





**A**

AB ----- AGGREGATE BASE  
 ACST. ----- ACOUSTIC  
 ADJ. ----- ADJUSTABLE  
 AGG. ----- AGGREGATE  
 ALUM. ----- ALUMINUM  
 ALT. ----- ALTERNATE  
 ARCH. ----- ARCHITECTURAL  
 A.B. ----- ANCHOR BOLT  
 A/C ----- AIR CONDITIONING  
 A.C.I. ----- AMERICAN CONCRETE INSTITUTE  
 ACWD ----- ALAMEDA COUNTY WATER DISTRICT  
 A.I.S.C. ----- AMERICAN INSTITUTE OF STEEL CONSTRUCTION  
 A.P.A. ----- AMERICAN PLYWOOD ASSOCIATION  
 A.S.C.E. ----- AMERICAN SOCIETY OF CIVIL ENGINEERS  
 A.S.T.M. ----- AMERICAN SOCIETY FOR TESTING AND MATERIALS  
 ATB ----- AT & T BROADBAND CABLE  
 A.W.S. ----- AMERICAN WELDING SOCIETY  
 AWWA ----- AMERICAN WATER WORKS ASSOCIATION

**B**

B. ----- BOTTOM (REINFORCEMENT DRAWINGS)  
 BOT. ----- BOTTOM  
 BRG. ----- BEARING  
 BK ----- BACK  
 BLDG ----- BUILDING  
 B.C. ----- BEGIN CURVE  
 B.O. ----- BLOWOFF  
 B.O.L. ----- BEGINNING OF LINE  
 B.P. ----- BASE PLATE  
 B.V.C. ----- BEGIN VERTICAL CURVE  
 B.A.B. ----- BOTTOM ALTERNATE BENT (REINFORCEMENT DRAWINGS)

**C**

CB ----- CATCH BASIN  
 CCP ----- CONCRETE CYLINDER PIPE  
 CDB ----- CONDUIT DUCT BANK  
 CEM. ----- CEMENT  
 CH'KR ----- CHECKER  
 CL. OR CLR. ----- CLEAR  
 CLSM ----- CONTROLLED LOW-STRENGTH MATERIALS  
 CMCL ----- CEMENT MORTAR COATED AND LINED  
 COLS. ----- COLUMNS  
 CONC. ----- CONCRETE  
 CONT. ----- CONTINUOUS  
 CSK. ----- COUNTERSUNK  
 CFS. ----- CUBIC FEET PER SECOND  
 CTB ----- CEMENT TREATED BASE  
 C.C. ----- CENTER TO CENTER  
 C.J. ----- CONSTRUCTION JOINT  
 C.O. ----- CLEAN OUT  
 C.I.D.H. ----- CAST IN DRILLED HOLE  
 C.I.P. ----- CAST IRON PIPE  
 C.M.P. ----- CORRUGATED METAL PIPE  
 C.A.V. ----- COMBINATION AIR AND VACUUM VALVE  
 C.J.P. ----- COMPLETE JOINT PENETRATION  
 C.T.E. ----- COAL TAR ENAMEL  
 C.T.X. ----- COAL TAR EPOXY  
 CU. YDS. ----- CUBIC YARDS

**D**

DET. ----- DETAIL  
 D OR DIA. ----- DIAMETER  
 DIM. ----- DIMENSION  
 DN. ----- DOWN  
 DWG. ----- DRAWING  
 D.F. ----- DOUGLAS FIR  
 D.I. ----- DROP INLET  
 DWR ----- DEPARTMENT OF WATER RESOURCES  
 DVBPL ----- DEL VALLE BRANCH PIPELINE

**E**

E OR ELECT. ----- ELECTRICAL  
 EA ----- EACH  
 ELEV. OR EL. ----- ELEVATION  
 EQ. ----- EQUAL  
 EQUIP. ----- EQUIPMENT  
 EQUIV. ----- EQUIVALENT  
 EXIST. ----- EXISTING  
 EXP. ----- EXPANSION  
 EXP. JT. ----- EXPANSION JOINT  
 E.C. ----- END CURVE  
 E.F. ----- EACH FACE (REINFORCEMENT DRAWINGS)  
 E.F.E.W. ----- EACH FACE EACH WAY (REINFORCEMENT DRAWINGS)  
 E.O.L. ----- END OF LINE  
 E.P. ----- EDGE OF PAVEMENT  
 EQ ----- EQUATION  
 E.V.C. ----- END VERTICAL CURVE  
 E.W. ----- EACH WAY (REINFORCEMENT DRAWINGS)  
 ELL ----- ELBOW

**F**

FIN. ----- FINISHED  
 FL. OR FLR. ----- FLOOR  
 FT. ----- FEET  
 F.B. ----- FLAT BAR  
 F.D. ----- FLOOR DRAIN  
 F.G. ----- FINISHED GRADE  
 F.H. ----- FLAT HEAD  
 F.H.M.S. ----- FLAT HEAD MACHINE SCREW  
 FOC ----- FIBER OPTIC CABLE

**G**

G ----- GAS  
 GA. ----- GAGE  
 GALV. ----- GALVANIZED  
 G.D. ----- GUTTER DRAIN  
 GM ----- GAS METER  
 GRD ----- GROUND  
 GTE ----- GENERAL TELEPHONE

**H**

HD. ----- HEAD  
 HEX. ----- HEXAGON  
 HMA ----- HOT MIX ASPHALT  
 HOR. ----- HORIZONTAL  
 HR. ----- HOUR  
 HT. ----- HEIGHT  
 H.R. ----- HANDRAIL  
 H.P. ----- HIGH POINT  
 HPU ----- HYDRAULIC POWER UNIT  
 HVAC ----- HEATING, VENTILATION & AIR CONDITIONING  
 H.C.B. ----- HOLLOW CONCRETE BLOCK  
 HSE ----- HIGH SOLIDS EPOXY  
 HWY ----- HIGHWAY

**I**

IN. ----- INCHES  
 INC. ----- INCLUDING  
 INV. ----- INVERT  
 I ----- MOMENT OF INERTIA  
 I.D. ----- INSIDE DIAMETER

**J**

JT. ----- JOINT

**L**

LBS. ----- POUNDS  
 LT. ----- LEFT OR LIGHT  
 L OR LGTH. ----- LENGTH  
 L.P. ----- LOW POINT  
 LN ----- LANE  
 LTB ----- LIME TREATED BASE  
 LWL ----- LOW WIRE ELEVATION

