

**THINK SAFETY
ACT SAFELY**

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, SIZES, AND LOCATIONS OF ALL EXISTING FACILITIES AND FEATURES BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH PLANS AND SPECIFICATIONS. PLANS SHOWN WITH AERIAL PHOTOS ARE PROVIDED FOR REFERENCE ONLY. ALL FACILITIES MAY NOT BE SHOWN ON PHOTOS. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING FACILITIES THAT MAY BE AFFECTED BY CONSTRUCTION.
2. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO THE CONTRACT SPECIFICATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND MAINTAINING ALL WARNING SIGNS, DEVICES, AND FEATURES NECESSARY TO PROTECT THE HEALTH AND SAFETY OF THE GENERAL PUBLIC AND WORKERS WHILE PROVIDING FOR THE PROPER AND SAFE ROUTING OF VEHICULAR TRAFFIC DURING THE PERFORMANCE OF WORK.
4. DO NOT SCALE DRAWINGS, CONTACT ENGINEER FOR ANY CONTROLLING DIMENSION OR SPECIFIC DETAIL NOT SHOWN.

STRUCTURAL

009	S-101	STRUCTURAL GENERAL NOTES
010	S-102	APPROACH STRUCTURE RETAINING WALL PLAN
011	S-103	WALL TIE-BACK SECTION
012	S-104	WALL TIE-BACK SECTION
013	S-105	WALL TIE-BACK SECTION
014	S-106	ELEVATION OF SOUTHWEST FACE
015	S-107	SITE PHOTO 1 APPROXIMATE EPOXY INJECTED CRACK REPAIR LOCATIONS
016	S-108	SITE PHOTO 2 CONCRETE SPALL REPAIR
017	S-109	SITE PHOTO 3 CONCRETE SPALL REPAIR
018	S-110	DETAILS

RECLAMATION DISTRICT NO 108 OUTFALL GATES, KNIGHTS LANDING, YOLO CO, CAL.

019	-	GENERAL PLAN AND LOCATION
020	-	LOCK AND BRIDGE SUBSTRUCTURE DETAILS

APP.		OSFM #	
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING			
REV.	DESCRIPTION	SUB. DATE	APP. DATE

	DESIGNED: M. HUANG
	DRAWN: M. HUANG
	CHECKED: J. FONTAINE
	REVIEWED: YALING LIU
	SUBMITTED: YALING LIU

APPROVAL RECOMMENDED:	DATE:
 MANAGER, CIVIL I SECTION	6/10/2026
APPROVED:	DATE:
 MANAGER, CIVIL ENGINEERING BRANCH	6/11/2026

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
YOLO COUNTY - COLUSA DRAIN

KNIGHTS LANDING
OUTFALL GATES RETAINING
WALL REHABILITATION

GENERAL

LIST OF DRAWINGS AND GENERAL NOTES

SPEC. NO. 26-05	SHEET NO. 002	DRAWING NO. G-102
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A

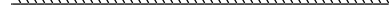
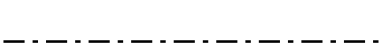
B

C

D

E

SYMBOLS	
°	DEGREE
'	MINUTES OR FEET
"	SECONDS OR INCHES
&	AND
±	PLUS OR MINUS
	SIGN
	TREE
	SURVEY CONTROL POINT
	UTILITY POLE
	FLOW DIRECTION
	ORIGINAL GRADE

LEGEND		
	FENCE	 (E) MAJOR CONTOUR
	SHORING	 (E) MINOR CONTOUR
	(E) OVERHEAD UTILITY	 (E) LEVEE EASEMENT
	STAGING AREA	 EXCAVATED AREA
	ORIGINAL EARTH	 CLEARING AND GRUBBING AREA

ABBREVIATIONS	
AB	AGGREGATE BASE
APPROX	APPROXIMATE
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CONC	CONCRETE
CY	CUBIC YARD
DWG(S)	DRAWING(S)
(E)	EXISTING
E	EAST
EL / ELEV	ELEVATION
FT	FEET
H	HORIZONTAL
HSS	HOLLOW STRUCTURAL SECTION
KLOG	KNIGHTS LANDING OUTFALL GATES
L	LENGTH
MAX	MAXIMUM
MIN	MINIMUM
N	NORTH
NO.	NUMBER
OC	ON CENTER
OD	OUTSIDE DIAMETER
OG	ORIGINAL GROUND
PIP	PROTECT IN PLACE
REQ	REQUIRED
RD	ROAD
S	SLOPE / SOUTH
SQ	SQUARE
SQFT	SQUARE FEET
TYP	TYPICAL
V / VERT	VERTICAL

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APP.		OSFM #					
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING							
REV.	DESCRIPTION	SUB.	APP. DATE				

	DESIGNED: M. HUANG
	DRAWN: M. HUANG
	CHECKED: J. FONTAINE
	REVIEWED: YALING LIU
	SUBMITTED: YALING LIU

APPROVAL RECOMMENDED:	DATE:
	6/10/2026
MANAGER, CIVIL I SECTION	
APPROVED:	DATE:
	6/11/2026
MANAGER, CIVIL ENGINEERING BRANCH	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
YOLO COUNTY - COULISA DRAIN

KNIGHTS LANDING
OUTFALL GATES RETAINING
WALL REHABILITATION

GENERAL

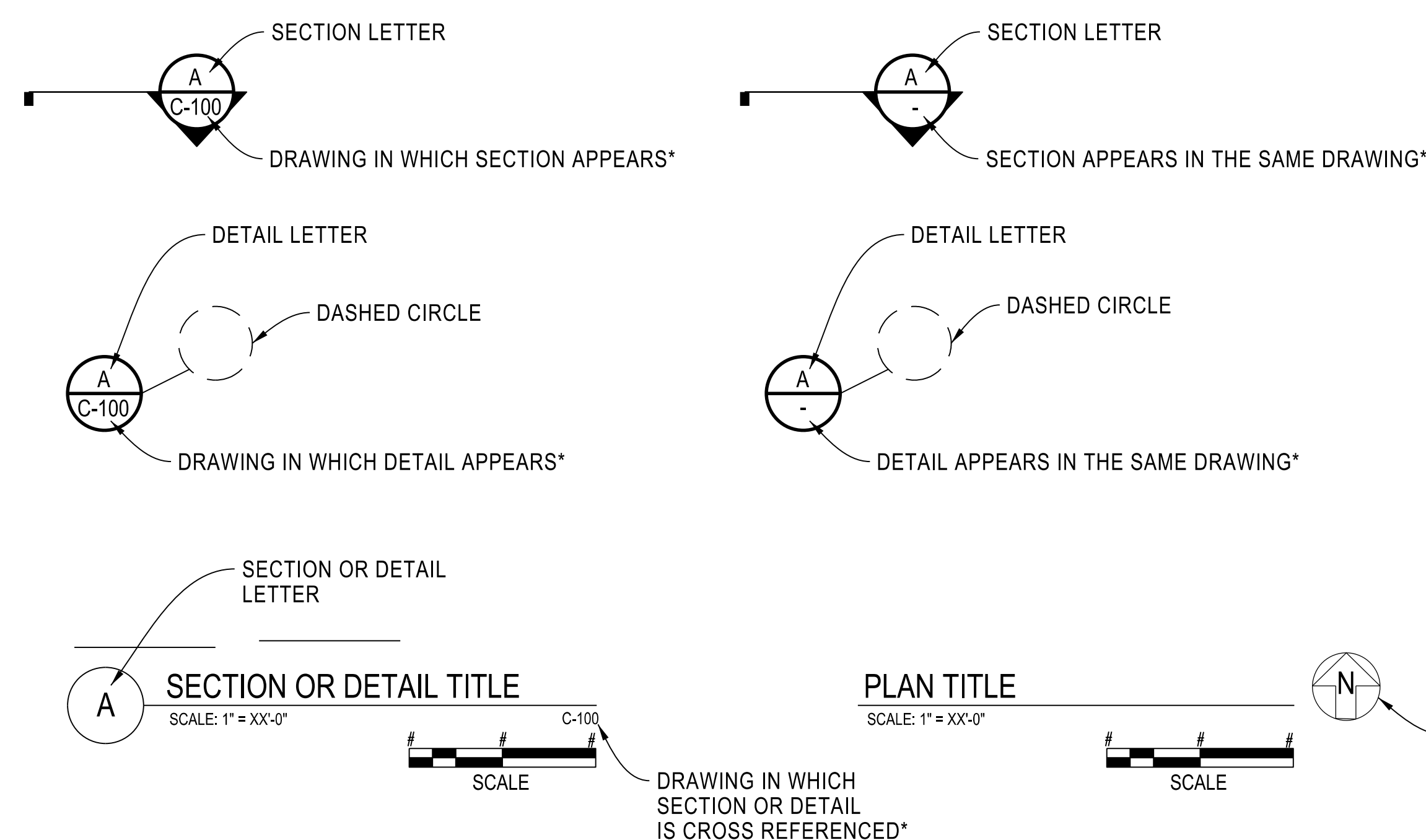
SYMBOLS, LEGEND
& ABBREVIATIONS

SPEC. NO. 26-05	SHEET NO. 003	DRAWING NO. G-103
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PLOT DATE: 29-MAY-2026

