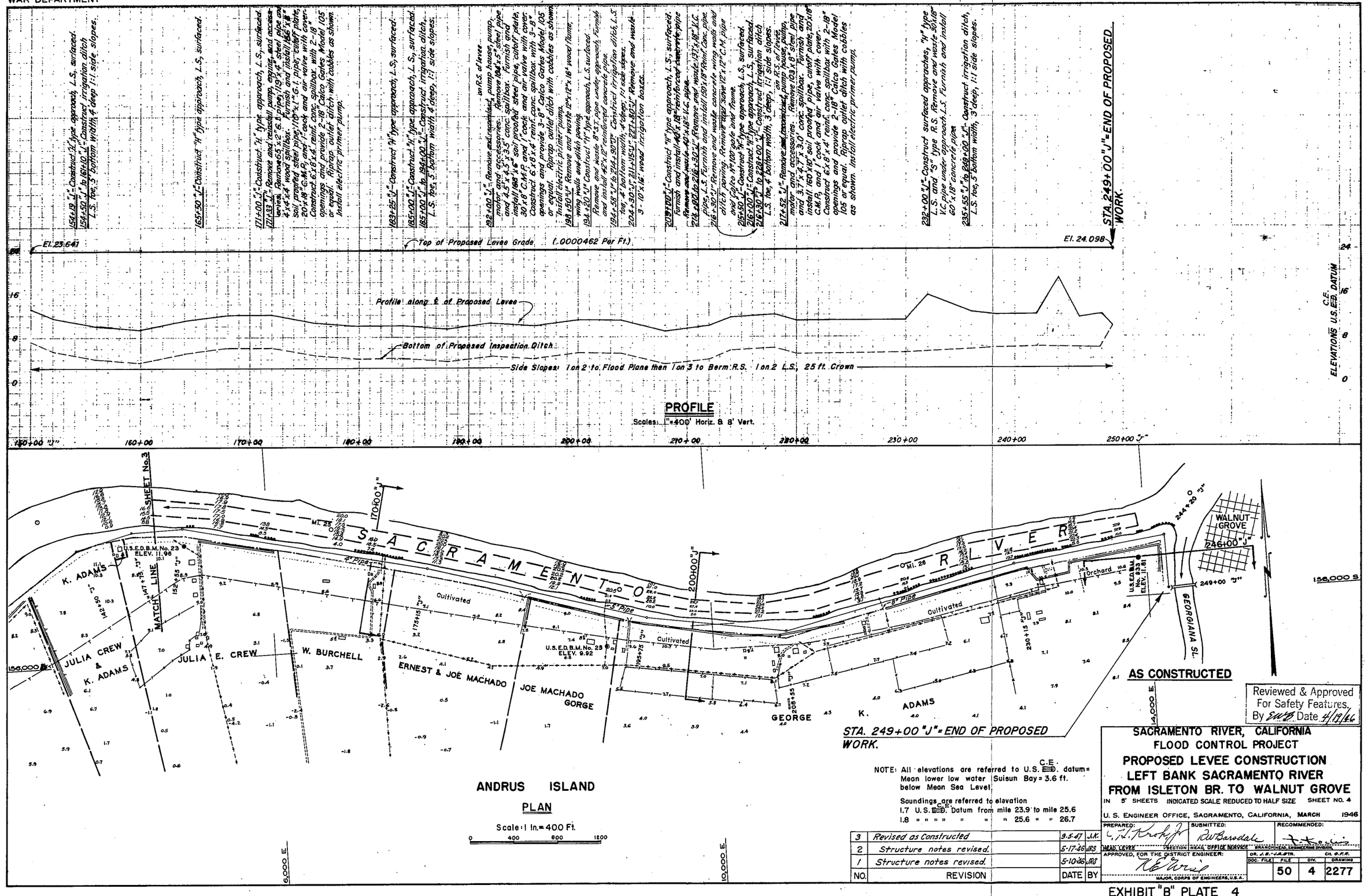
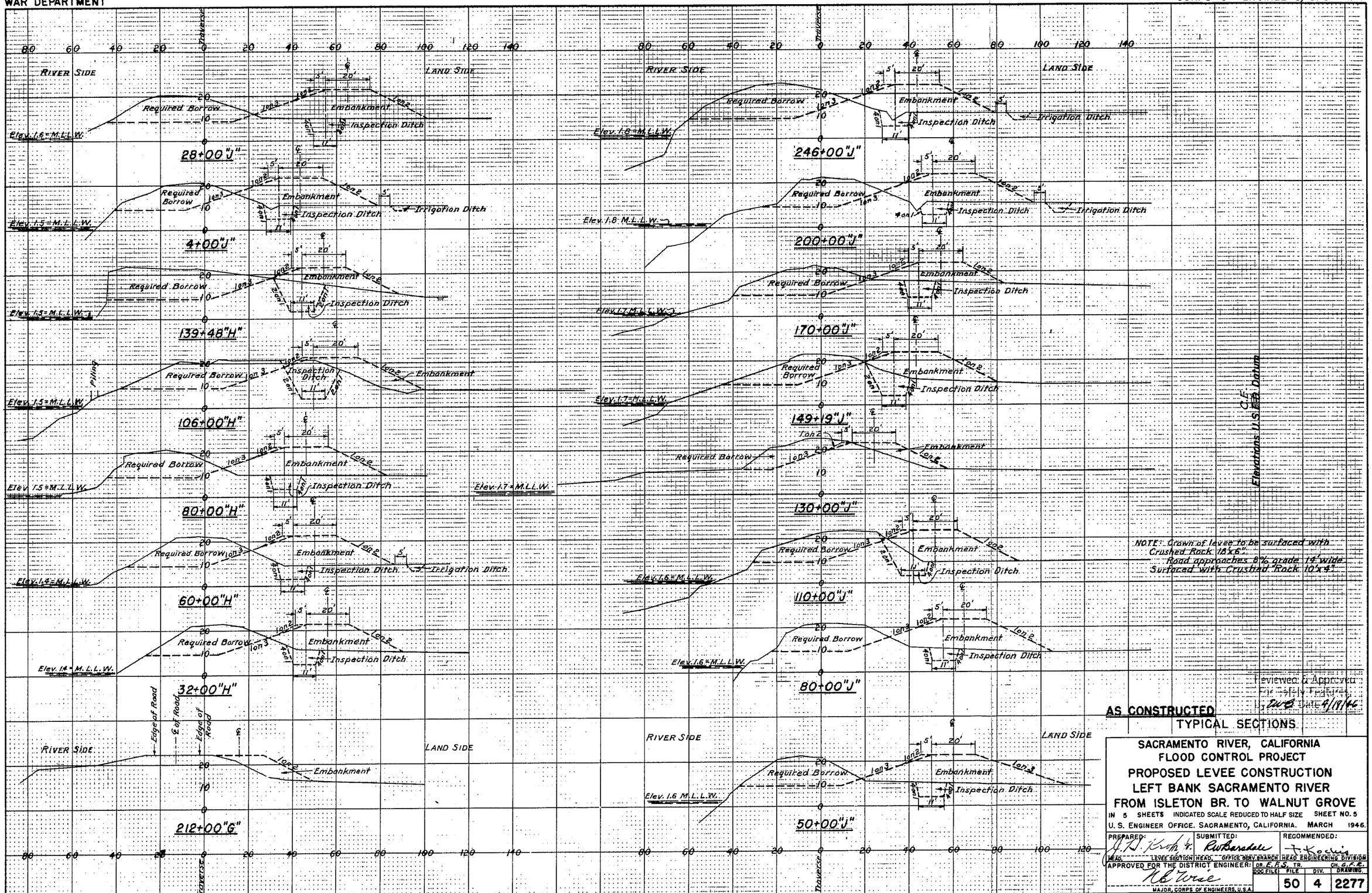


