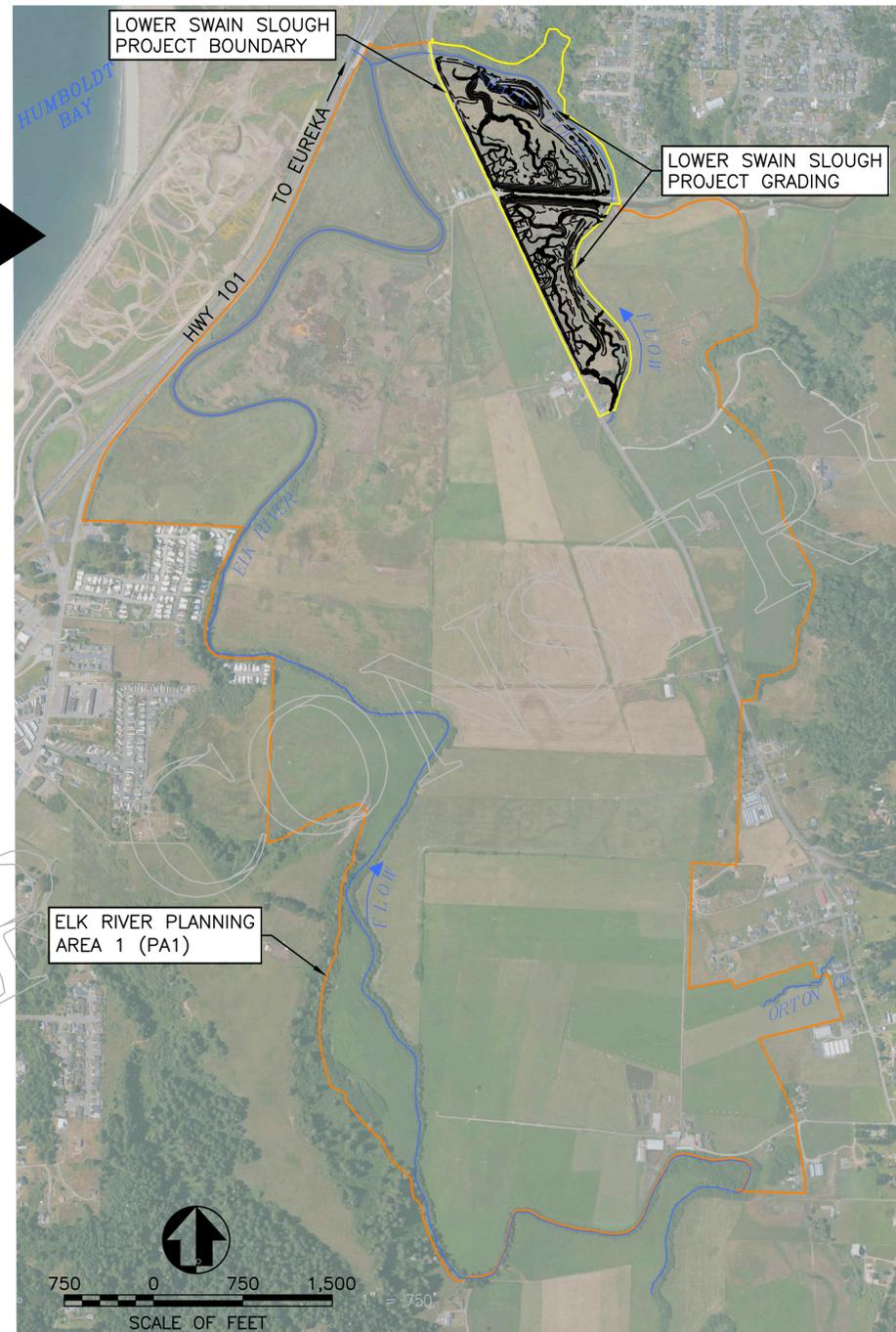


# ELK RIVER PLANNING AREA 1 65% DESIGN: LOWER SWAIN SLOUGH PERMIT SET HUMBOLDT COUNTY, CALIFORNIA



## SHEET INDEX

CIVIL SHEETS		
1	G1	COVER
2	G2	EXISTING CONDITIONS
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12	C9	ISOPACH 2
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Plotted: 10/8/2025 12:25 PM - By: LICENSED USER - R17.1 - File: 03\_LOWER-SWAIN-PRELIM-65PER-DRAFT-G1-COVER

NOT FOR CONSTRUCTION

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF JEFFREY K. ANDERSON P.E. LICENSE # 50713