CROSS REFERENCING OF SECTIONS AND DETAILS

*IF SECTION OR DETAIL APPEARS ON THE SAME DRAWING AS THE CALLOUT, THE DRAWING REFERENCE IS REPLACED WITH A DASH (-).



1. CONTRACTOR SHALL PROTECT IN PLACE EXISTING TREES NOT IDENTIFIED FOR CUTTING OR TRIMMING ON SITE PLAN DWG C-101, AS WELL AS OVERHEAD UTILITIES & POSTS, GATES, FENCES AND EXISTING BUILDINGS LOCATED ALONG THE ACCESS ROUTES.

**THINK SAFETY
ACT SAFELY**

APP.

OSFM #	
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STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF
WATER RESOURCES
DIVISION OF ENGINEERING

REV

DESCRIPTION

SUB.	A
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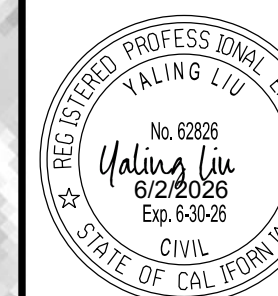
DESIGNED:	M. HUANG
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DRAWN:
M. HUANG

CHECKED:
J. FONTAINE

REVIEWED:
YALING LIU

SUBMITTED:
YAI ING LIU



APPROVAL RECOMMENDED:

DATE: _____

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01100000

APPROVED:

DATE: _____

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CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
YOLO COUNTY - COLUSA DRAIN

KNIGHTS LANDING
OUTFALL GATES RETAINING
WALL REHABILITATION

GENERAL

GENERAL PLAN

SPEC. NO.
26-05

SHEET NO.
004

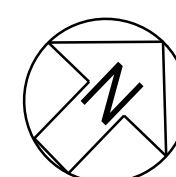
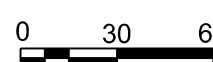
DRAWING NO.
G-104

PLOT DATE: 29-MAY-2026



GENERAL PLAN

SCALE: 1" = 60'-0"



1. THE ACCESS ROUTES SHOWN ARE APPROXIMATE
SEE TEMPORARY TRAFFIC CONTROL SPEC
SECTION.

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

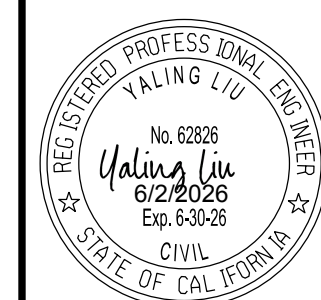
DESIGNED:	M. HUANG
-----------	----------