**M**

MATL. ----- MATERIAL  
 MAX. ----- MAXIMUM  
 MCC ----- MOTOR CONTROL CENTER  
 MECH. ----- MECHANICAL  
 MET. ----- METAL  
 MFR. ----- MANUFACTURER  
 MIN. ----- MINIMUM  
 M.B.G.R. ----- METAL BEAM GUARD RAILING  
 M.H. ----- MANHOLE  
 M.T. ----- METAL THRESHOLD  
 MP ----- MILE POST

**N**

NO. ----- NUMBER  
 NIC ----- NOT IN CONTRACT  
 N.F. ----- NEAR FACE  
 NTS ----- NOT TO SCALE  
 Nc ----- NATIONAL COARSE

**O**

OPG. ----- OPENING  
 OPP. ----- OPPOSITE  
 O.C. ----- ON CENTER  
 O.D. ----- OUTSIDE DIAMETER  
 O.G. ----- ORIGINAL GROUND  
 O.H. ----- OVERHEAD WIRE  
 O-O ----- OUT - OUT

**P**

PLYWD. ----- PLYWOOD  
 PSF ----- POUNDS PER SQUARE FOOT  
 PSI ----- POUNDS PER SQUARE INCH  
 PT. ----- POINT  
 P.I. ----- POINT OF INTERSECTION

**P**

P.O.T. ----- POINT ON TANGENT  
 PVC ----- POLYVINYL CHLORIDE  
 PVMT ----- PAVEMENT  
 PP ----- POWER POLE

**R**

R ----- RADIUS OR RISER  
 RAD. ----- RADIUS  
 RD. ----- ROAD  
 REF. ----- REFERENCE  
 REINF. ----- REINFORCEMENT  
 REQ'D. ----- REQUIRED  
 RM. ----- ROOM  
 RT. ----- RIGHT  
 RWD. ----- REDWOOD  
 R/W ----- RIGHT OF WAY  
 RCCP ----- REINFORCED CONCRETE CYLINDER PIPE  
 RCP ----- REINFORCED CONCRETE PIPE  
 RR ----- RAILROAD

**S**

S ----- SECTION MODULUS  
 S= ----- SLOPE

SCH. ----- SCHEDULE  
 SHT. ----- SHEET  
 SP. ----- SPACES  
 SPEC'S ----- SPECIFICATIONS  
 SQ. ----- SQUARE  
 SQ. YDS. ----- SQUARE YARDS  
 S.STL OR S.S. ----- STAINLESS STEEL  
 STA. ----- STATION  
 STD. ----- STANDARD  
 STIFF. ----- STIFFENER  
 STL. ----- STEEL  
 STRUCT. ----- STRUCTURAL  
 SYMM. ----- SYMMETRICAL  
 SMH ----- SEWER MANHOLE  
 SS ----- SANITARY SEWER

**T**

T ----- TANGENT OR TOP (REINFORCEMENT DRAWINGS)  
 TO ----- TURNOUT  
 TRD. ----- TREAD  
 TYP. ----- TYPICAL  
 T & B ----- TOP AND BOTTOM (REINFORCEMENT DRAWINGS)  
 T.D.H. ----- TOTAL DYNAMIC HEAD  
 TB ----- TRAFFIC BOX  
 TEL ----- TELEPHONE  
 TP ----- TELEPHONE POLE  
 TV ----- CABLE TV

**U**

USC & GS ----- UNITED STATES COAST AND GEODETIC SURVEY  
 UG ----- UNDERGROUND

**V**

VERT. ----- VERTICAL  
 V.C. ----- VERTICAL CURVE  
 V.P.I. ----- VERTICAL POINT OF INTERSECTION

**W**

W ----- WIDTH  
 WTP ----- WATER TREATMENT PLANT  
 W ----- WITH  
 W.S. ----- WATER SURFACE  
 W.W.F. ----- WELDED WIRE FABRIC  
 W.P. ----- WORKING POINT  
 W.S.P. ----- WELDED STEEL PIPE

**SYMBOLS**

@ ----- AT  
 ----- CENTERLINE  
 { ----- DEFLECTION ANGLE  
 ° ----- DEGREE  
 ' ----- MINUTE OR FEET  
 " ----- SECONDS OR INCHES  
 ) ----- ROUND, DIAMETER  
 [ ----- SQUARE  
 # ----- NUMBER OR POUND  
 d ----- PENNYWEIGHT  
 { ----- PLATE  
 ⊕ ----- GRID LINES



AS BUILT	JRB	CDD
		6/15/15
REV.	DESCRIPTION	SUB. APP.



DESIGNED: KHOI NGUYEN REG. C.E. No. 76572	CHECKED: DAGNACHEW FANTA REG. C.E. No. 72540
DRAWN: KHOI NGUYEN REG. C.E. No. 76572	REVIEWED: VU Q. THAI REG. C.E. No. 60133

SUBMITTED:  
VU Q. THAI  
REG. C.E. No. 60133

APPROVAL RECOMMENDED: DATE:  
 CHIEF, PIPELINES SECTION, REG. C.E. No. 51335  
 APPROVED: DATE:  
 CHIEF, CIVIL ENGR. BRANCH, REG. C.E. No. 34327

**THINK SAFETY -  
 ACT SAFELY**

STATE WATER FACILITIES  
 FISH RESTORATION PROGRAM  
 DIVISION OF ENVIRONMENTAL SERVICES  
 DECKER ISLAND MODIFICATIONS

**ABBREVIATIONS AND SYMBOLS**

SPEC. NO.	SHEET NO.	REVISION	DRAWING NO.
16-XX	003		G-103



REV.	DESCRIPTION	SUB.	APP.