ELK PA-1 65% DESIGN: PERMIT SET



**Northern  
Hydrology &  
Engineering**

- Engineering
- Hydrology
- Geomorphology
- Water Resources

PO BOX 2515, MCKINLEYVILLE, CA 95519 (707) 839-2195

DESIGNED:  
NHE  
TC  
TECH. REVIEW:  
DATE:  
10/08/2025

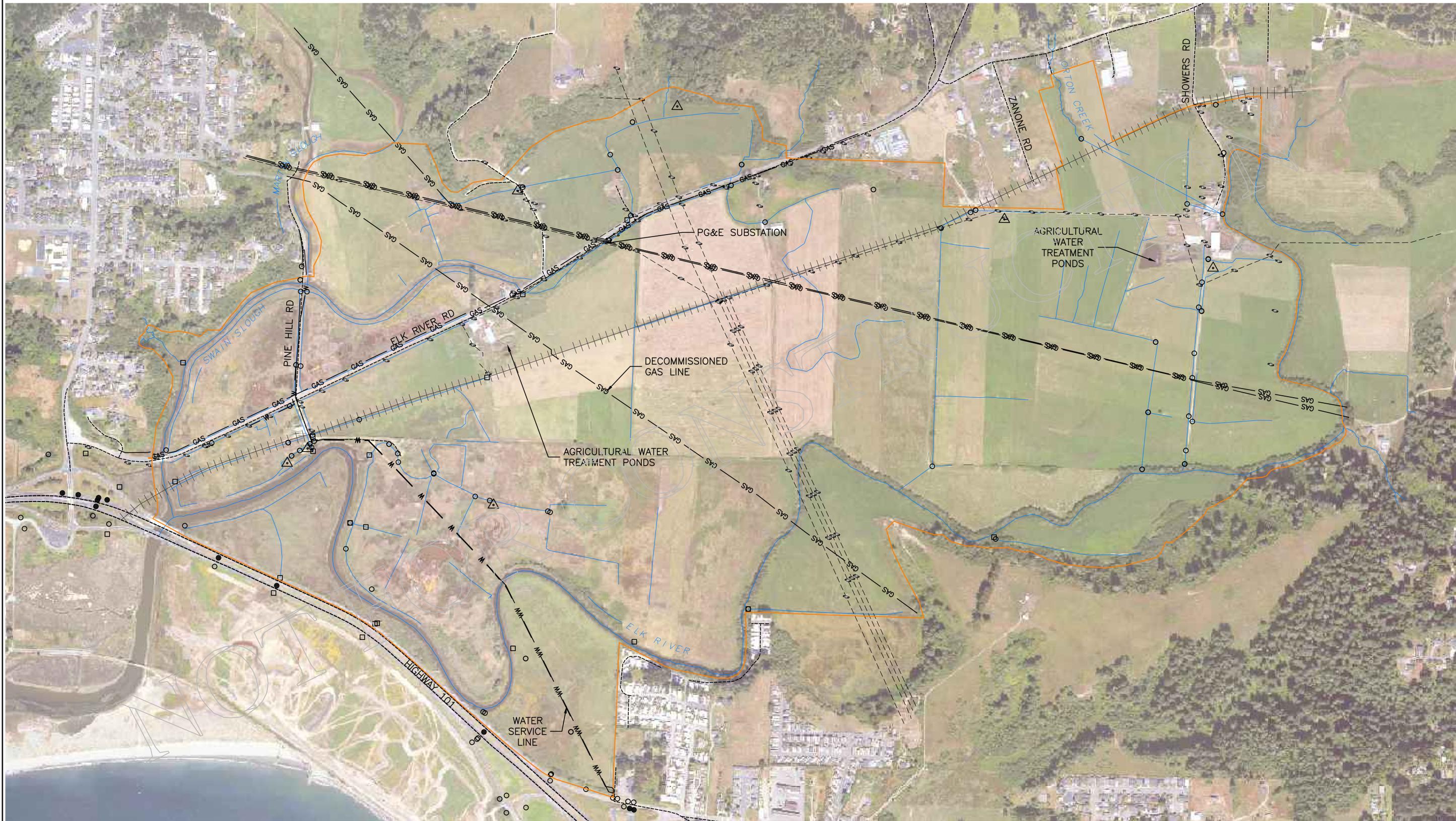
SUB SHEET NO.  
**G1**

TITLE OF SHEET  
**COVER  
LOWER SWAIN SLOUGH  
PROJECT**

HUMBOLDT COUNTY, CA

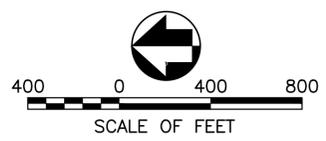
SHEET  
**1**  
OF  
**14**

Plotted: 10/14/2025 2:53 PM - By: LICENSED USER - R17.1 - File: G2-EXISTING-CONDITIONS



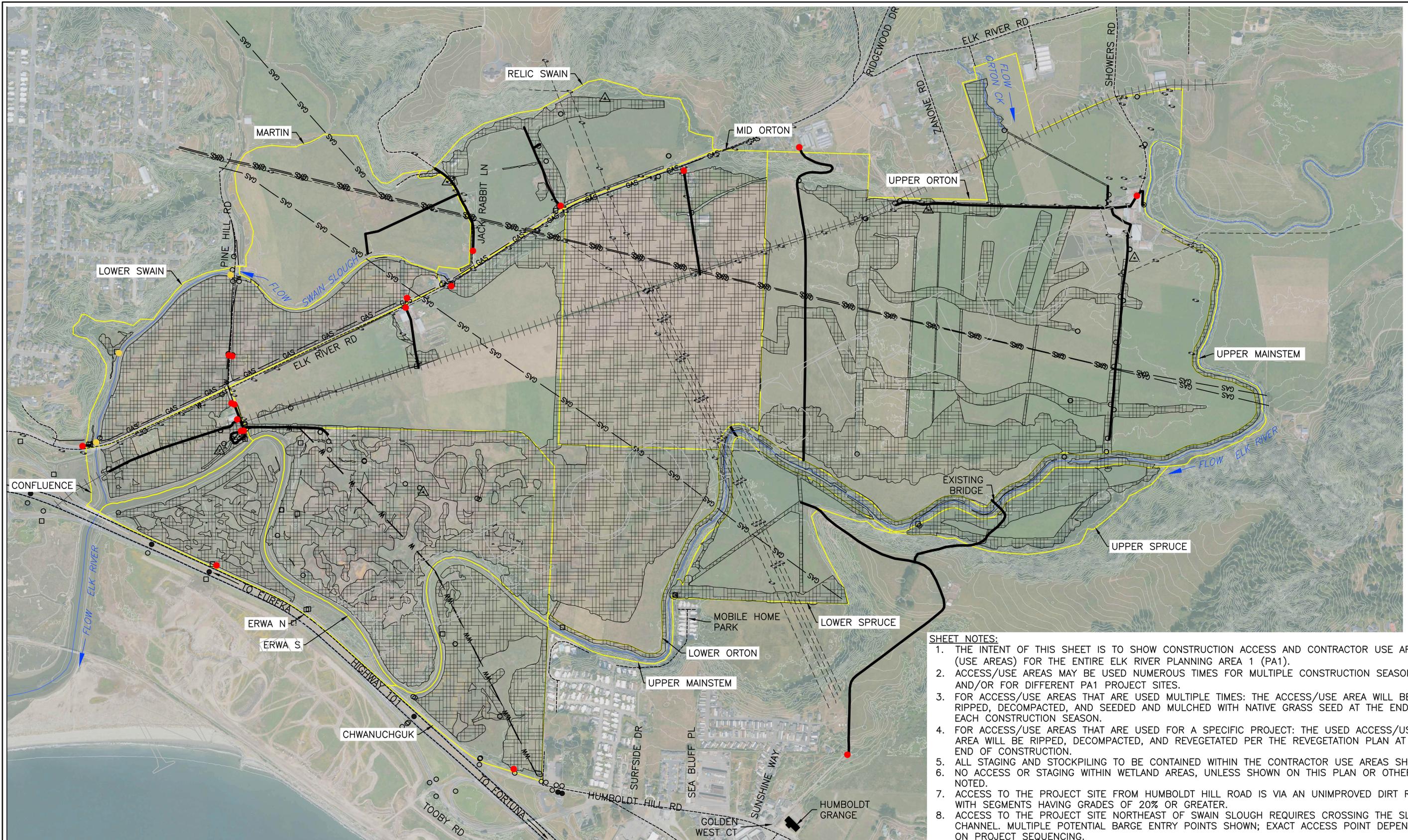
- |  |                    |  |                       |  |               |
|--|--------------------|--|-----------------------|--|---------------|
|  | PLANNING AREA 1    |  | OVERHEAD UTILITY LINE |  | CULVERT       |
|  | HIGHWAY            |  | WATER LINE            |  | DROP INLET    |
|  | MAIN ROAD          |  | RIVER CENTERLINE      |  | TIDE GATE     |
|  | ABANDONED RAILROAD |  | STREAMS               |  | ARTESIAN WELL |
|  | GAS                |  | DRAINAGE CHANNEL      |  | UTILITY POLE  |

**SHEET NOTES:**  
 1) ALL INFRASTRUCTURE LOCATIONS ARE APPROXIMATE.



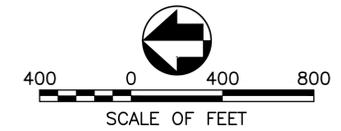
DESIGNED: NHE CV, JRP		SUB SHEET NO. <b>G2</b>		DRAFT ELK RIVER PA1		SHEET 2	
TECH. REVIEW: JRP, BSP, JKA		DATE: 10/13/2025		TITLE OF SHEET <b>EXISTING CONDITIONS OVERVIEW PLANNING AREA 1</b>		OF 14	
				HUMBOLDT COUNTY, CA			

Plotted: 10/14/2025 2:51 PM - By: LICENSED USER - R17.1 - File: G3-CONTRACTOR USE-&-ACCESS-65PER-PERMIT



- EXISTING CONTOUR (5-FT INTERVAL)
- GAS — GASLINE (E)
- OVERHEAD UTILITY LINE (E)
- ABANDONED RAILROAD
- w — WATER LINE
- HIGHWAY
- MAIN ROAD
- UTILITY POLE (E)
- TIDE GATE (E)

- CULVERT (E)
- ⊕ DROP INLET
- △ ARTESIAN WELL
- ACCESS POINT (E)
- ACCESS POINT: POTENTIAL BARGE ENTRY LOCATION (SEE NOTE #8)
- ACCESS ROAD (E)
- ▨ CONTRACTOR USE AREA