DRAWN:
M. HUANG

CHECKED:
J. FONTAIN

REVIEWED:
YALING LIU

SUBMITTED:
YALING LIU



APPROVAL RECOMMENDED: _____ DATE _____

6/10/20

APPROVED: _____ DATE _____

[Signature] 6/11/20

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
YOLO COUNTY - COLUSA DRAIN

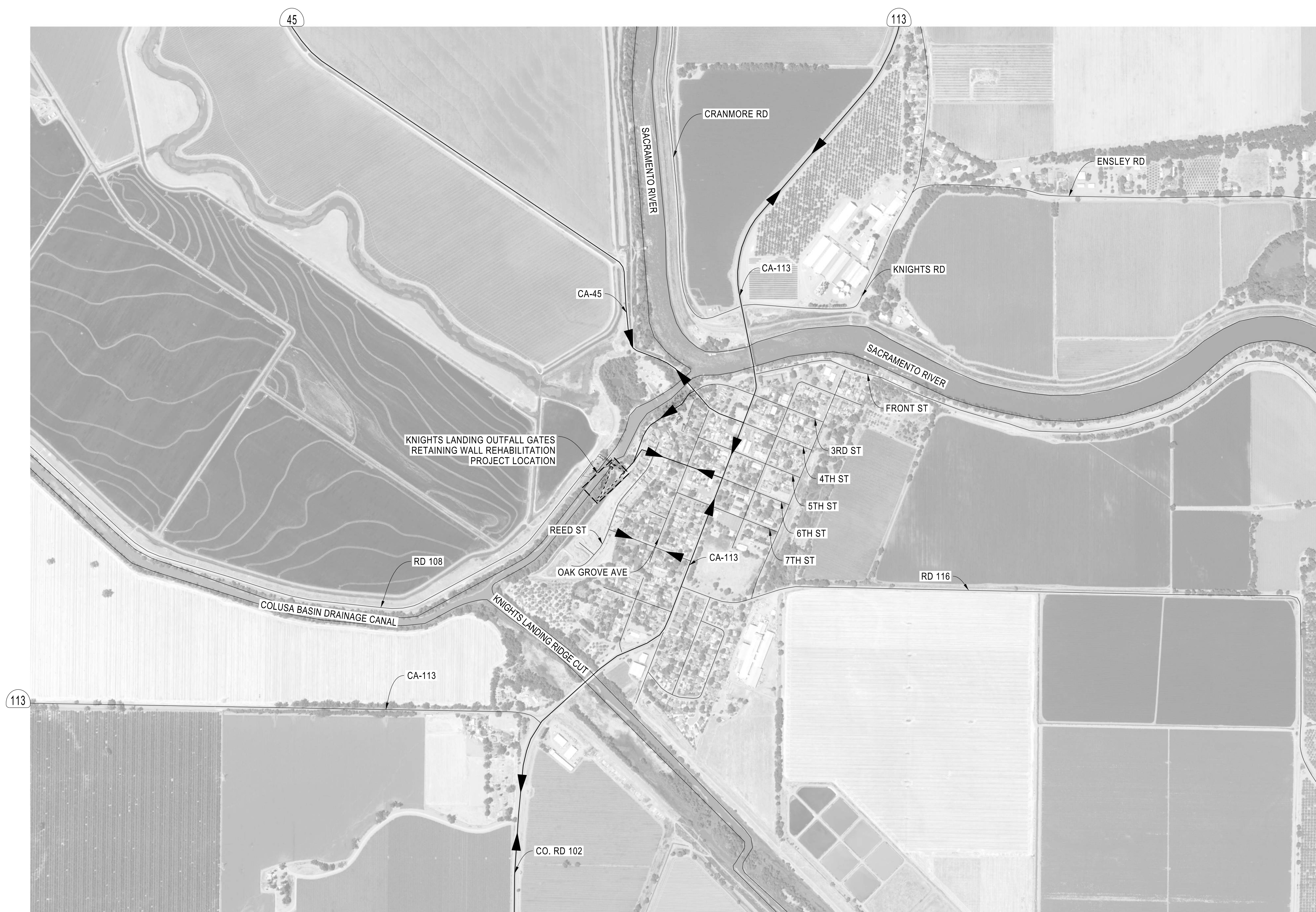
KNIGHTS LANDING
OUTFALL GATES RETAINING
WALL REHABILITATION

GENERAL

ACCESS ROUTE OVERVIEW

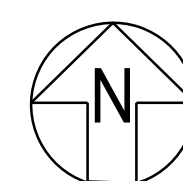
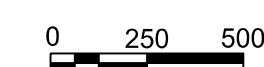
SPEC. NO. 26-05	SHEET NO. 005	DRAWING NO. G-105
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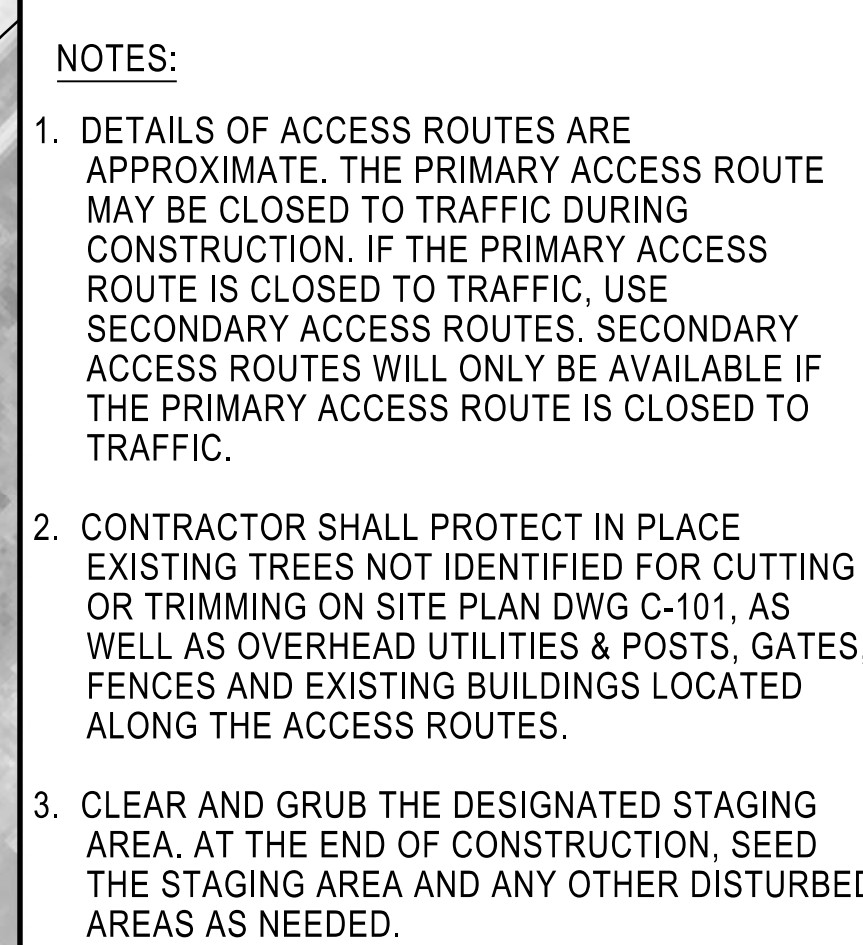
PLOT DATE: 29-MAY-2026



ACCESS ROUTE OVERVIEW

SCALE: 1" = 500'-0"



E

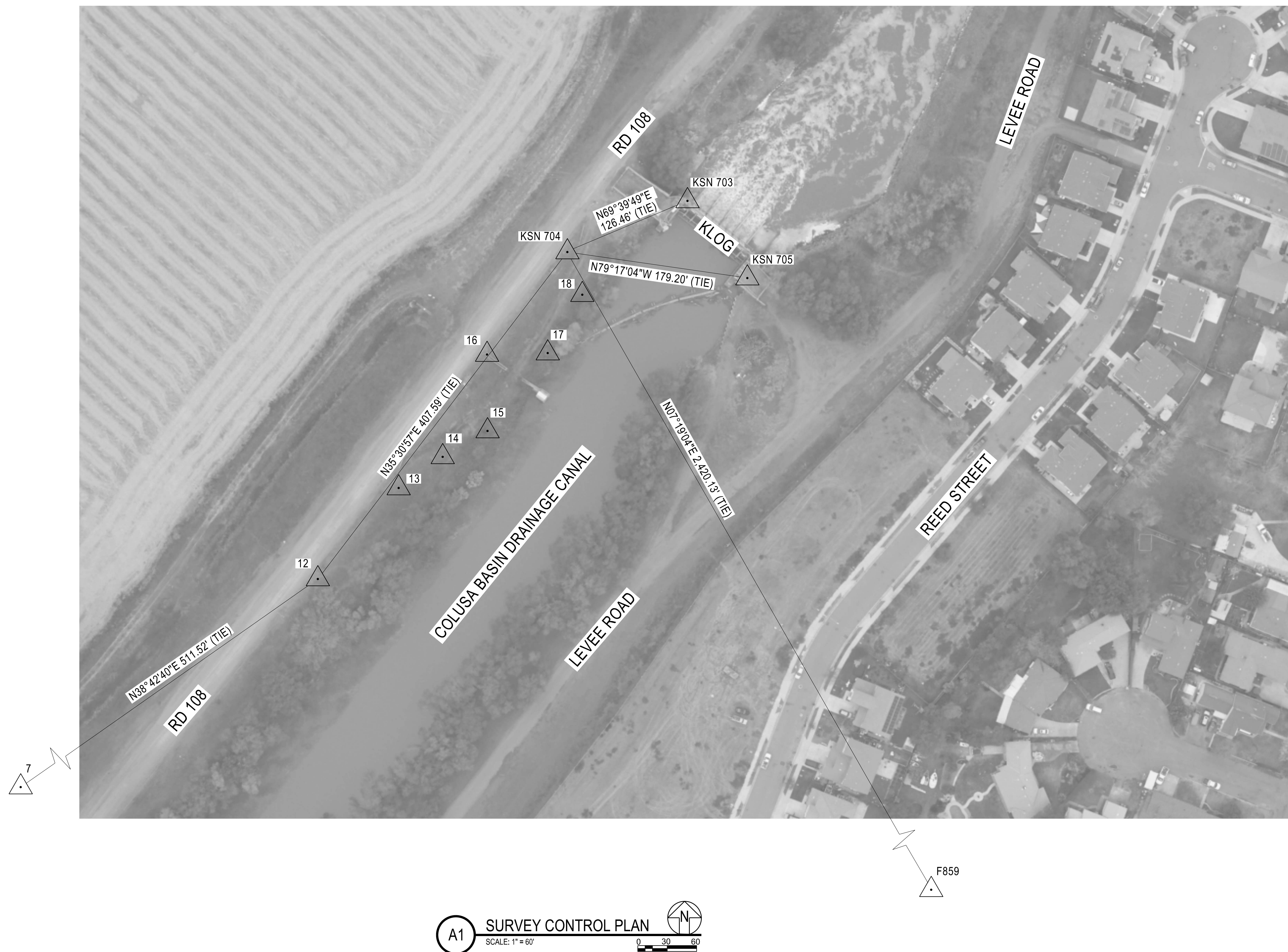
**THINK SAFETY
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[illegible]

SURVEY CONTROL POINT TABLE

POINT ID	NORTHING (FT)	EASTING (FT)	ELEVATION (FT)	DESCRIPTION	COMBINED SCALE FACTOR	PROJECTION SCALE FACTOR	HEIGHT SCALE FACTOR	CONVERGENCE ANGLE
7(1)(2)	2052342.77	6639319.77	38.49	REY CONTROL REBAR WITH CAP	0.999930073	0.999927173	1.000002901	0°10'18.4"
12(2)	2052741.91	6639639.67	41.09	REY CONTROL REBAR WITH CAP	0.999923854	0.999927078	1.000002777	0°10'21.0"
13(2)	2052834.73	6639699.85	45.26	REY CONTROL REBAR WITH CAP	0.999929633	0.999927056	1.000002578	0°10'21.5"
14(2)	2052861.81	6639742.76	38.93	REY CONTROL REBAR WITH CAP	0.999929929	0.999927049	1.000002881	0°10'21.8"
15(3)	2052895.10	6639789.82	34.46	REY CONTROL REBAR WITH CAP	0.999930136	0.999927041	1.000003095	0°10'22.2"
18(2)	2053034.93	6639892.25	35.79	REY CONTROL REBAR WITH CAP	0.999930039	0.999927008	1.000003031	0°10'23.0"
F859(1)(2)	2050673.25	6639568.19	45.40	NGS DISK IN CONC F859 RESET 1993 EPOCH 2021.3000	0.999930148	0.999927575	1.000002573	0°10'20.4"
KSN 704(2)	2053073.67	6639876.45	45.82	REBAR WITH CAP KSN SURVEY CONTROL	0.999929550	0.999926999	1.000002551	0°10'22.9"
SITE CONTROL								
16	2052962.68	6639789.44	46.99	REY CONTROL REBAR WITH CAP	0.999929521	0.999927025	1.000002496	0°10'22.2"
17	2052953.72	6639842.01	31.39	REY CONTROL REBAR WITH CAP	0.999930267	0.999927027	1.000003240	0°10'22.6"
KSN 703	2053117.62	6639995.03	45.95	COPPERHEAD-1/2IN COPPER ROD W/PUNCH	0.999929535	0.999926989	1.000002547	0°10'23.8"
KSN 705	2053040.35	6640052.53	43.98	MAG NAIL WITH WASHER KSN SURVEY CONTROL	0.999929648	0.999927007	1.000002641	0°10'24.3"