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DRAWN:	REVIEWED:
SUBMITTED:	

APPROVAL RECOMMENDED: DATE:

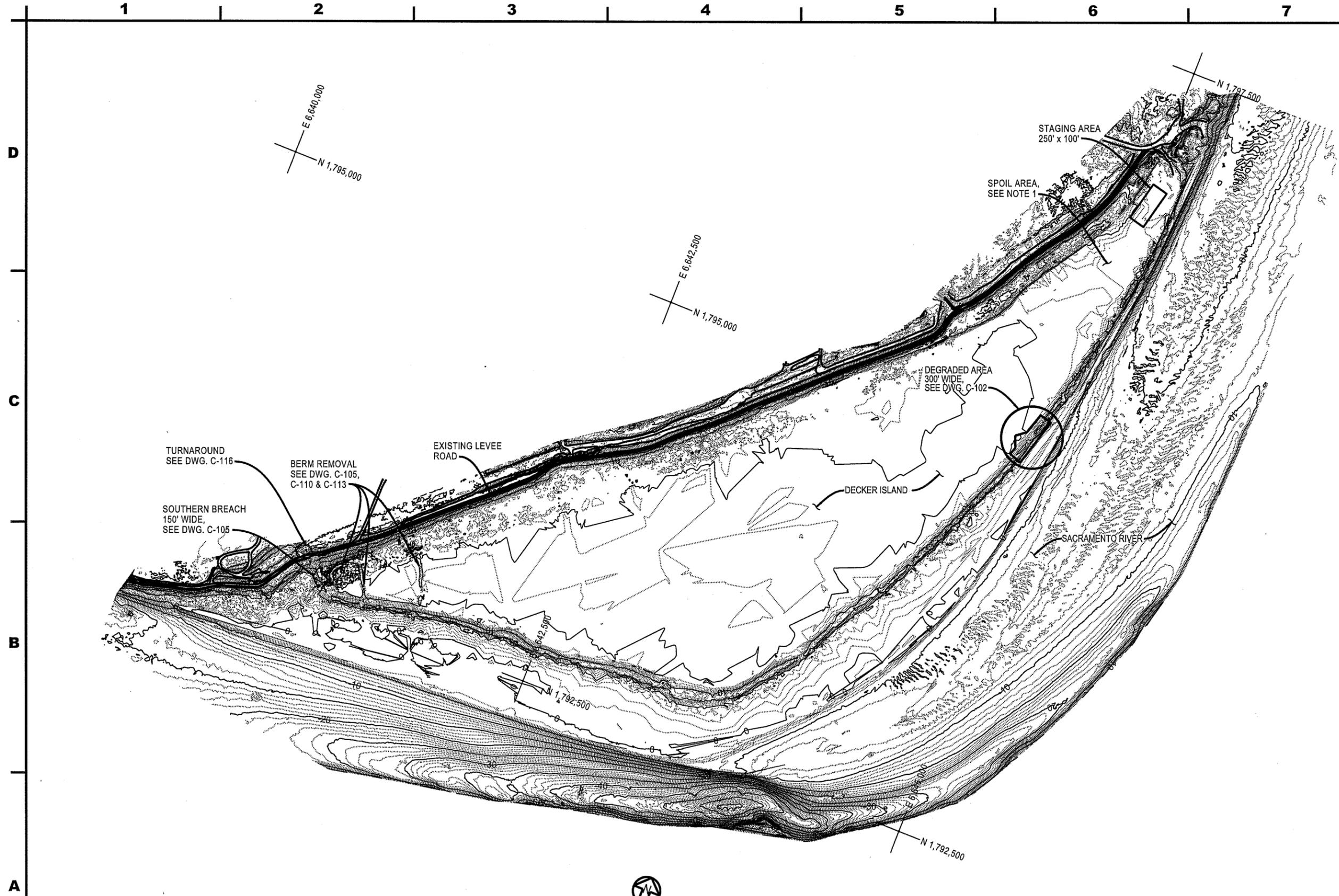
APPROVED: DATE:

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 ACT SAFELY**

STATE WATER FACILITIES  
 FISH RESTORATION PROGRAM  
 DIVISION OF ENVIRONMENTAL SERVICES  
 DECKER ISLAND MODIFICATIONS

GENERAL PLAN

SPEC. NO.	SHEET NO.	REVISION	DRAWING NO.
XX-XX	004	X	C-101



PLAN  
 NTS



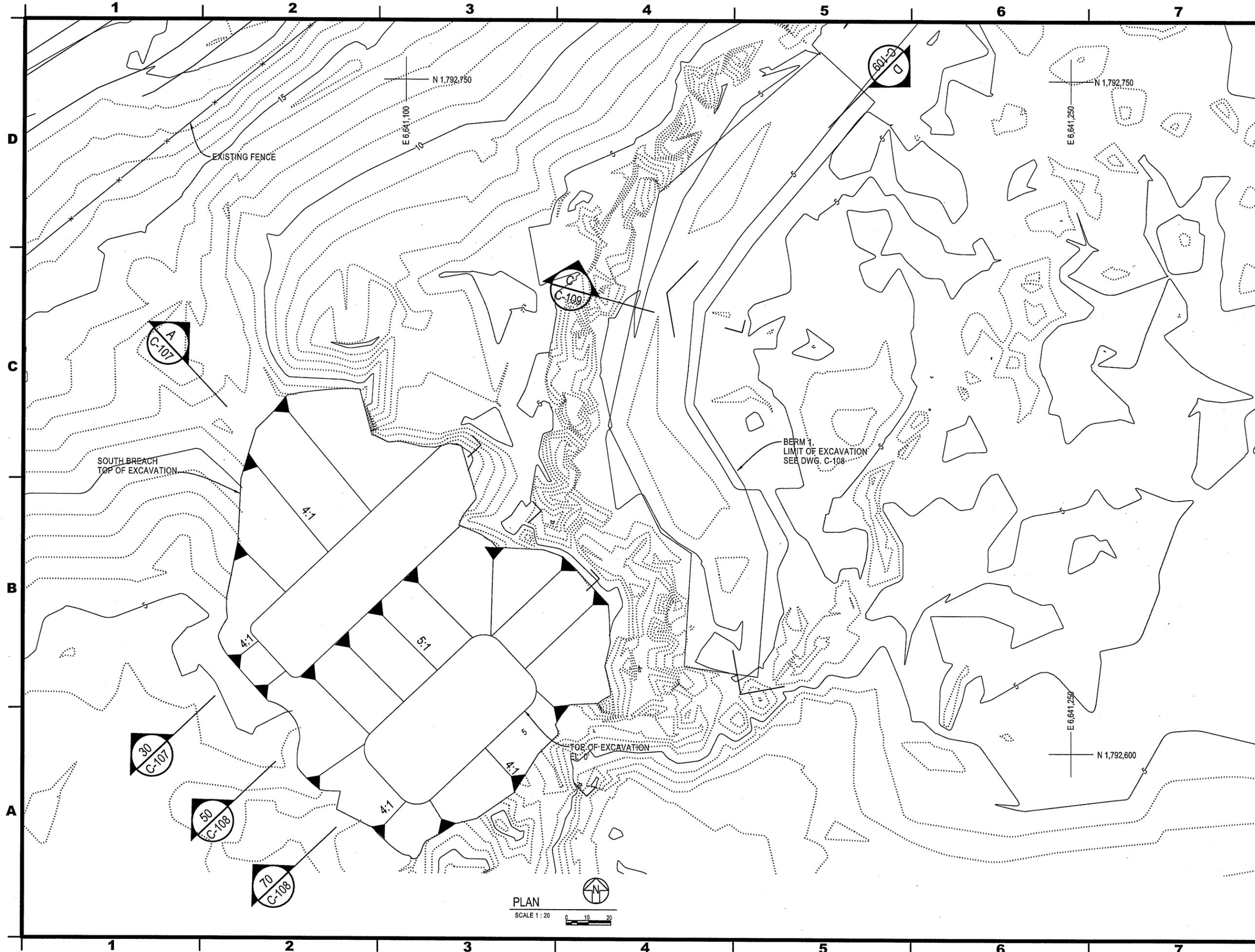
**NOTE**

1. SPOIL AREA SHALL BE LIMITED TO GROUND ELEVATION ABOVE 6.9'.









PLAN  
SCALE 1 : 20

STATE OF CALIFORNIA  
CALIFORNIA NATURAL RESOURCES AGENCY  
DEPARTMENT OF WATER RESOURCES  
DIVISION OF ENGINEERING  
STATE WATER FACILITIES



REV.	DESCRIPTION	SUB.	APP.



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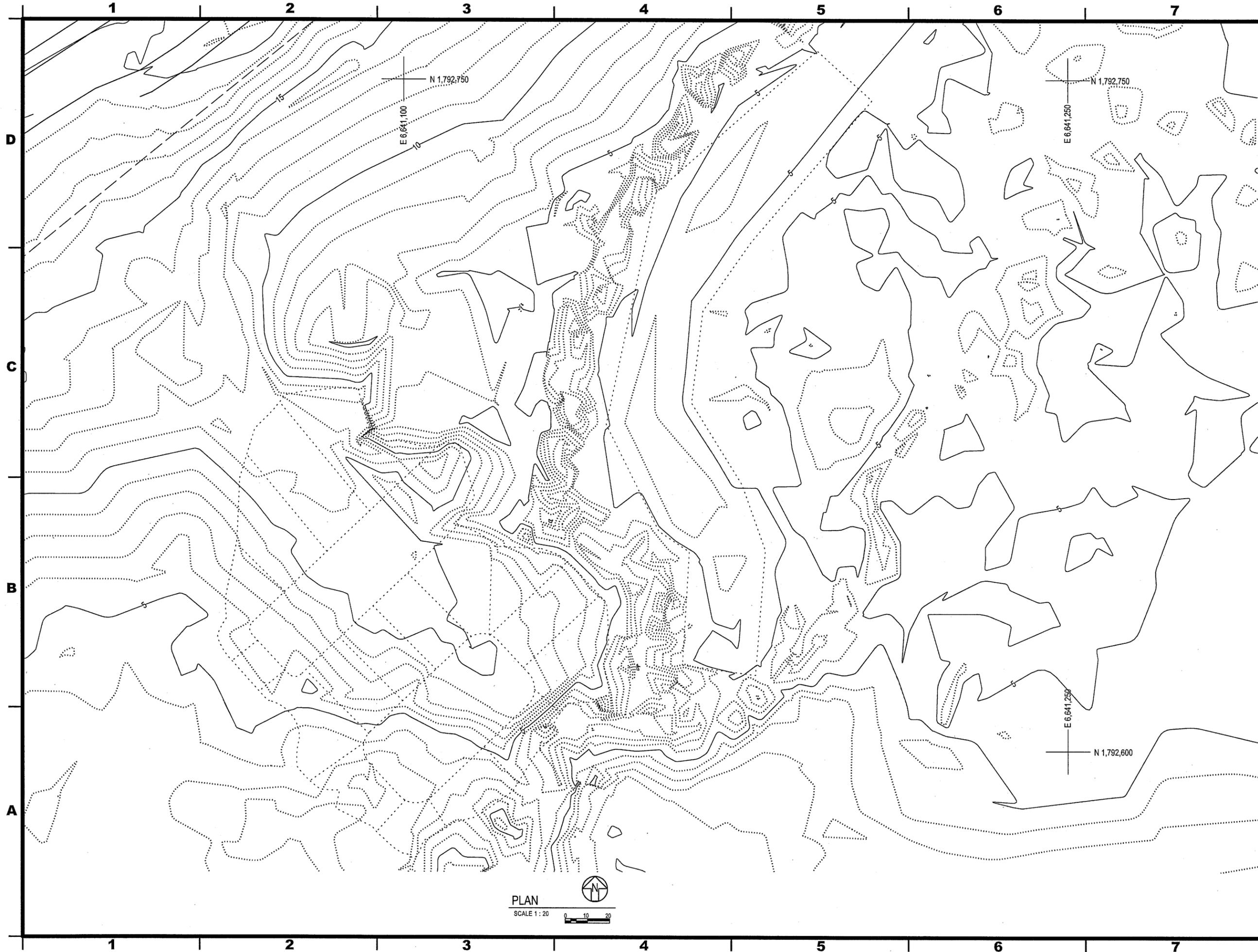
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STATE WATER FACILITIES  
FISH RESTORATION PROGRAM  
DIVISION OF ENVIRONMENTAL SERVICES  
DECKER ISLAND MODIFICATIONS

SOUTHERN BREACH  
& BERM 1  
PLAN  
FINISHED CONDITION

SPEC. NO.	SHEET NO.	REVISION	DRAWING NO.
XX-XX	008	X	C-105



STATE OF CALIFORNIA  
 CALIFORNIA NATURAL RESOURCES AGENCY  
 DEPARTMENT OF WATER RESOURCES  
 DIVISION OF ENGINEERING  
 STATE WATER FACILITIES



REV.	DESCRIPTION	SUB.	APP.