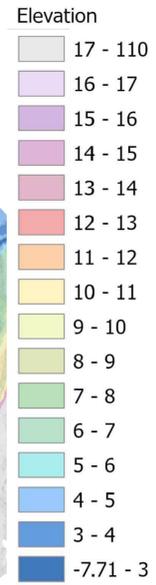
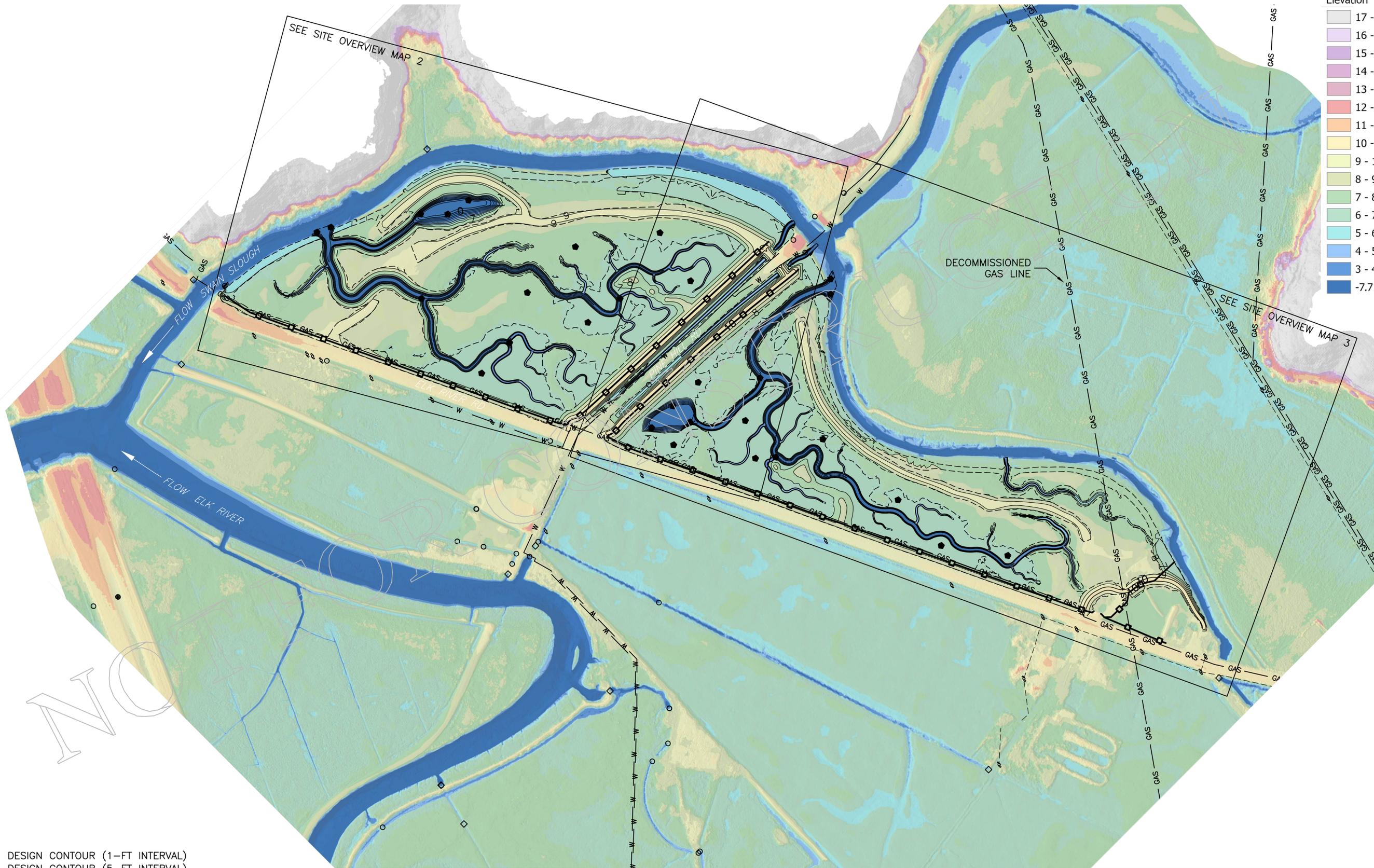


**SHEET NOTES:**

1. THE INTENT OF THIS SHEET IS TO SHOW CONSTRUCTION ACCESS AND CONTRACTOR USE AREAS (USE AREAS) FOR THE ENTIRE ELK RIVER PLANNING AREA 1 (PA1).
2. ACCESS/USE AREAS MAY BE USED NUMEROUS TIMES FOR MULTIPLE CONSTRUCTION SEASONS AND/OR FOR DIFFERENT PA1 PROJECT SITES.
3. FOR ACCESS/USE AREAS THAT ARE USED MULTIPLE TIMES: THE ACCESS/USE AREA WILL BE RIPPED, DECOMPACTED, AND SEEDED AND MULCHED WITH NATIVE GRASS SEED AT THE END OF EACH CONSTRUCTION SEASON.
4. FOR ACCESS/USE AREAS THAT ARE USED FOR A SPECIFIC PROJECT: THE USED ACCESS/USE AREA WILL BE RIPPED, DECOMPACTED, AND REVEGETATED PER THE REVEGETATION PLAN AT THE END OF CONSTRUCTION.
5. ALL STAGING AND STOCKPILING TO BE CONTAINED WITHIN THE CONTRACTOR USE AREAS SHOWN.
6. NO ACCESS OR STAGING WITHIN WETLAND AREAS, UNLESS SHOWN ON THIS PLAN OR OTHERWISE NOTED.
7. ACCESS TO THE PROJECT SITE FROM HUMBOLDT HILL ROAD IS VIA AN UNIMPROVED DIRT ROAD WITH SEGMENTS HAVING GRADES OF 20% OR GREATER.
8. ACCESS TO THE PROJECT SITE NORTHEAST OF SWAIN SLOUGH REQUIRES CROSSING THE SLOUGH CHANNEL. MULTIPLE POTENTIAL BARGE ENTRY POINTS SHOWN; EXACT ACCESS POINT DEPENDENT ON PROJECT SEQUENCING.

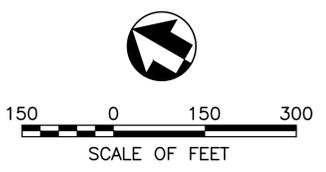


ELK PA1 65% DESIGN: PERMIT SET		TITLE OF SHEET	SHEET
DESIGNED:	SUB SHEET NO.	<b>G3</b>	<b>3</b>
NHE	BD		
TECH. REVIEW:		CONTRACTOR USE AREAS & ACCESS PLANNING AREA 1	OF
DATE:		HUMBOLDT COUNTY, CA	14
10/08/2025			



- DESIGN CONTOUR (1-FT INTERVAL)
- DESIGN CONTOUR (5-FT INTERVAL)
- GRADING BOUNDARY
- GAS LINE
- WATER LINE
- FENCE (D)
- CULVERT (E)
- TIDE GATE (E)
- UTILITY POLE (E)
- WOOD STRUCTURE (D)