NOTE:
 (1) = NGS CORS POINT AND PROJECT CONTROL POINT NOT SHOWN ON MAP AS THEY ARE LOCATED WELL BEYOND LIMITS OF VIEW
 (2) = NGS CORS POINT AND PROJECT CONTROL POINTS HELD HORIZONTALLY AND VERTICALLY IN FULLY CONSTRAINED NETWORK ADJUSTMENT
 (3) = NGS CORS POINT AND PROJECT CONTROL POINTS HELD HORIZONTALLY ONLY IN FULLY CONSTRAINED NETWORK ADJUSTMENT
 (BPC 8726(f), PRC 8813.3, 8815.1, 8815.5)



BASIS OF BEARING AND COORDINATES

HORIZONTAL COORDINATES, BEARINGS AND DISTANCES ARE BASED ON THE NORTH AMERICAN DATUM 1983, NAD83(2011) CSRC CGPS EPOCH 2021.3000, CALIFORNIA STATE PLANE COORDINATE SYSTEM 1983 (CCS83) ZONE 2, U.S. SURVEY FOOT. COORDINATES SHOWN ARE BASED ON THE CONTROL POINTS LISTED IN CONTROL TABLE BELOW. DISTANCES SHOWN HEREON ARE GRID, TO CONVERT TO GROUND DIVIDE BY AVERAGE COMBINED SCALE FACTOR OF 0.99992992.
(BPC 8726(ft), PRC 8813.3, 8815.1, 8815.5)

VERTICAL COORDINATE DATUM

THE ELEVATIONS ESTABLISHED IN THIS SURVEY ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88, AS DERIVED FROM APPLYING GEOID18 TO NAD83(2011) CSRC CGPS EPOCH 2021.3000 ELLIPSOID HEIGHTS. UNITS ARE IN U.S. SURVEY FOOT.
(BPC 8726(f), PRC 8890-8902)

SURVEY CONTROL ACCURACY

DWR ABSOLUTE SURVEY CONTROL HORIZONTAL ACCURACY AT 95%
CONFIDENCE LEVEL: 0.035 US FEET

DWR ABSOLUTE SURVEY CONTROL VERTICAL ACCURACY AT 95%
CONFIDENCE LEVEL: 0.070 US FEET

REFERENCE: TRIMBLE BUSINESS CENTER NETWORK ADJUSTMENT
REPORT

NOTE

SEE DEPARTMENT OF WATER RESOURCES SURVEY REQUEST
SR23-26 KLOG KNIGHTS LANDING OUTFALL GATE
FOR COMPLETE PROJECT CONTROL AND MONUMENTATION DATA.

PROFESSIONAL LAND SURVEYOR'S STATEMENT

THIS SUBJECT SURVEY, REPORT AND DATA DELIVERABLES WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE PROVISIONS OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE §8700-8805 (LAND SURVEYORS' ACT), AND THE CALIFORNIA PUBLIC RESOURCES CODE § 8801-8819 STATE PLANE COORDINATES, § 8850- 8861 GEODETIC DATUMS, § 8870- 8880 GEODETIC COORDINATES, AND § 8890-8892 HEIGHTS.

MONUMENT PRESERVATION

BPC 8771 (a)-(f) and 8773.3
THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH CALIFORNIA BUSINESS AND PROFESSIONS CODE 8771 TO ENSURE THAT ALL EXISTING SURVEY CONTROL AND MONUMENTS WITHIN THE BOUNDS OF THE PERMITTED CONSTRUCTION ARE PROTECTED. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL DESIGNATE A LICENSED LAND SURVEYOR OR A PROFESSIONAL CIVIL ENGINEER AUTHORIZED TO PERFORM LAND SURVEYING IN THE STATE OF CALIFORNIA AS THE PERSON RESPONSIBLE FOR COMPLIANCE. ANY EXISTING SURVEY CONTROL OR MONUMENT SHOWN ON THE PLAT NOT SHOWN HEREIN MUST BE PRESERVED, REFERENCED, OR REPLACED, AND THE CONTRACTOR IS RESPONSIBLE FOR FILING OF ANY REQUIRED CORNER RECORD(S) OR RECORD(S) OF SURVEY.

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APP.		OSFM #					
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING							
REV.	DESCRIPTION		SUB.	APP.			
			DATE				