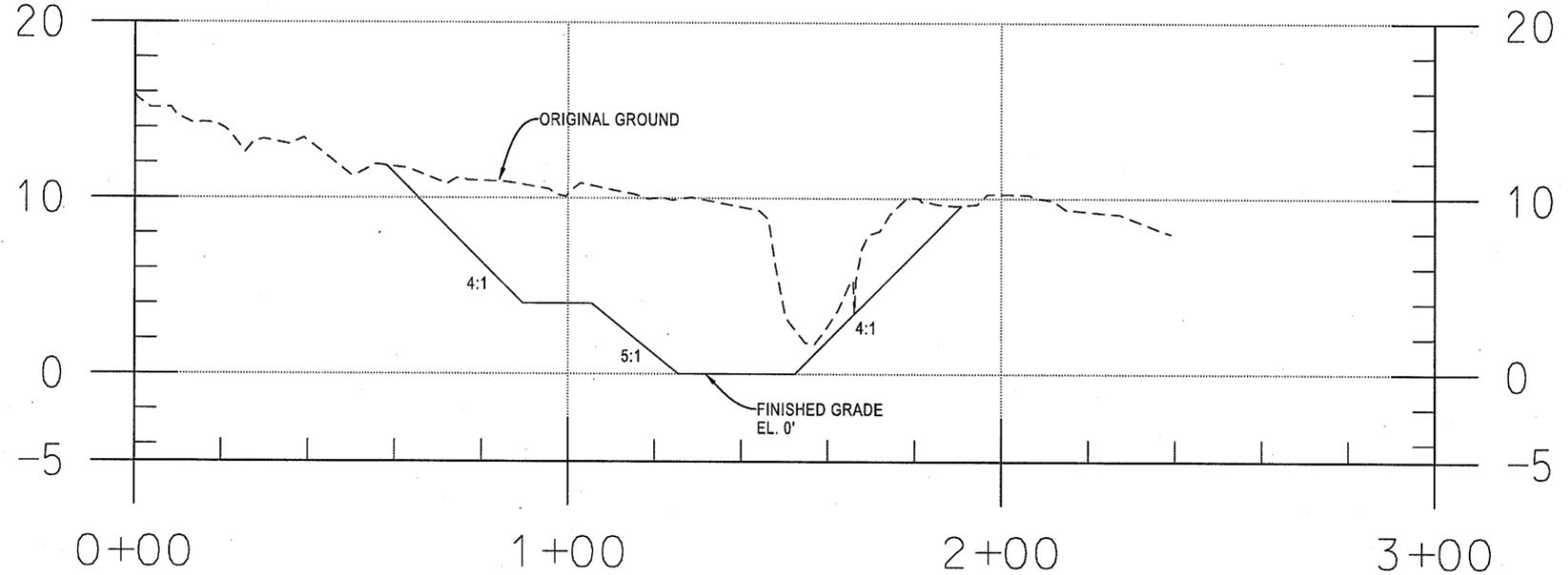
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DRAWN: _____	REVIEWED: _____
SUBMITTED: _____	
APPROVAL RECOMMENDED: _____	DATE: _____
APPROVED: _____	DATE: _____

**THINK SAFETY -  
 ACT SAFELY**

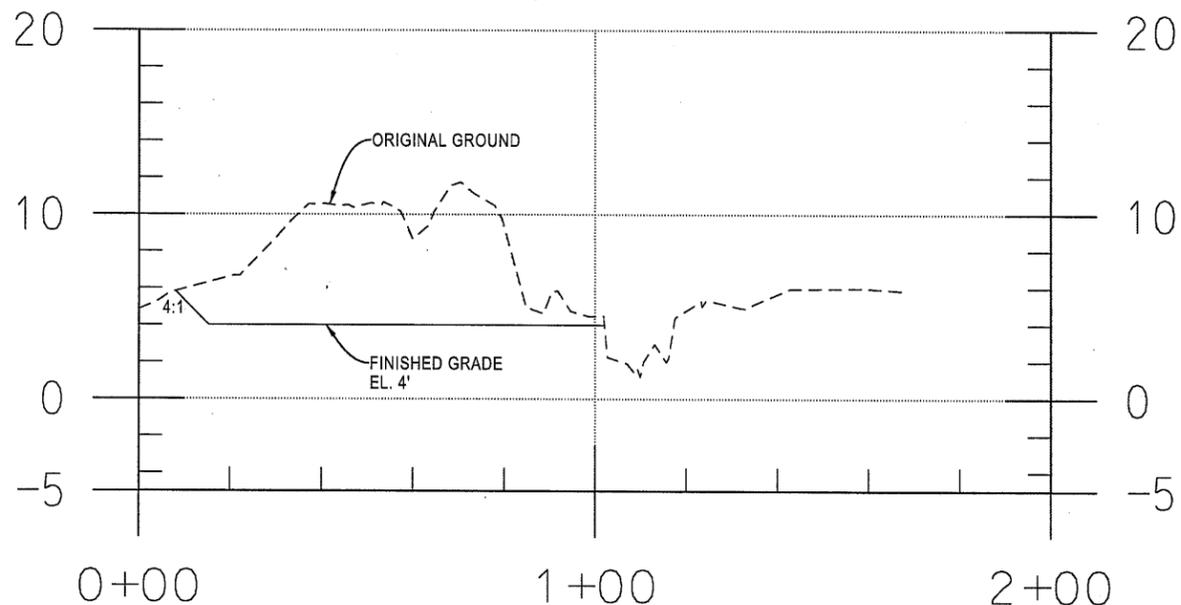
STATE WATER FACILITIES  
 FISH RESTORATION PROGRAM  
 DIVISION OF ENVIRONMENTAL SERVICES  
 DECKER ISLAND MODIFICATIONS

SOUTHERN BREACH  
 & BERM 1  
 PLAN  
 EXISTING CONDITION

SPEC. NO. XX-XX	SHEET NO. 009	REVISION X	DRAWING NO. C-106
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**A SECTION**  
 DWG. C-105  
 HORIZ. SCALE: 1:20  
 VERT. SCALE: 1:5



**30 SECTION**  
 DWG. C-105  
 HORIZ. SCALE: 1:20  
 VERT. SCALE: 1:5

REV.	DESCRIPTION	SUB.	APP.