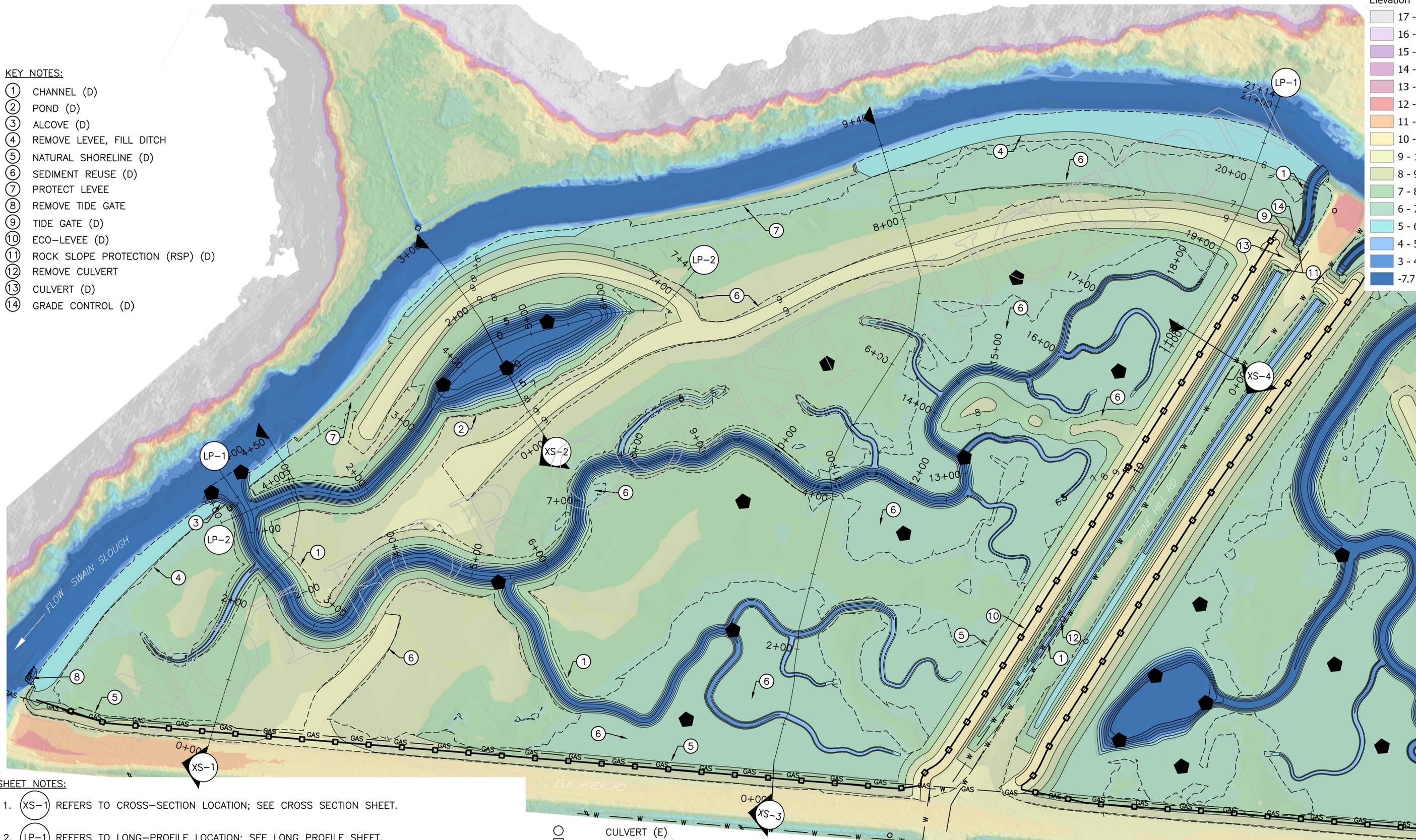
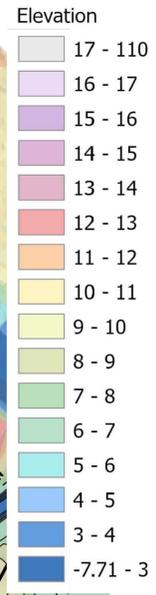
- SHEET NOTES:**
1. CROSS-SECTIONS (XS) NOT SHOWN ON THIS SHEET.
  2. LONG-PROFILE (LP) NOT SHOWN ON THIS SHEET.



ELK PA1 65% DESIGN: PERMIT SET			
DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	SHEET
NHE	C1C	<b>COLOR SITE OVERVIEW 1</b> <b>LOWER SWAIN SLOUGH</b> <b>PROJECT</b>	4
TC			OF
TECH. REVIEW:			14
DATE:	HUMBOLDT COUNTY, CA		
10/14/2025			

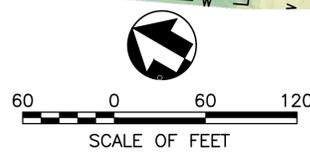
Plotted: 10/14/2025 1:47 PM - By: LICENSED USER - R17.1 - File: 03\_LOWER-SWAIN-PRELIM-65PER-DRAFT-C-SHEETS-N

- KEY NOTES:**
- ① CHANNEL (D)
  - ② POND (D)
  - ③ ALCOVE (D)
  - ④ REMOVE LEVEE, FILL DITCH
  - ⑤ NATURAL SHORELINE (D)
  - ⑥ SEDIMENT REUSE (D)
  - ⑦ PROTECT LEVEE
  - ⑧ REMOVE TIDE GATE
  - ⑨ TIDE GATE (D)
  - ⑩ ECO-LEVEE (D)
  - ⑪ ROCK SLOPE PROTECTION (RSP) (D)
  - ⑫ REMOVE CULVERT
  - ⑬ CULVERT (D)
  - ⑭ GRADE CONTROL (D)



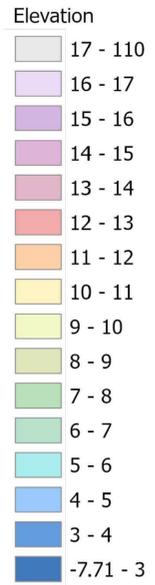
- SHEET NOTES:**
- 1. XS-1 REFERS TO CROSS-SECTION LOCATION; SEE CROSS SECTION SHEET.
  - 2. LP-1 REFERS TO LONG-PROFILE LOCATION; SEE LONG PROFILE SHEET.
  - 3. REMOVE ALL EXISTING CULVERTS WITHIN GRADING BOUNDARY.
  - 4. REMOVE FENCE (E), NOT SHOWN.
  - 5. GATES (D) NOT SHOWN; LOCATIONS TO BE COORDINATED WITH LANDOWNER BEFORE CONSTRUCTION.

- CULVERT (E)
- TIDE GATE (E)
- UTILITY POLE (E)
- WOOD STRUCTURE (D)
- DESIGN CONTOUR (1-FIT INTERVAL)
- DESIGN CONTOUR (5-FIT INTERVAL)
- GRADING BOUNDARY
- GAS LINE
- WATER LINE
- FENCE (D)