	DESIGNED: RYAN MICHALAK
	DRAWN: RYAN MICHALAK
	CHECKED: TIMOTHY CASE
	REVIEWED: A. SQUELLATI
	SUBMITTED: A. SQUELLATI

APPROVAL RECOMMENDED: _____ DATE _____

NOT APPLICABLE

APPROVED: _____ DATE: _____

Patrick Tami 6/10/20
MANAGER, GEOMATICS BRANCH, P.L.S. 58

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
YOLO COUNTY - COLUSA DRAIN

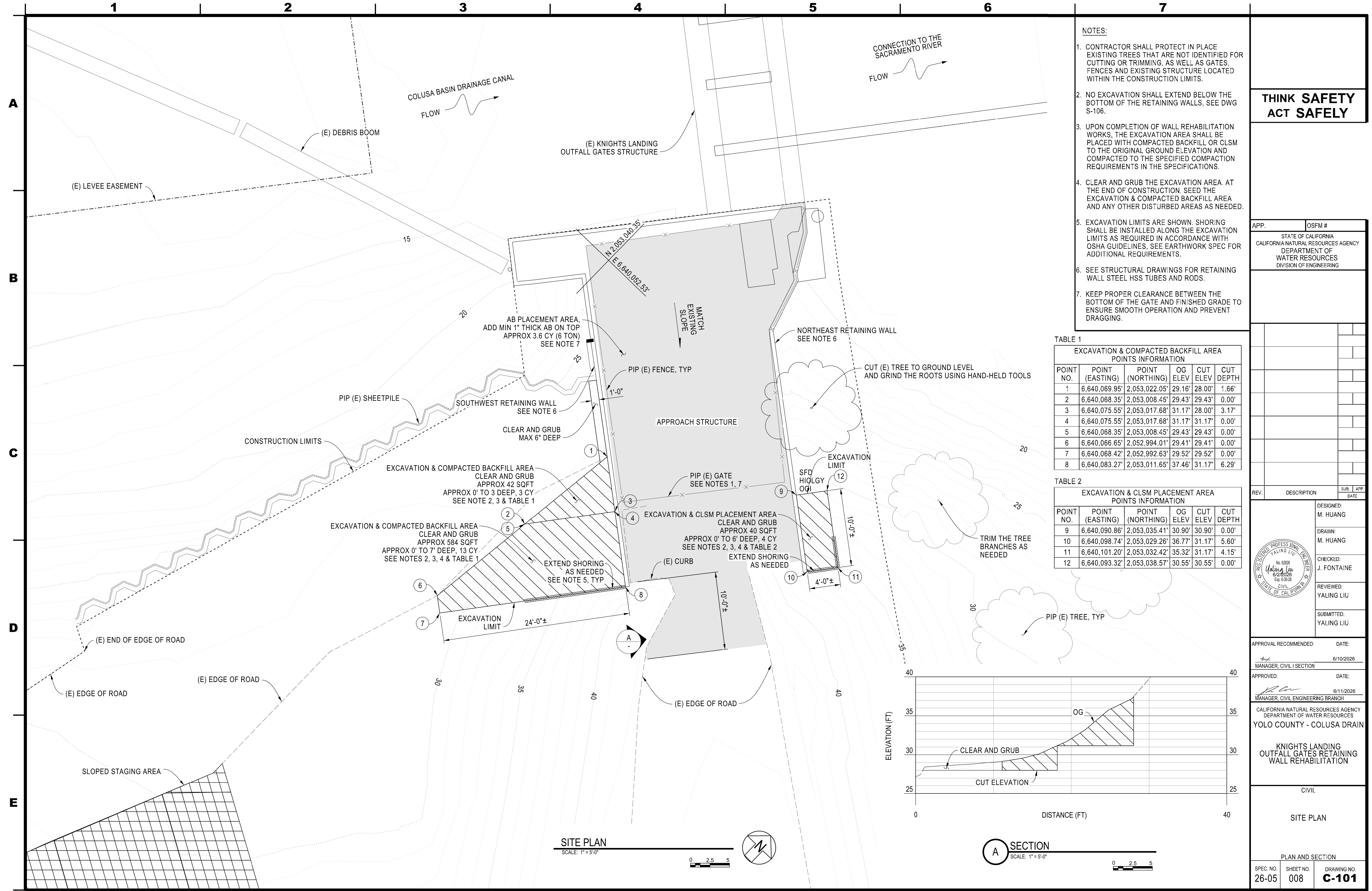
KNIGHTS LANDING OUTFALL GATES RETAINING WALL REHABILITATION

SURVEY/MAPPING

SURVEY CONTROL PLAN

SPEC. NO. 26-05	SHEET NO. 007	DRAWING NO. V-101
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PLOT DATE: 29-MAY-2026



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APP. OSFM #
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF
WATER RESOURCES
DIVISION OF ENGINEERING

DESIGNED:
M. HUANG
DRAWN:
M. HUANG
CHECKED:
J. FONTAINE
REVIEWED:
YALING LIU
SUBMITTED:
YALING LIU

APPROVAL RECOMMENDED: DATE:
MANAGER, CIVIL SECTION 6/10/2026

APPROVED: DATE:
MANAGER, CIVIL ENGINEERING BRANCH 6/11/2026

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
YOLO COUNTY - COLUSA DRAIN

KNIGHTS LANDING
OUTFALL GATES RETAINING
WALL REHABILITATION

CIVIL
SITE PLAN

PLAN AND SECTION
SPEC. NO. SHEET NO. DRAWING NO.
26-05 008 C-101

PLOT DATE: 29-MAY-2026

STRUCTURAL ABBREVIATIONS

- ASC = AMERICAN INSTITUTE OF STEEL CONSTRUCTION
 ASTM = AMERICAN SOCIETY FOR TESTING AND MATERIALS
 BO = BOTTOM OF
 C/L / C = CENTERLINE
 CLR = CLEAR
 DEV = DEVELOPMENT
 DWG = DRAWING
 DWR = DEPARTMENT OF WATER RESOURCES
 (E) = EXISTING
 E.F. = EACH FACE
 EL = ELEVATION
 EMBED = EMBEDMENT
 EQ = EQUAL
 ETC = ETCETERA
 EW = EACH WAY
 FF = FINISHED FLOOR
 HORIZ = HORIZONTAL
 HR = HOUR
 HSS = HOLLOW STRUCTURAL SECTION
 I.F. = INSIDE FACE
 IN (") = INCH
 INFO = INFORMATION
 Kip = 1,000 POUNDS
 LB = POUNDS
 LW = LIGHT WEIGHT
 MANUF = MANUFACTURER
 MAX = MAXIMUM
 MB = MACHINE BOLT
 MIN = MINIMUM
 MPH = MILES PER HOUR
 (N) = NEW
 NTS = NOT TO SCALE
 OC = ON CENTER
 O.D. = OUTER DIAMETER
 O.F. = OUTSIDE FACE
 PGA = PEAK GROUND ACCELERATION
 PL = PLATE
 REBAR = REINFORCING STEEL BAR
 REQ'D = REQUIRED
 SAD = SEE ARCHITECTURAL DRAWING
 SMS = SHEET METAL SCREW
 SOG = SLAB ON GRADE
 SST = STAINLESS STEEL
 STL = STEEL
 T.O. = TOP OF
 TYP = TYPICAL
 UNO = UNLESS NOTED OTHERWISE
 VERT = VERTICAL
 WHS = WELDED HEADED STUD

VI. STRUCTURAL STEEL WELDING

1. USE THE MINIMUM SIZE OF WELDING IN ACCORDANCE WITH AISC MANUAL OF STEEL CONSTRUCTION AT STEEL TO STEEL JOINTS UNLESS A LARGER WELDING SIZE IS SPECIFIED ON THE PLANS.
2. WHERE LENGTH OF WELDING IS NOT SHOWN, IT SHALL BE FULL LENGTH OF JOINT. ALL BUTT WELDS SHALL BE COMPLETE PENETRATION WELDS UNLESS OTHERWISE NOTED.
3. WHERE FIELD WELDING IS NOTED, THE DESIGNATION IS GIVEN AS A SUGGESTED CONSTRUCTION PROCEDURE ONLY.
4. ARC-WELDING ELECTRODES/FILLER METALS SHALL BE LOW HYDROGEN TYPES E70XX MINIMUM AS APPLICABLE.
5. ALL COMPLETE AND PARTIAL PENETRATION WELDS WHICH ARE EXPOSED TO VIEW SHALL BE GROUND SMOOTH AND FLUSH WITH FINISH SURFACE OF STEEL. HOLES SHALL BE FILLED WITH WELD METAL AND SMOOTHED BY GRINDING OR FILING.
6. EACH FLANGE OF A MOMENT FRAME BEAM TO COLUMN CONNECTION SHALL BE WELDED IN ONE CONTINUOUS PROCESS WITHOUT COOLING BELOW THE PRE-HEAT TEMPERATURE.

1. LOCATE AND PROTECT EXISTING UTILITIES TO REMAIN DURING AND/OR AFTER CONSTRUCTION.

1. REMOVE ABANDONED FOOTINGS, UTILITIES, ETC. WHICH INTERFERE WITH NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED.
2. SCARIFY AND RECOMPACT TOP 6 INCHES OF SOIL BENEATH FILL PER EARTHWORK SPECIFICATIONS.

1. REINFORCING SHALL BE FABRICATED ACCORDING TO THE "MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION" AND SHALL CONFORM TO ASTM A615, GRADE 60.
2. PROVIDE REINFORCING SHOWN OR NOTED CONTINUOUS IN LENGTHS AS LONG AS PRACTICABLE.
3. FIELD BENDING OF REINFORCING STEEL SHALL NOT BE ALLOWED UNLESS APPROVED BY THE ENGINEER.

OSFM

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

[illegible]

	DESIGNED: C. FARNES
	DRAWN: E. ELLEDGE
	CHECKED: J. MYERS
	REVIEWED: C. FARNES
	SUBMITTED: C. FARNES

APPROVAL RECOMMENDED: Alutan Selladurai DATE: 6/10/2026
MGR., STRUCT. SEC. II, Reg. C.E. No. 77011

APPROVED: *Arthur Carlton* DATE: 6/11/2026
MGR., STRUCT. ENG. BR., Reg. C.E. No. 37954