EXHIBIT "B" PLATE 4

WAR DEPARTMENT

CORPS OF ENGINEERS, U. S. ARMY



NOTE: Crown of levee to be surfaced with Crushed Rock 18'x6".
Road approaches 8% grade 14' wide
Surfaced with Crushed Rock 10'x4".

Reviewed & Approved
For Safety Features
By [illegible] Date 4/19/46

AS CONSTRUCTED

TYPICAL SECTIONS

SACRAMENTO RIVER, CALIFORNIA
FLOOD CONTROL PROJECT
PROPOSED LEVEE CONSTRUCTION
LEFT BANK SACRAMENTO RIVER
FROM ISLETON BR. TO WALNUT GROVE

IN 5 SHEETS INDICATED SCALE REDUCED TO HALF SIZE SHEET NO. 5

U. S. ENGINEER OFFICE. SACRAMENTO, CALIFORNIA. MARCH 1946.

PREPARED:	SUBMITTED:	RECOMMENDED:
J. D. Kroh Jr.	R.W. Barsdale	T. Kochis
HEAD, LEVEE SECTION	HEAD, OFFICE SERV. BRANCH	HEAD ENGINEERING DIVISION

APPROVED FOR THE DISTRICT ENGINEER: [signature]
MAJOR, CORPS OF ENGINEERS, U.S.A.

DR. E.F.S. TR.		CH. G.F.R.
DOC FILE	FILE	DIV.	DRAWING
	50	4	2277

EXHIBIT "B" PLATE 5

CHECK LIST NO. 2

Drainage structures located along the easterly bank of the Sacramento River from immediately upstream of the Isleton Bridge, upstream approximately 8 miles to Walnut Grove. This project is about 24 miles southerly of Sacramento, California as indicated on Drawing No. 50-4-2277 in 5 sheets.