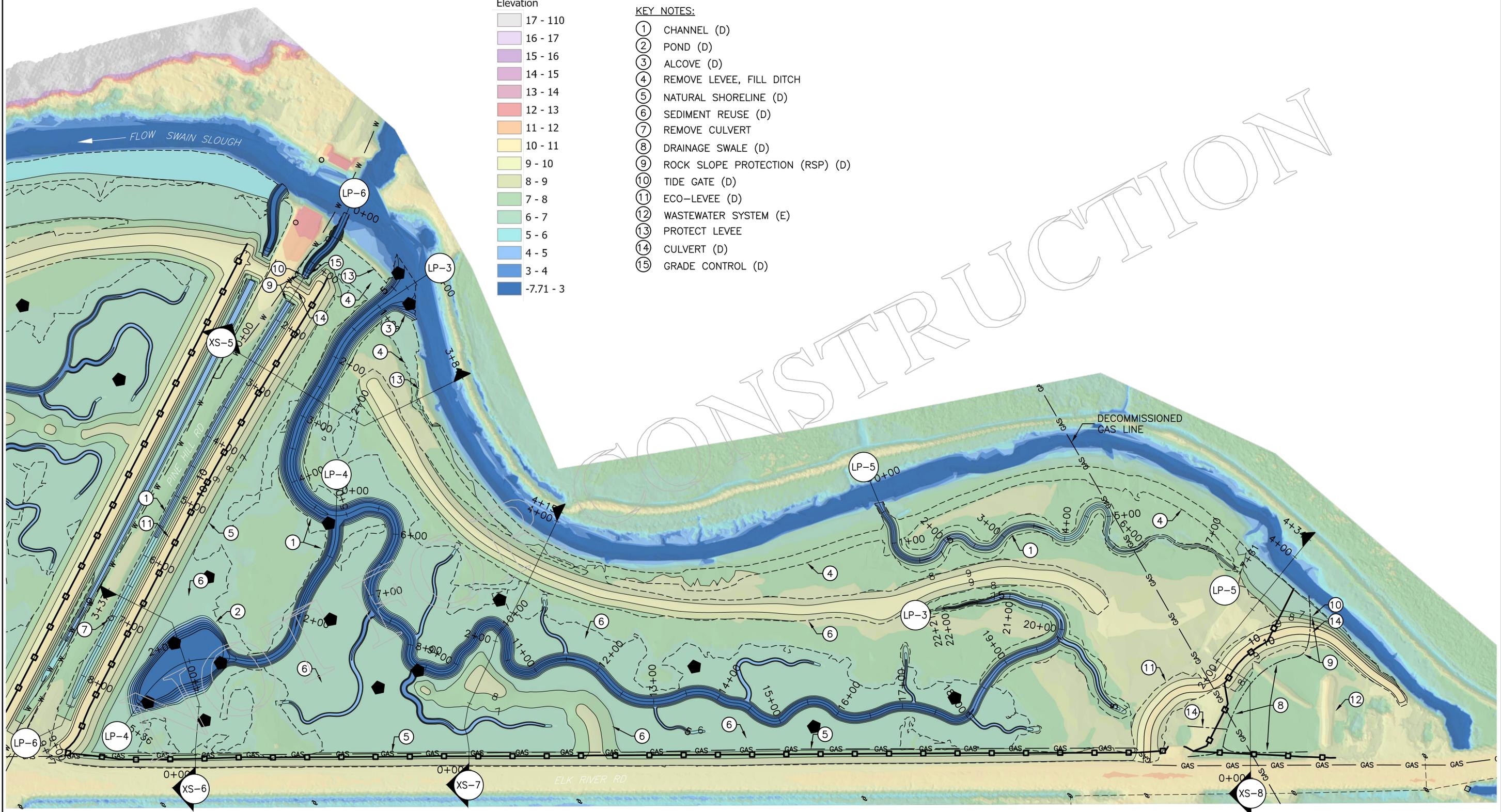


ELK PA1 65% DESIGN: PERMIT SET		TITLE OF SHEET	SHEET
DESIGNED: NHE	SUB SHEET NO. <b>C2C</b>	<b>COLOR SITE OVERVIEW 2 LOWER SWAIN SLOUGH PROJECT</b>	<b>5 OF 14</b>
TC GADD	TECH. REVIEW:		
DATE: 10/14/2025		HUMBOLDT COUNTY, CA	

Plotted: 10/14/2025 1:55 PM - By: LICENSED USER - R17.1 - File: 03\_LOWER-SWAIN-PRELIM-65PER-DRAFT-C-SHEETS-S

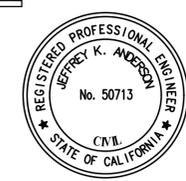
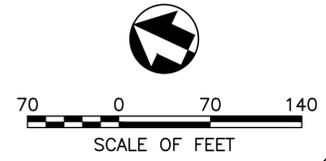


- KEY NOTES:**
- ① CHANNEL (D)
  - ② POND (D)
  - ③ ALCOVE (D)
  - ④ REMOVE LEVEE, FILL DITCH
  - ⑤ NATURAL SHORELINE (D)
  - ⑥ SEDIMENT REUSE (D)
  - ⑦ REMOVE CULVERT
  - ⑧ DRAINAGE SWALE (D)
  - ⑨ ROCK SLOPE PROTECTION (RSP) (D)
  - ⑩ TIDE GATE (D)
  - ⑪ ECO-LEVEE (D)
  - ⑫ WASTEWATER SYSTEM (E)
  - ⑬ PROTECT LEVEE
  - ⑭ CULVERT (D)
  - ⑮ GRADE CONTROL (D)



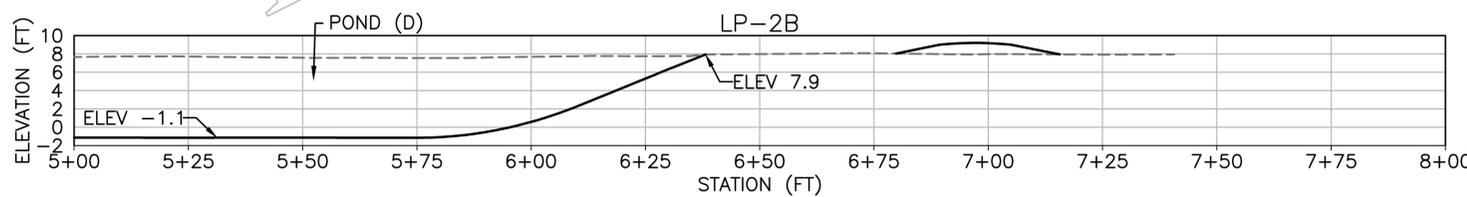
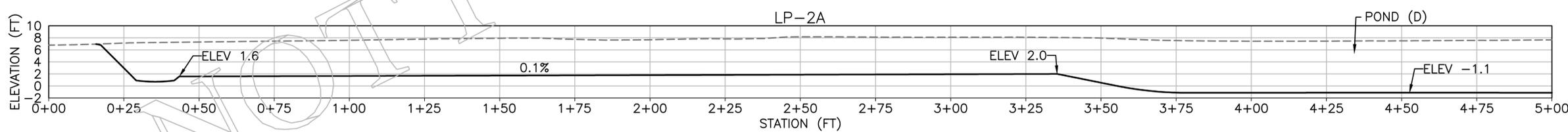
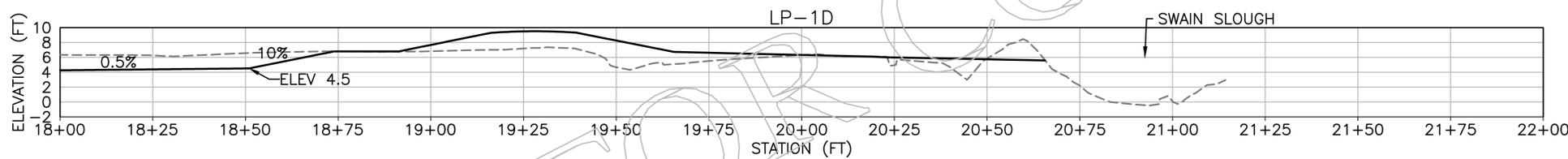
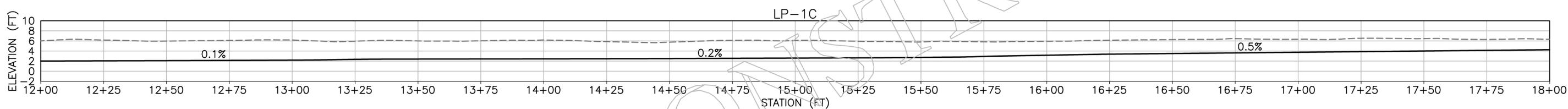
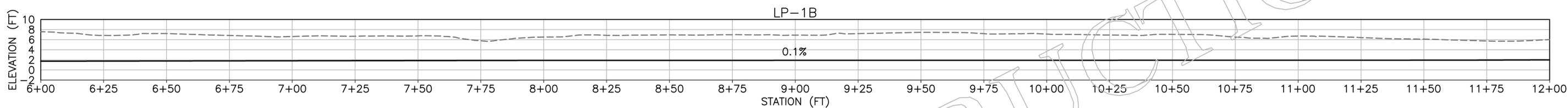
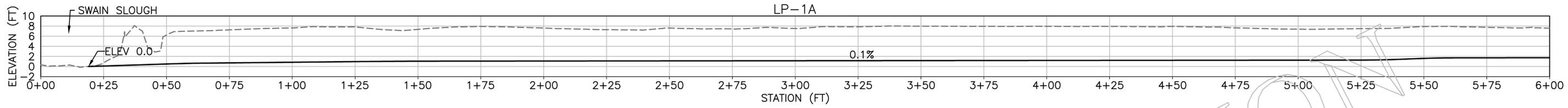
- SHEETS NOTES:**
1. (XS-1) REFERS TO CROSS-SECTION LOCATION; SEE CROSS SECTION SHEET.
  2. (LP-1) REFERS TO LONG-PROFILE LOCATION; SEE LONG PROFILE SHEET.
  3. REMOVE ALL EXISTING CULVERTS WITHIN GRADING BOUNDARY.
  4. REMOVE FENCE (E), NOT SHOWN.
  5. GATES (D) NOT SHOWN; LOCATIONS TO BE COORDINATED WITH LANDOWNER BEFORE CONSTRUCTION.