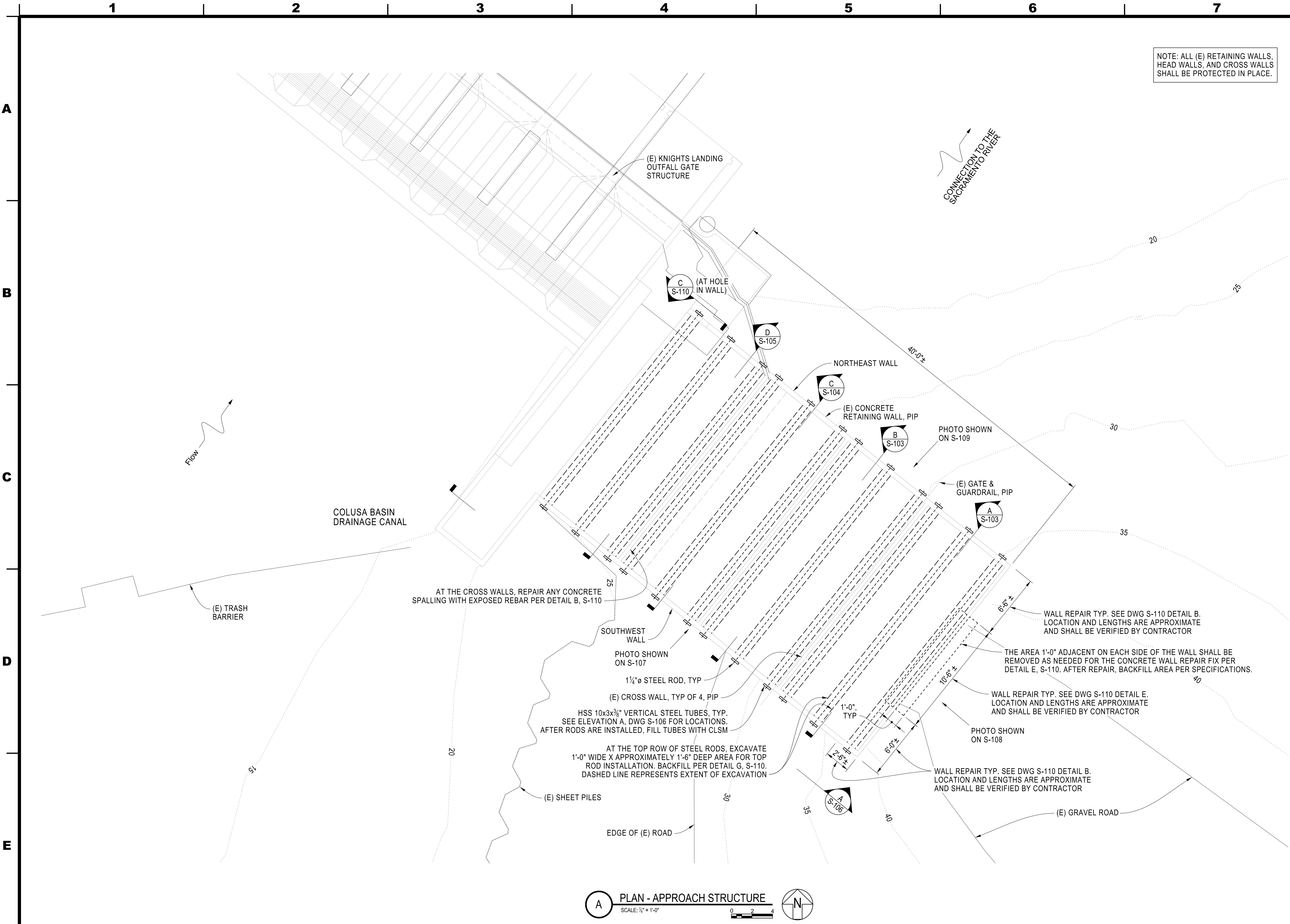
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
YOLO COUNTY - COLUSA DRAIN

KNIGHTS LANDING
OUTFALL GATES RETAINING
WALL REHABILITATION

GENERAL

STRUCTURAL GENERAL NOTES

SPEC. NO.	SHEET NO.	DRAWING NO.
26-05	009	S-101



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STATE OF CALIFORNIA
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SUBMITTED:	C. FARNES		

APPROVAL RECOMMENDED: DATE:
MGR., STRUCT. SEC. II, Reg. C.E. No. 77011
APPROVED: DATE:
MGR., STRUCT. ENG. BR., Reg. C.E. No. 37954

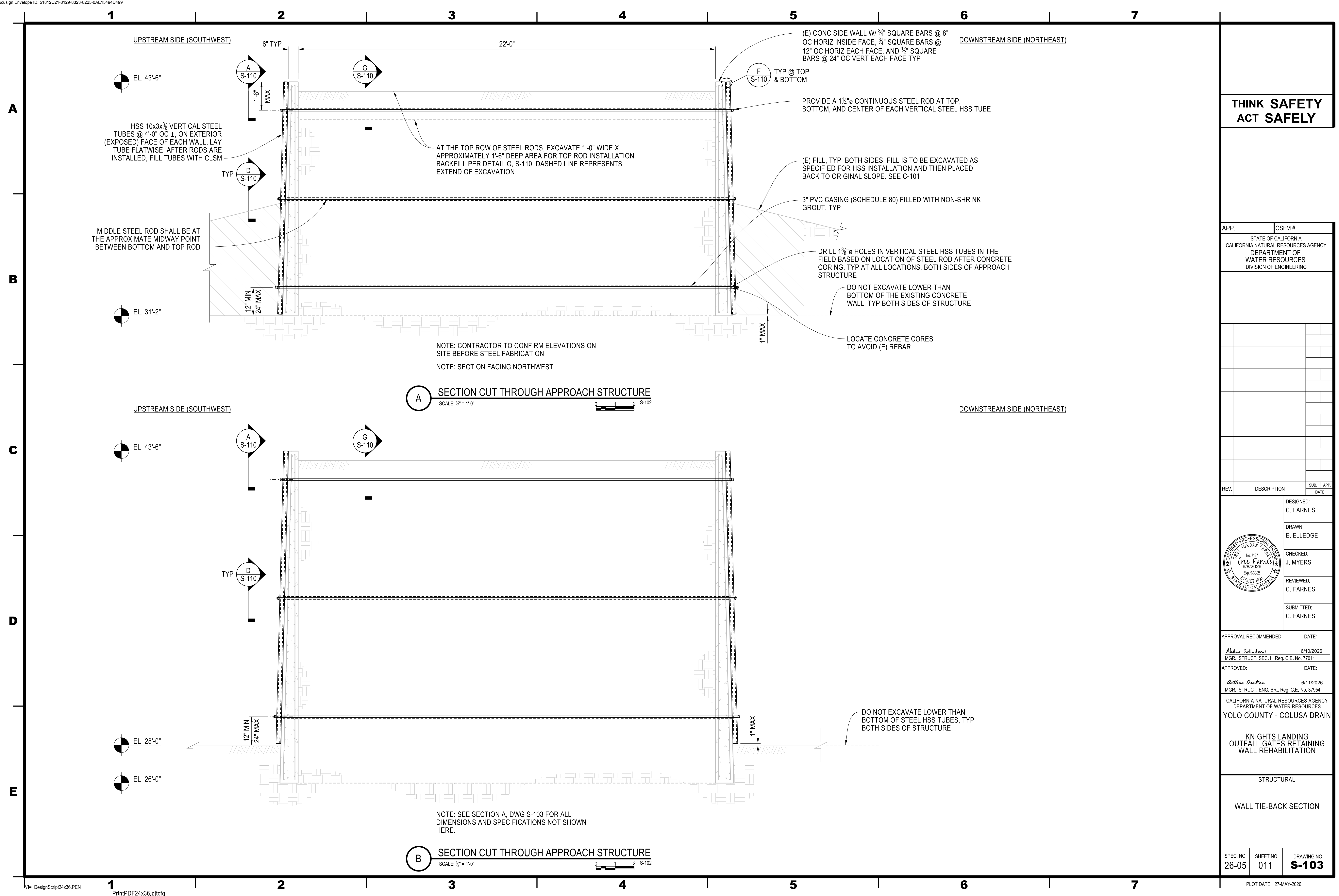
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
YOLO COUNTY - COLUSA DRAIN