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APPROVAL RECOMMENDED: DATE:	
APPROVED: DATE:	

**THINK SAFETY -  
 ACT SAFELY**

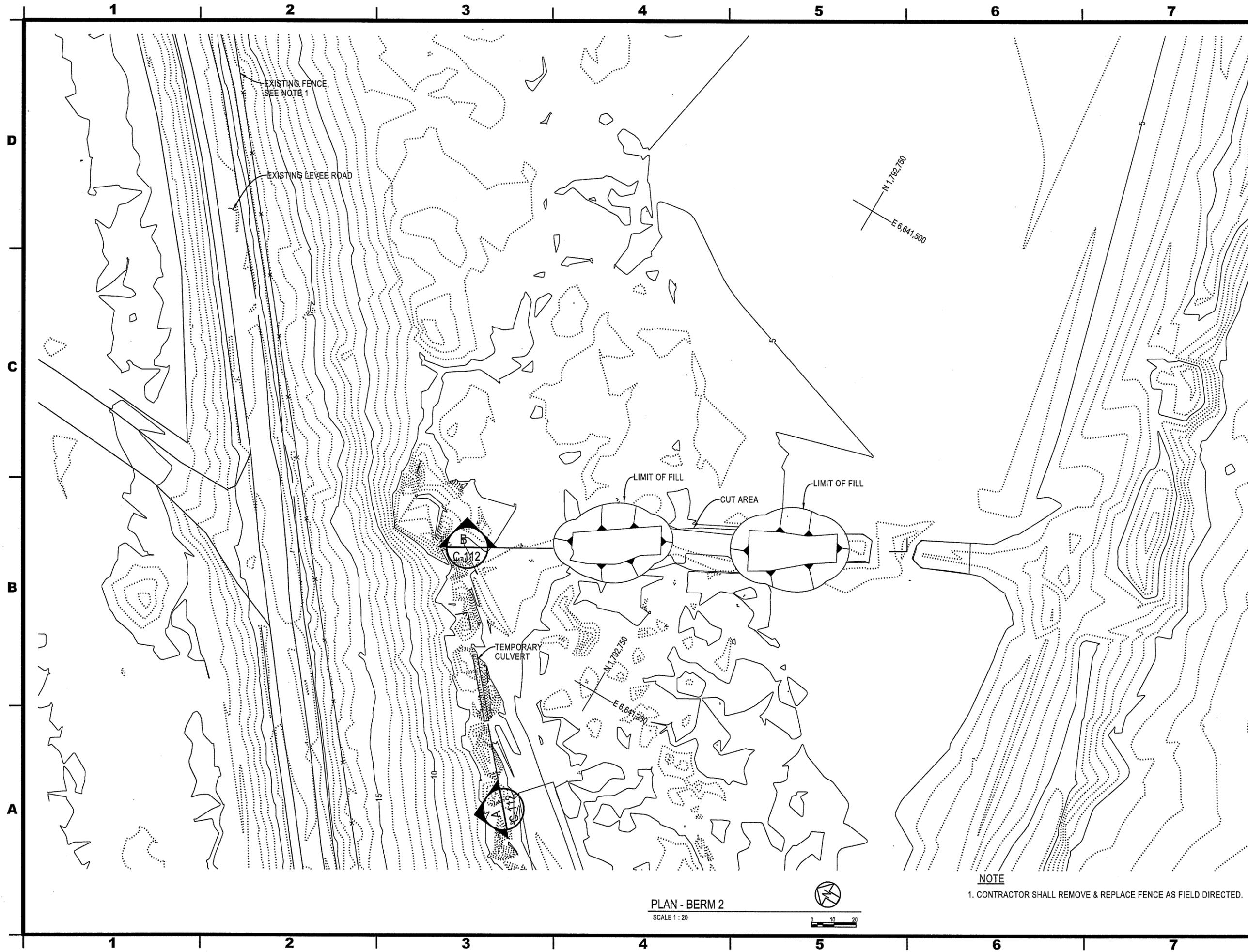
STATE WATER FACILITIES  
 FISH RESTORATION PROGRAM  
 DIVISION OF ENVIRONMENTAL SERVICES  
 DECKER ISLAND MODIFICATIONS

SOUTHERN BREACH  
 SECTIONS  
 SHEET 1 OF 2

SPEC. NO.	SHEET NO.	REVISION	DRAWING NO.
XX-XX	010	X	C-107







STATE OF CALIFORNIA  
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 STATE WATER FACILITIES



REV.	DESCRIPTION	SUB.	APP.

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APPROVED:		DATE:	



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STATE WATER FACILITIES  
 FISH RESTORATION PROGRAM  
 DIVISION OF ENVIRONMENTAL SERVICES  
 DECKER ISLAND MODIFICATIONS

BERM 2  
 PLAN  
 FINISHED CONITON

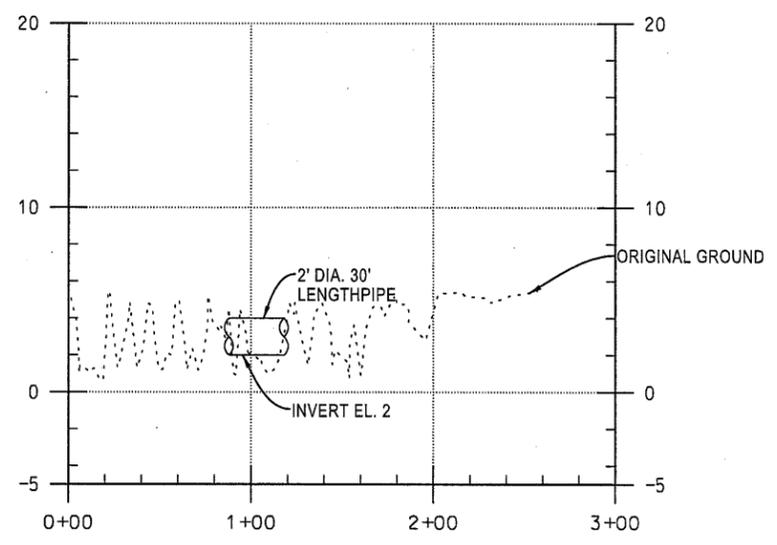
**NOTE**  
 1. CONTRACTOR SHALL REMOVE & REPLACE FENCE AS FIELD DIRECTED.