- DESIGN CONTOUR (1-FT INTERVAL)
- DESIGN CONTOUR (5-FT INTERVAL)
- - - GRADING BOUNDARY
- GAS - GAS LINE
- W - WATER LINE
- FENCE (D)
- DRAINAGE DITCH (D)
- CULVERT (E)
- TIDE GATE (E)
- UTILITY POLE (E)
- WOOD STRUCTURE (D)



ELK PA1 65% DESIGN: PERMIT SET		
DESIGNED: NHE	SUB SHEET NO. <b>C3C</b>	TITLE OF SHEET <b>COLOR SITE OVERVIEW 3 LOWER SWAIN SLOUGH PROJECT</b>
TC	TECH. REVIEW:	SHEET 6 OF 14
DATE: 10/14/2025		HUMBOLDT COUNTY, CA

Plotted: 10/8/2025 12:40 PM - By: LICENSED USER - R17.1 - File: 03\_LOWER-SWAIN-PRELIM-65PER-DRAFT-C-SHEETS-N



**SHEET NOTES:**

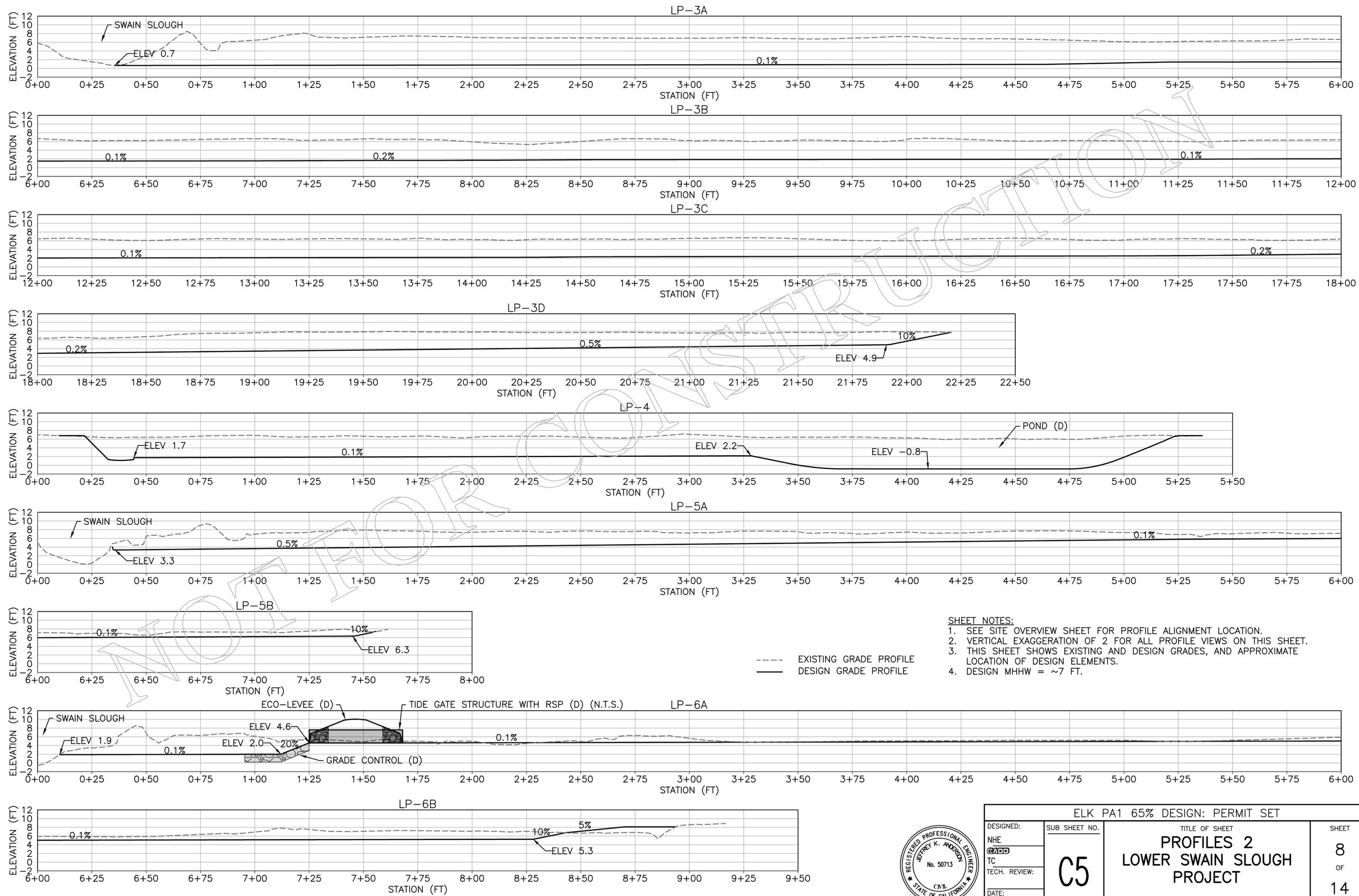
1. SEE SITE OVERVIEW SHEET FOR PROFILE ALIGNMENT LOCATION.
2. VERTICAL EXAGGERATION OF 2 FOR ALL PROFILE VIEWS ON THIS SHEET.
3. THIS SHEET SHOWS EXISTING AND DESIGN GRADES, AND APPROXIMATE LOCATION OF DESIGN ELEMENTS.
4. DESIGN MHHW = ~7 FT.

----- EXISTING GRADE PROFILE  
 \_\_\_\_\_ DESIGN GRADE PROFILE



ELK PA1 65% DESIGN: PERMIT SET		
DESIGNED: NHE	SUB SHEET NO. <b>C4</b>	TITLE OF SHEET <b>PROFILES 1 LOWER SWAIN SLOUGH PROJECT</b>
TECH. REVIEW: TC		SHEET 7 OF 14
DATE: 10/08/2025		HUMBOLDT COUNTY, CA