KNIGHTS LANDING
OUTFALL GATES RETAINING
WALL REHABILITATION

STRUCTURAL
APPROACH STRUCTURE
RETAINING WALL PLAN

SPEC. NO. SHEET NO. DRAWING NO.
26-05 010 S-102

PLOT DATE: 27-MAY-2026



THINK SAFETY
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STATE OF CALIFORNIA
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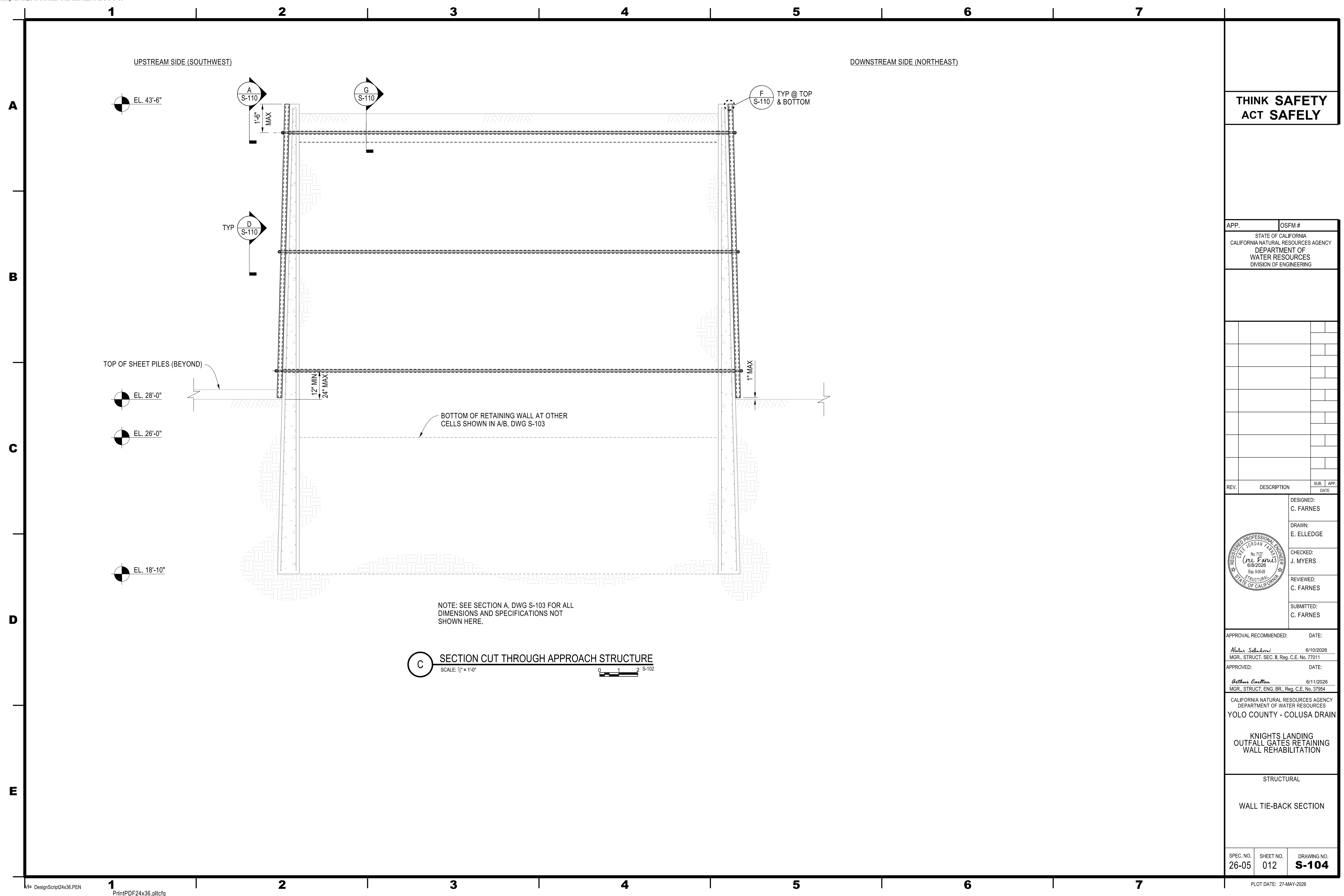
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CHECKED:	J. MYERS		
REVIEWED:	C. FARNES		
SUBMITTED:	C. FARNES		

APPROVAL RECOMMENDED:	DATE:
<i>Alvin Sella</i>	6/10/2026
MGR., STRUCT. SEC. II, Reg. C.E. No. 77011	
APPROVED:	DATE:
<i>Arthur Carlson</i>	6/11/2026
MGR., STRUCT. ENG. BR., Reg. C.E. No. 37954	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
YOLO COUNTY - COLUSA DRAIN

KNIGHTS LANDING
OUTFALL GATES RETAINING
WALL REHABILITATION

STRUCTURAL		
WALL TIE-BACK SECTION		
SPEC. NO. 26-05	SHEET NO. 011	DRAWING NO. S-103



THINK SAFETY
ACT SAFELY

APP. OSFM #
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF
WATER RESOURCES
DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE
DESIGNED:	C. FARNES		
DRAWN:	E. ELLEDGE		
CHECKED:	J. MYERS		
REVIEWED:	C. FARNES		
SUBMITTED:	C. FARNES		

APPROVAL RECOMMENDED: DATE:
MGR., STRUCT. SEC. II, Reg. C.E. No. 77011
APPROVED: DATE:
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CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
YOLO COUNTY - COLUSA DRAIN
KNIGHTS LANDING
OUTFALL GATES RETAINING
WALL REHABILITATION

STRUCTURAL
WALL TIE-BACK SECTION

SPEC. NO. SHEET NO. DRAWING NO.
26-05 012 S-104

PLOT DATE: 27-MAY-2026

PLOT DATE: 27-MAY-2026





CRACKS SHOWN ON THIS SHEET ARE PROVIDED AS A REPRESENTATIVE SAMPLE OF CRACK INJECTION REQUIREMENTS. THIS IS NOT INTENDED TO BE ALL AREAS THAT REQUIRE INJECTION. CONTRACTOR IS TO CONFIRM ON SITE WITH ENGINEER ALL LOCATIONS THAT NEED EPOXY INJECTED CRACK REPAIR.

NOTE: PHOTO FACING NORTH

A PHOTO OF SOUTHWEST WALL
NOT TO SCALE

**THINK SAFETY
ACT SAFELY**

APP. OSFM #
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF
WATER RESOURCES
DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED:
C. FARNES
DRAWN:
E. ELLEDGE
CHECKED:
J. MYERS
REVIEWED:
C. FARNES
SUBMITTED:
C. FARNES

APPROVAL RECOMMENDED: DATE:
Alvin Sella 6/10/2026
MGR., STRUCT. SEC. II, Reg. C.E. No. 77011
APPROVED: DATE:
Arthur Carlson 6/11/2026
MGR., STRUCT. ENG. BR., Reg. C.E. No. 37954

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
YOLO COUNTY - COLUSA DRAIN
KNIGHTS LANDING
OUTFALL GATES RETAINING
WALL REHABILITATION

STRUCTURAL
SITE PHOTO 1
APPROXIMATE EPOXY INJECTED
CRACK REPAIR LOCATIONS

SPEC. NO. SHEET NO. DRAWING NO.
26-05 015 **S-107**

PLOT DATE: 29-MAY-2026

E

A PHOTO OF APPROACH STRUCTURE
NOT TO SCALE S-102

SPEC. NO. 26-05	SHEET NO. 016	DRAWING NO. S-108
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PLOT DATE: 29-MAY-2026