PLAN - BERM 2  
 SCALE 1 : 20

SPEC. NO.	SHEET NO.	REVISION	DRAWING NO.
XX-XX	013	X	C-110

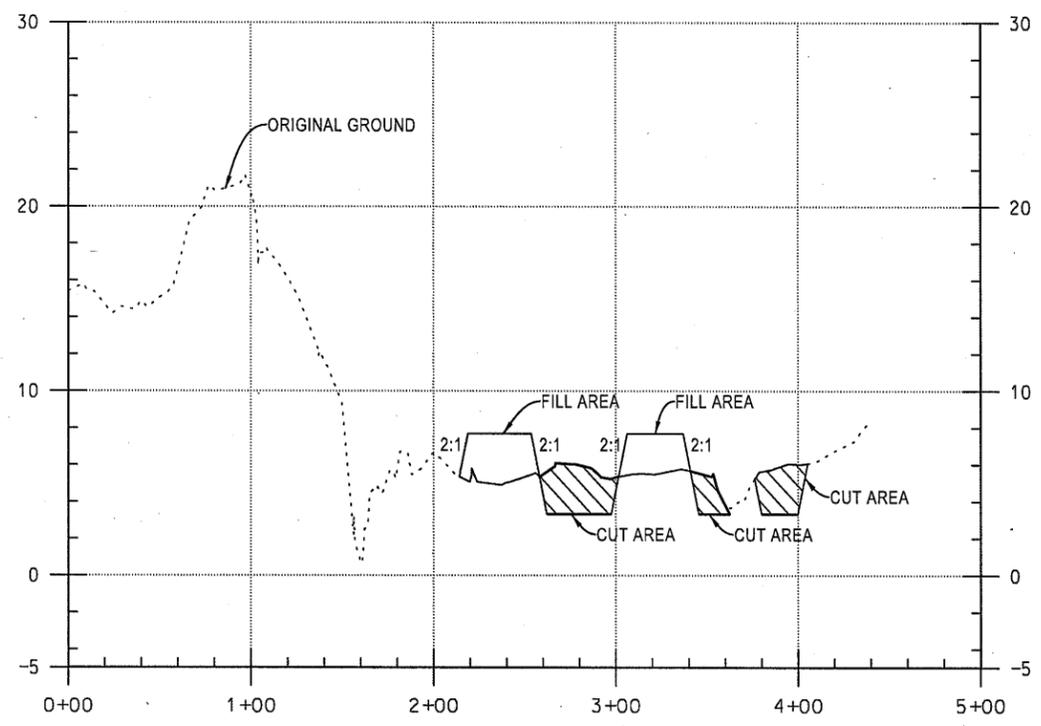


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 DIVISION OF ENGINEERING  
 STATE WATER FACILITIES



**SECTION A-A**

DWG. C-110  
 HORIZ. SCALE: 1:50  
 VERT. SCALE: 1:5



**SECTION B-B**

DWG. C-110  
 HORIZ. SCALE: 1:50  
 VERT. SCALE: 1:5

REV.	DESCRIPTION	SUB.	APP.



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 SUBMITTED: \_\_\_\_\_

APPROVAL RECOMMENDED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

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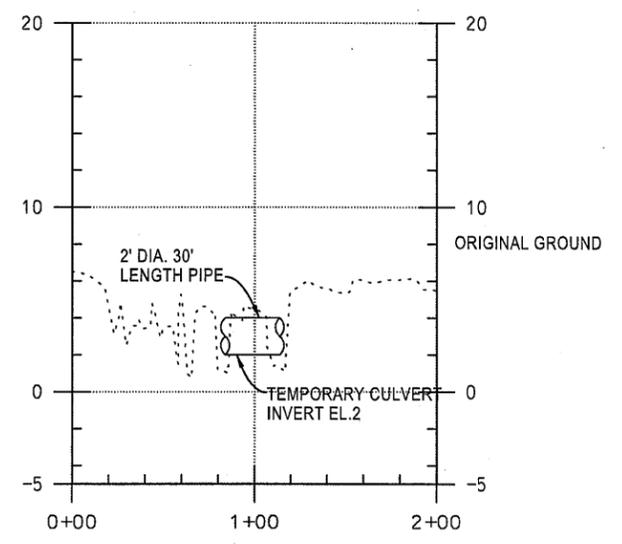
STATE WATER FACILITIES  
 FISH RESTORATION PROGRAM  
 DIVISION OF ENVIRONMENTAL SERVICES  
 DECKER ISLAND MODIFICATIONS

**BERM 2  
 SECTIONS**

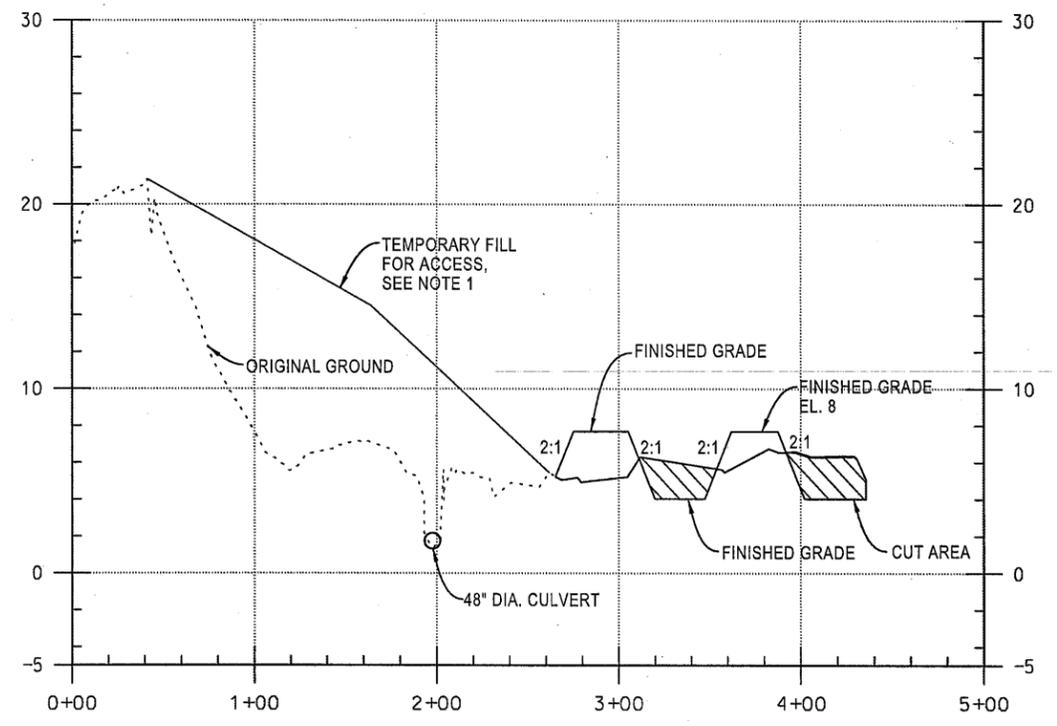
SPEC. NO.	SHEET NO.	REVISION	DRAWING NO.
XX-XX	015	X	C-112