HIGHWATER PERIOD. This term is used under Paragraph 4-02(c)3b of the Standard Operation and Maintenance Manual; it applies to floods rising above the reading 17° on the Division of Water Resources station gage set immediately upstream from head of Georgiana Slough. Continuous water stage recorder and staff gage set on U.S.C.E. Datum. Zero of this gage set at Elevation 2.84 feet U.S.C.E. Datum and 0.00 U.S.G.S. Datum.

Location (Station)	Steel Pipe		Description of Structure	Invert Elevation of Pipe (U.S.C.E. Datum)
2+00	"H"	12"	Irrigation structure with pump house on R.S. of levee and with gate valve in discharge line of pump. Pipe passes through levee with invert at flood plane.	17.2
8+72	"H"	6"	"	17.2
14+64	"H"	12"	"	17.2
42+33	"H"	8"	"	17.4
52+21	"H"	12"	"	17.4
72+67	"H"	12"	"	17.5
95+27	"H"	10"	"	17.6
114+87	"H"	12"	"	17.7
139+48	"H"	8"	"	17.8
157+48	"H"	12" & 8"	"	17.9
159+97	"H"	6"	"	17.9
2+73	"J"	6"	"	18.0
18+20	"J"	8"	"	18.0
32+40	"J"	6"	"	18.1
58+00	"J"	10"	"	18.2
80+79	"J"	12"	"	18.3
91+27	"J"	6"	"	18.4
115+25	"H"	10"	"	18.5
125+31	"J"	6"	"	18.5
149+10	"J"	8"	"	18.6
171+33	"J"	8"	"	18.7
192+00	"J"	6"	"	18.8
217+52	"J"	10"	"	19.0

EXHIBIT "E"

R E S O L U T I O N

PASSED AND ADOPTED BY THE RECLAMATION BOARD

JULY 2, 1947

WHEREAS The Reclamation Board has heretofore approved certain items of "new construction"; consisting of (1) the enlargement, set back and construction of the East Levee of the Sacramento River from Isleton Bridge to Walnut Grove, in Reclamation Districts Nos. 407 and 556; (2) enlargement, set back and construction of the East Levee of the Sacramento River from Meridian Bridge to Tisdale Weir, in Reclamation Districts Nos. 70 and 1660; and (3) the enlargement, set back and construction of the East Levee of the Sacramento River between River Miles 92.6 to 94.5, 99.3 to 101.2, and 110.8 to 111.5, in Reclamation District No. 1500; and

WHEREAS the War Department, Corps of Engineers, District Engineer, Sacramento District, under date of June 23, 1947, has notified The Reclamation Board of the completion of the three items of levee enlargement, set back and construction, and has transferred said portions of levee to the State of California for maintenance and operation between proper local interests; and

WHEREAS the Chief Engineer of the Reclamation Board has caused to be made an inspection on the ground of the three items of new construction as specified above, and has found and determined that such work, as completed, has been prosecuted and carried out in conformance with plans and specifications therefor; now therefore be it

EXHIBIT "F"

RESOLVED AND ORDERED that The Reclamation Board does hereby accept for the State of California the said three items of "new construction" as aforesaid, which have on the date above set forth been transferred to said Board by the War Department, U. S. District Engineer; and be it further

RESOLVED AND ORDERED that the East Levee of the Sacramento River from Isleton Bridge to Walnut Grove, together with the berms and appurtenant structures thereof, so much thereof as lies within Reclamation District No. 407, be, and the same is hereby turned over to Reclamation District No. 407 for maintenance and operation, as the legally authorized function of said district; and so much thereof as lies within Reclamation District No. 556 be, and the same is hereby turned over to Reclamation District No. 556 for maintenance and operation, as the legally authorized function of said district; and be it further

RESOLVED AND ORDERED that the East Levee of the Sacramento River, Meridian Bridge to Tisdale Weir, together with the berms and appurtenant structures thereof, so much thereof as lies within Reclamation District No. 70 be, and the same is hereby turned over to Reclamation District No. 70 for maintenance and operation, as the legally authorized function of said district; and that so much thereof as lies within Reclamation District No. 1660 be, and the same is hereby turned over to Reclamation District No. 1660 for maintenance and operation, as the legally authorized function of said district; and be it further

RESOLVED AND ORDERED that the East Levee of the Sacramento River between Miles 92.6 to 94.5, 99.3 to 101.2, and 110.8 to 111.5, together with the berms and appurtenant structures thereof, be and the same is hereby turned over to Reclamation District No. 1500 for maintenance and operation, as the legally authorized function of said district.

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STATE OF CALIFORNIA)
COUNTY OF SACRAMENTO) ss.
Office of the Reclamation Board)

I, S. A. HONAKER, Assistant Secretary of the Reclamation Board, do hereby certify that the above and foregoing is a true and correct copy of a Resolution adopted by said Board at its meeting held July 2, 1947.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of The Reclamation Board this 15th day of July, 1947.

/s/ S. A. HONAKER
S. A. HONAKER
Assistant Secretary
The Reclamation Board