A

B

C

D

E



A

PHOTO OF NORTHEAST FACE

NOT TO SCALE

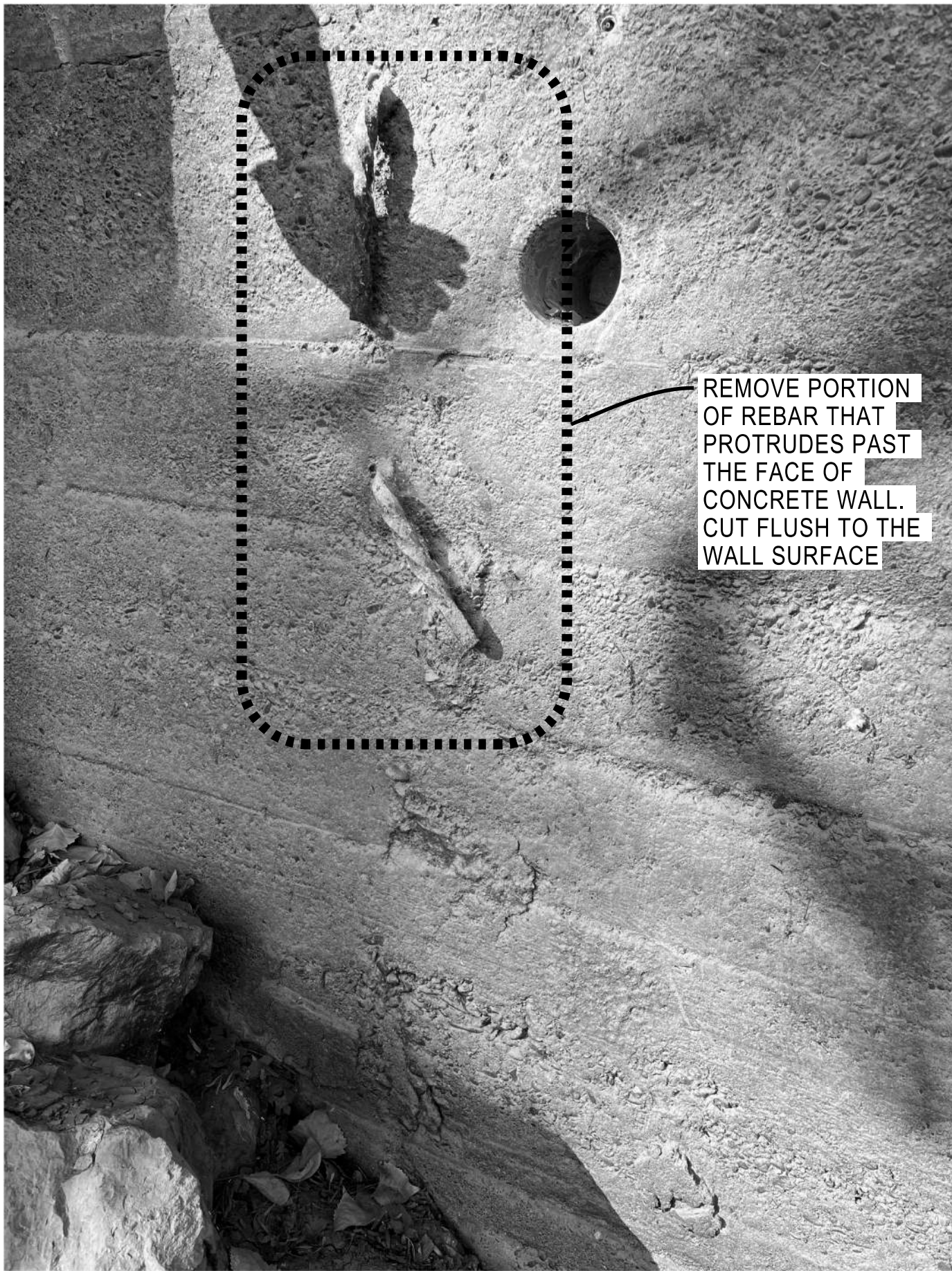
S-102



B

PHOTO OF OPENING

NOT TO SCALE



C

PHOTO OF REBAR

NOT TO SCALE

THINK SAFETY

ACT SAFELY

APP.

OSFM #

STATE OF CALIFORNIA

CALIFORNIA NATURAL RESOURCES AGENCY

DEPARTMENT OF

WATER RESOURCES

DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED:

C. FARNES

DRAWN:

E. ELLEDGE

CHECKED:

J. MYERS

REVIEWED:

C. FARNES

SUBMITTED:

C. FARNES

REGISTERED PROFESSIONAL ENGINEER

C. FARNES

No. 7127

6/8/2026

Exp. 5-30-28

STRUCTURAL

STATE OF CALIFORNIA

APPROVAL RECOMMENDED:

DATE:

6/10/2026

MGR., STRUCT. SEC. II, Reg. C.E. No. 77011

APPROVED:

DATE:

6/11/2026

MGR., STRUCT. ENG. BR., Reg. C.E. No. 37954

CALIFORNIA NATURAL RESOURCES AGENCY

DEPARTMENT OF WATER RESOURCES

YOLO COUNTY - COLUSA DRAIN

KNIGHTS LANDING

OUTFALL GATES RETAINING

WALL REHABILITATION

STRUCTURAL

SITE PHOTO 3

CONCRETE SPALL REPAIR

SPEC. NO.

26-05

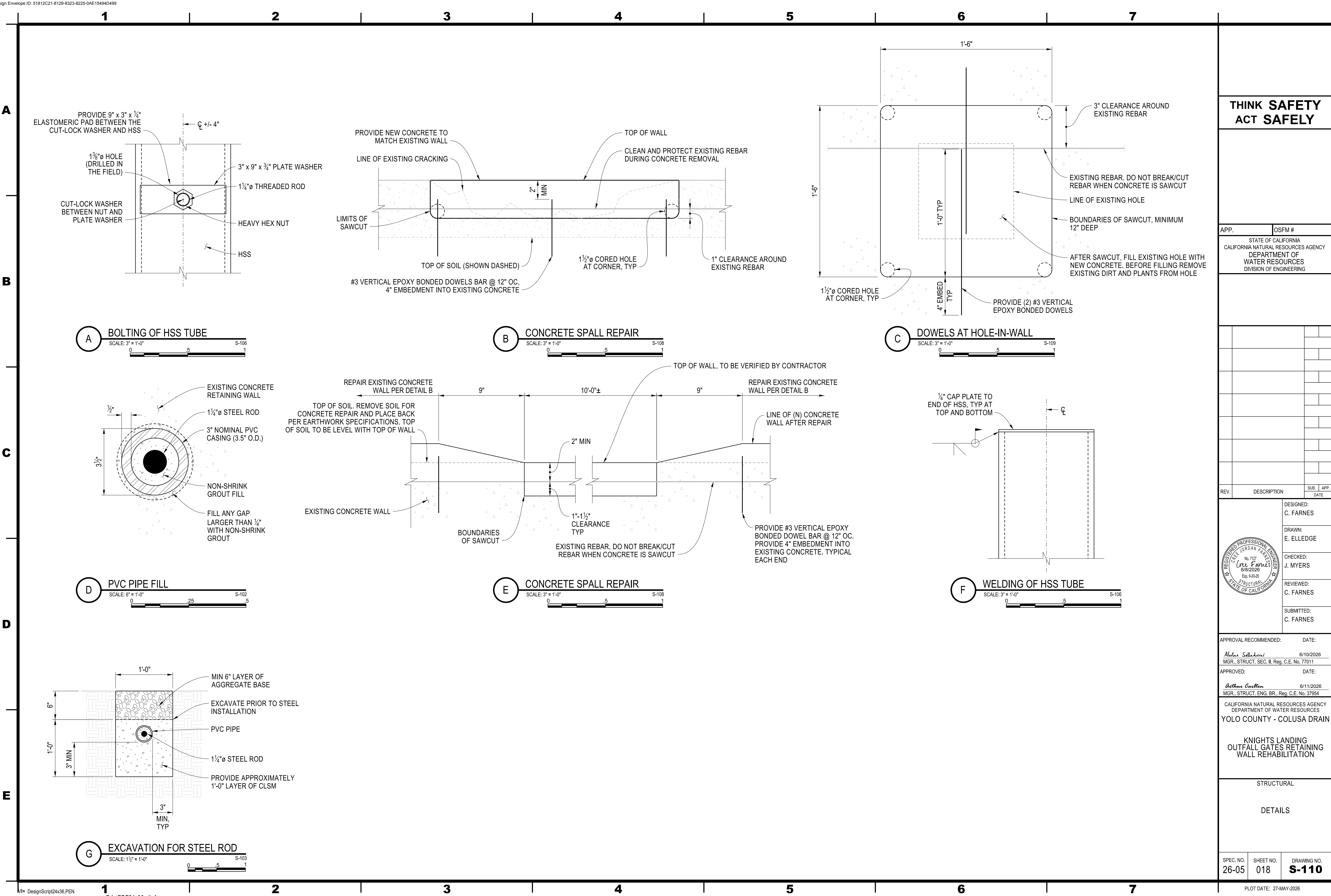
SHEET NO.

017

DRAWING NO.

S-109

PLOT DATE: 29-MAY-2026



THINK SAFETY
ACT SAFELY

APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE
DESIGNED: C. FARNES			
DRAWN: E. ELLEDGE			
CHECKED: J. MYERS			
REVIEWED: C. FARNES			
SUBMITTED: C. FARNES			

APPROVAL RECOMMENDED:	DATE:
<i>Alvin Sella</i>	6/10/2026
MGR., STRUCT. SEC. II, Reg. C.E. No. 77011	
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CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
YOLO COUNTY - COLUSA DRAIN

KNIGHTS LANDING
OUTFALL GATES RETAINING
WALL REHABILITATION

STRUCTURAL

DETAILS

SPEC. NO. 26-05	SHEET NO. 018	DRAWING NO. S-110
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PLOT DATE: 27-MAY-2026

