MINIMUM DISTANCE FOR DWELLING, STRUCTURE, OR MOBILE HOME FROM TOP OF BANK

FIGURE 8.01
TYPICAL EXISTING LEVEE LOOKING DOWNSTREAM

A Landside Levee

B Waterside Channel

C Typical Waterside - Section

D Typical Waterside - Crown

E Typical Waterside - SLOPE

F Typical Waterside - Edge of Levee Shoulder (Hinge Point)

G Patrol Road

H Levee Shoulder (Hinge Point)

I Design Water Surface Elevation

J Freeboard

K Inspection Trench (Required when levee heights exceed 6 feet)

L Not to Scale

M Typical Water Surface

N Project Floodway

O Right Side (Similar to Left Side)

Item | TYPICAL MINIMUM DIMENSIONS OF EXISTING STANDARD LEVEE SECTIONS
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Main River Channels</td>
<td>Major Tributaries</td>
<td>Minor Tributaries</td>
<td>Bypasses</td>
</tr>
<tr>
<td>Crown Width</td>
<td>20'</td>
<td>20'</td>
<td>12'</td>
<td>20'</td>
</tr>
<tr>
<td>Landside</td>
<td>1 on 2</td>
<td>1 on 2</td>
<td>1 on 2</td>
<td>1 on 2</td>
</tr>
<tr>
<td>Waterside</td>
<td>1 on 3</td>
<td>1 on 3</td>
<td>1 on 3</td>
<td>1 on 3 to 1 on 4</td>
</tr>
<tr>
<td>Freeboard</td>
<td>3'</td>
<td>3'</td>
<td>3'</td>
<td>4' to 6'</td>
</tr>
<tr>
<td>Patrol Road Width</td>
<td>12'</td>
<td>12'</td>
<td>10'</td>
<td>12'</td>
</tr>
</tbody>
</table>

**FIGURE 8.02**
EROSION CONTROL

MINIMUM RIPRAP THICKNESS = LARGER OF (1.5d_50 OR d_{10})

RIPRAP REVETMENT WITH KEYED TOE
TYPICAL SECTION

RIPRAP REVETMENT WITH MOUNDED TOE
TYPICAL SECTION

FIGURE 8.03
FIGURE 8.04

THE LEGAL DELTA

- Delta Primary Zone
- Legal Delta Boundary, DWR

Delta Service Area
Delta Boundary
PIPELINE OVER OR THROUGH A LEVEE 24" MIN

WATERSURFACE LEVEL

LEVEE CROWN

LEVEE SLOPE

LEVEE TOE

TYPICAL LEVEE PROFILE

TYPICAL CROSS SECTION (ISOMETRIC) OF PIPELINE ON A LEVEE SLOPE

FIGURE 8.05
FILLING ABANDONED PIPES

CUT SLOPE TO EXPOSE PIPE

REMOVE LANDSIDE WELDED STEEL PLATE OR 2' CONCRETE PLUG IN CONCRETE PIPES

LEVEE CROWN

WATERSIDE DESIGN WATER SURFACE ELEVATION

CUT SLOPE TO 2' ABOVE TOP OF PIPE OR ABOVE WATER LEVEL

WELDED STEEL PLATE OR 2' CONCRETE PLUG IN CONCRETE PIPES

PIPEDLINE

REMOVE

GROUTING OR CELLULAR CONCRETE FILL OF ABANDONED PIPES BELOW DESIGN WATER SURFACE ELEVATION

FIGURE 8.06
ACCESS RAMPS

LANDSIDE ACCESS RAMP

LEVEE SURFACING FOR 12' PATROL ROAD

LANDSIDE

WATERSIDE

1' TAPER

LEVEE CROWN 12'

SURFACING WIDTH 12'

1' TAPER

2% 2% 2% 2%

4" STABILIZED AGGREGATE CROSS LEVEE SECTOR

WATERSIDE ACCESS RAMP

1. VERTICAL CURVE AT TOP AND BOTTOM OF RAMP.
2. VERTICAL CURVE TO BE 100 FOOT RADIUS.
3. SLOPE OF RAMP TO BE A MINIMUM GRADE OF 5 PERCENT AND A MAXIMUM GRADE OF 10 PERCENT.
4. RAMP TO BE SURFACED WITH 4 INCHES OF CLASS 2 AGGREGATE BASE (AB), (CALTRANS SPEC. 26-1.02B)
5. ALL RAMPS GRADED TO DRAIN AWAY FROM LEVEE SECTION.

FIGURE 8.07
ACCESS RAMP GRADING REQUIREMENTS

NOTE: THE LOWER VERTICAL CURVE TO BE FIELD ADJUSTED IN EACH LOCATION TO CORRESPOND WITH EXISTING APPROACH SLOPE AND ELEVATION.

SCALE
HORZ.: 1"=40'
VERT.: 1"=5'

FIGURE 8.08
FIGURE 8.10

AREA "A"

AREA "B"

AREA "C"

NORTH PROJECT LEVEE

SOUTH PROJECT LEVEE
ZONE "B"
ZONE "C"
ZONE "D"
ZONE "E"
RD 1004
BUTTE BASIN
LIMIT OF 1970 FLOODING
LOWER LIMIT