Plotted: 10/14/2025 1:58 PM - By: LICENSED USER - R17.1 - File: 03\_LOWER-SWAIN-PRELIM-65PER-DRAFT-C-SHEETS-S



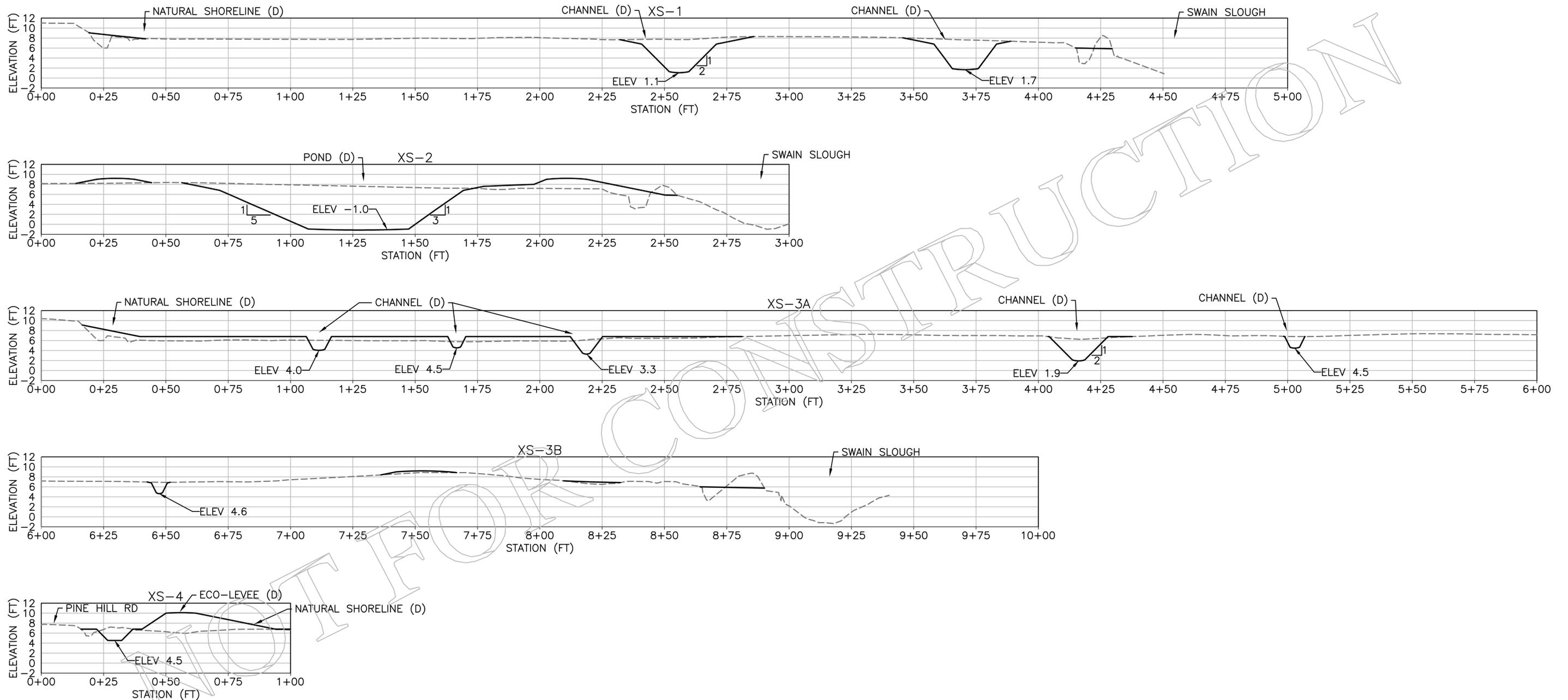
**SHEET NOTES:**

1. SEE SITE OVERVIEW SHEET FOR PROFILE ALIGNMENT LOCATION.
2. VERTICAL EXAGGERATION OF 2 FOR ALL PROFILE VIEWS ON THIS SHEET.
3. THIS SHEET SHOWS EXISTING AND DESIGN GRADES, AND APPROXIMATE LOCATION OF DESIGN ELEMENTS.
4. DESIGN MHHW = ~7 FT.



ELK PA1 65% DESIGN: PERMIT SET		TITLE OF SHEET <b>PROFILES 2          LOWER SWAIN SLOUGH          PROJECT</b>	SHEET <b>8</b> OF <b>14</b>
DESIGNED: NHE	SUB SHEET NO. <b>C5</b>		
TECH. REVIEW: TC		HUMBOLDT COUNTY, CA	
DATE: 10/14/2025			

Plotted: 10/14/2025 2:01 PM - By: LICENSED USER - R17.1 - File: 03\_LOWER-SWAIN-PRELIM-65PER-DRAFT-C-SHEETS-N



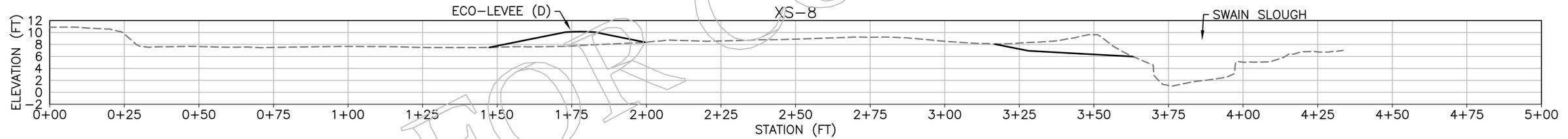
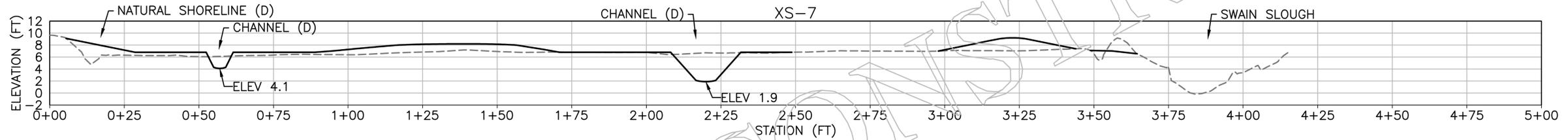
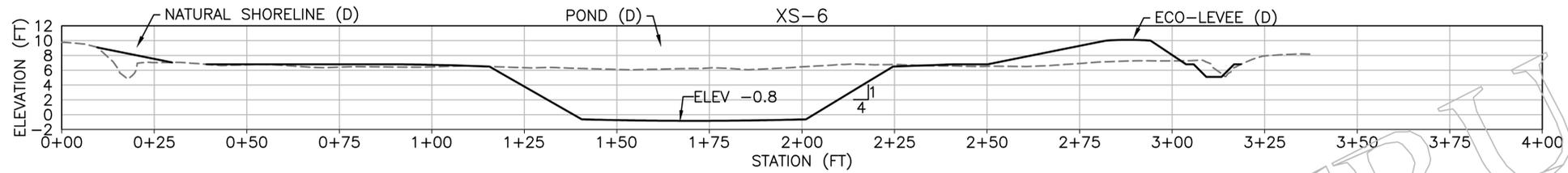
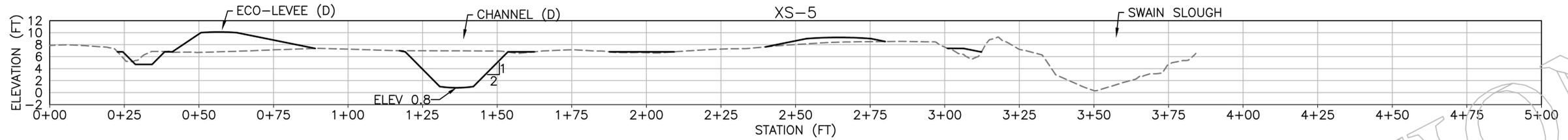
----- EXISTING GRADE PROFILE  
 \_\_\_\_\_ DESIGN GRADE PROFILE

- SHEET NOTES:**
1. SEE SITE OVERVIEW SHEET FOR CROSS-SECTION LOCATIONS.
  2. VERTICAL EXAGGERATION OF 2 FOR ALL SECTION VIEWS ON THIS SHEET.
  3. THIS SHEET SHOWS EXISTING AND DESIGN GRADES, AND APPROXIMATE LOCATION OF DESIGN ELEMENTS.
  4. DESIGN MHHW = ~7 FT.