**SECTION A-A**  
 DWG. C-113  
 HORIZ. SCALE: 1:50  
 VERT. SCALE: 1:5



**SECTION B-B**  
 DWG. C-113  
 HORIZ. SCALE: 1:50  
 VERT. SCALE: 1:5



**NOTE**  
 1. FINAL CUT ELEVATION SHALL BE FIELD DIRECTED.  
 2. CONTRACTOR SHALL PLACE TEMPORARY FILL ABOVE THE CULVERT FOR ACCESS TO BERM. BACKFILL MATERIALS SHALL BE REMOVED AND DISPOSED AT DESIGNATED AREA AFTER FINISHED.

REV.	DESCRIPTION	SUB.	APP.



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APPROVAL RECOMMENDED:	DATE:
APPROVED:	DATE:

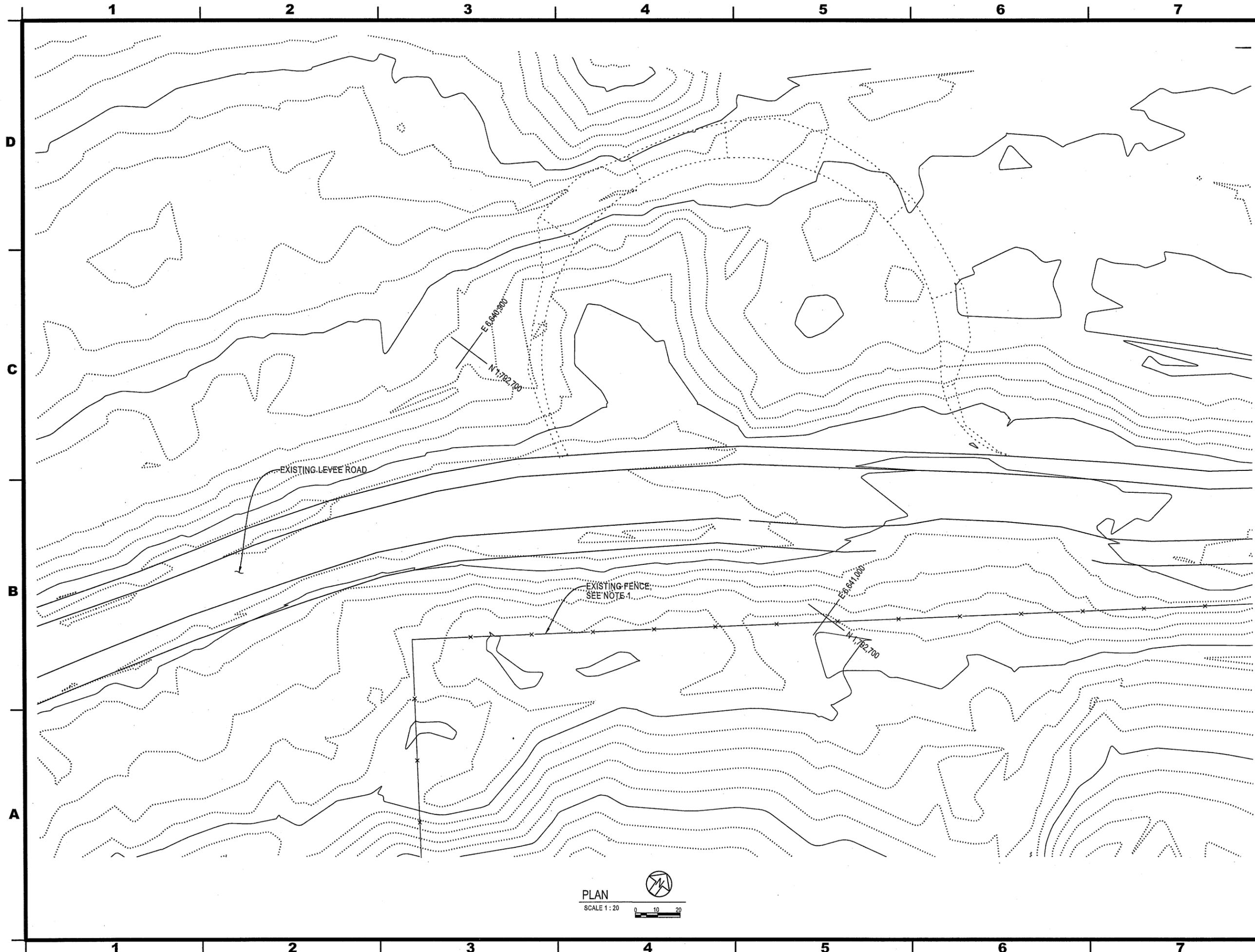
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STATE WATER FACILITIES  
 FISH RESTORATION PROGRAM  
 DIVISION OF ENVIRONMENTAL SERVICES  
 DECKER ISLAND MODIFICATIONS

**BERM 3  
 SECTIONS**

SPEC. NO.	SHEET NO.	REVISION	DRAWING NO.
XX-XX	018	X	C-115





STATE OF CALIFORNIA  
 CALIFORNIA NATURAL RESOURCES AGENCY  
 DEPARTMENT OF WATER RESOURCES  
 DIVISION OF ENGINEERING  
 STATE WATER FACILITIES




REV.	DESCRIPTION	SUB.	APP.
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APPROVED:	DATE:

**THINK SAFETY -  
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STATE WATER FACILITIES  
 FISH RESTORATION PROGRAM  
 DIVISION OF ENVIRONMENTAL SERVICES  
 DECKER ISLAND MODIFICATIONS

TURNAROUND  
 PLAN  
 EXISTING CONDITION

SPEC. NO.	SHEET NO.	REVISION	DRAWING NO.
	020	X	C-117