ELK PA1 65% DESIGN: PERMIT SET		
DESIGNED: NHE	SUB SHEET NO. <b>C6</b>	TITLE OF SHEET <b>SECTIONS 1 LOWER SWAIN SLOUGH PROJECT</b>
TECH. REVIEW: TC		SHEET <b>9</b> OF <b>14</b>
DATE: 10/14/2025		HUMBOLDT COUNTY, CA

Plotted: 10/8/2025 12:53 PM - By: LICENSED USER - R17.1 - File: 03\_LOWER-SWAIN-PRELIM-65PER-DRAFT-C-SHEETS-S



NOT FOR CONSTRUCTION

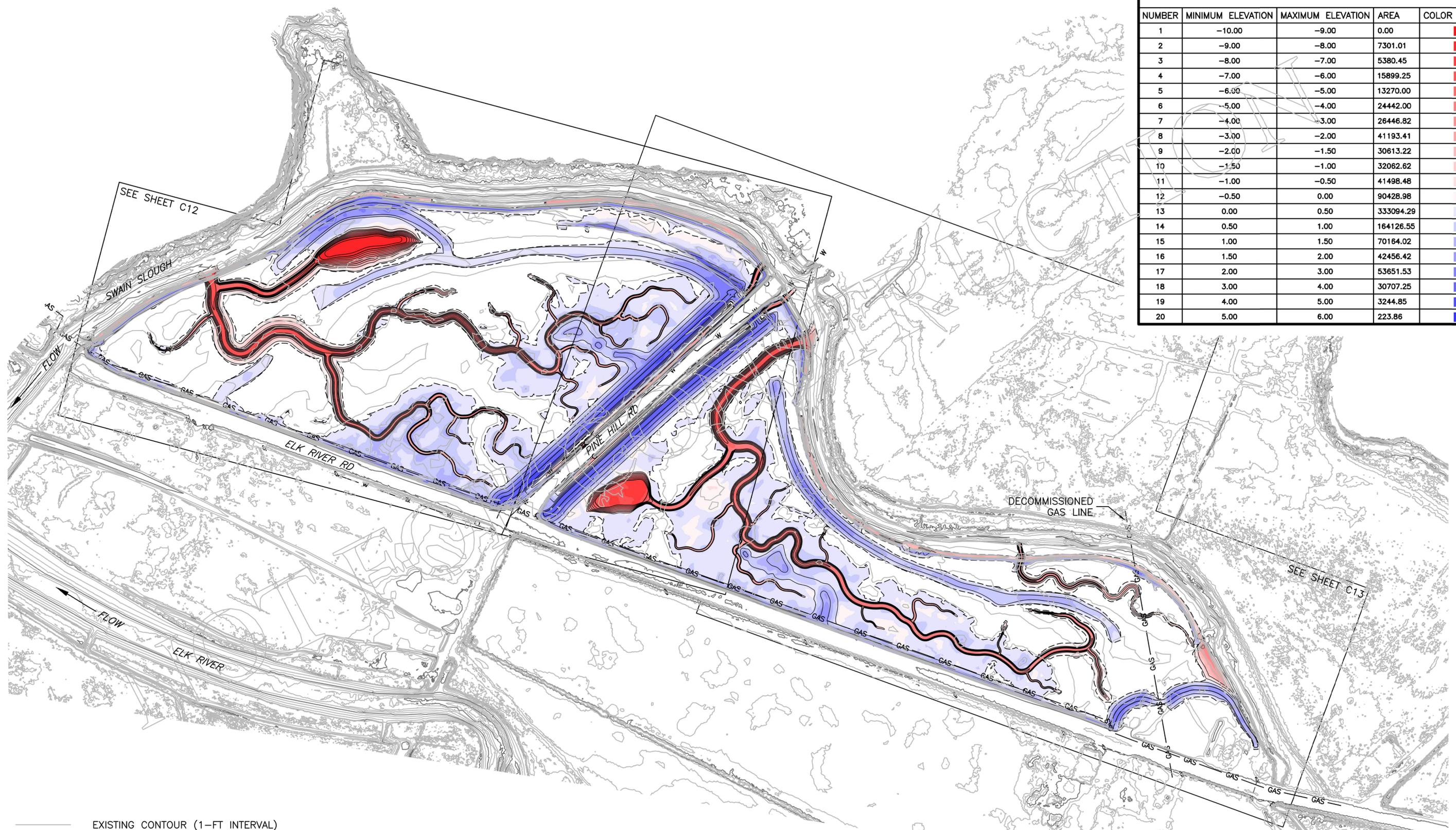
- SHEET NOTES:**
1. SEE SITE OVERVIEW SHEET FOR CROSS-SECTION LOCATIONS.
  2. VERTICAL EXAGGERATION OF 2 FOR ALL SECTION VIEWS ON THIS SHEET.
  3. THIS SHEET SHOWS EXISTING AND DESIGN GRADES, AND APPROXIMATE LOCATION OF DESIGN ELEMENTS.
  4. DESIGN MHHW = ~7 FT.

--- EXISTING GRADE PROFILE  
 ——— DESIGN GRADE PROFILE



ELK PA1 65% DESIGN: PERMIT SET		
DESIGNED: NHE	SUB SHEET NO. <b>C7</b>	TITLE OF SHEET <b>SECTIONS 2 LOWER SWAIN SLOUGH PROJECT</b>
TECH. REVIEW: TC		SHEET 10 OF 14
DATE: 10/08/2025		HUMBOLDT COUNTY, CA

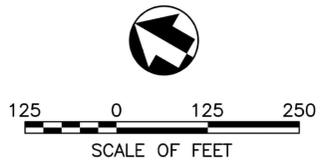
Plotted: 10/14/2025 2:14 PM - By: LICENSED USER - R17.1 - File: 03\_LOWER-SWAIN-PRELIM-65PER-DRAFT-ISOPACH-1



ELEVATIONS TABLE				
NUMBER	MINIMUM ELEVATION	MAXIMUM ELEVATION	AREA	COLOR
1	-10.00	-9.00	0.00	Red
2	-9.00	-8.00	7301.01	Red
3	-8.00	-7.00	5380.45	Red
4	-7.00	-6.00	15899.25	Red
5	-6.00	-5.00	13270.00	Red
6	-5.00	-4.00	24442.00	Red
7	-4.00	-3.00	26446.82	Red
8	-3.00	-2.00	41193.41	Red
9	-2.00	-1.50	30613.22	Red
10	-1.50	-1.00	32062.62	Red
11	-1.00	-0.50	41498.48	Red
12	-0.50	0.00	90428.98	Red
13	0.00	0.50	333094.29	Light Blue
14	0.50	1.00	164126.55	Light Blue
15	1.00	1.50	70164.02	Light Blue
16	1.50	2.00	42456.42	Light Blue
17	2.00	3.00	53651.53	Light Blue
18	3.00	4.00	30707.25	Light Blue
19	4.00	5.00	3244.85	Light Blue
20	5.00	6.00	223.86	Light Blue

- EXISTING CONTOUR (1-FT INTERVAL)
- EXISTING CONTOUR (5-FT INTERVAL)
- DESIGN CONTOUR (1-FT INTERVAL)
- DESIGN CONTOUR (5-FT INTERVAL)
- - - GRADING BOUNDARY
- - - GAS LINE
- - - WATER LINE
- CULVERT (E)
- TIDE GATE (E)

**SHEET NOTES:**  
 1) THE INTENT OF THIS DRAWING IS TO SHOW FINISHED GRADE CUT/FILL DEPTHS RELATIVE TO EXISTING GRADE (EG).  
 2) ISOPACH LABELS REPRESENT CUT/FILL DEPTHS IN FEET (RELATIVE TO EG).  
 3) SEE SHEETS C1C-C7 FOR ADDITIONAL GRADING DETAILS.

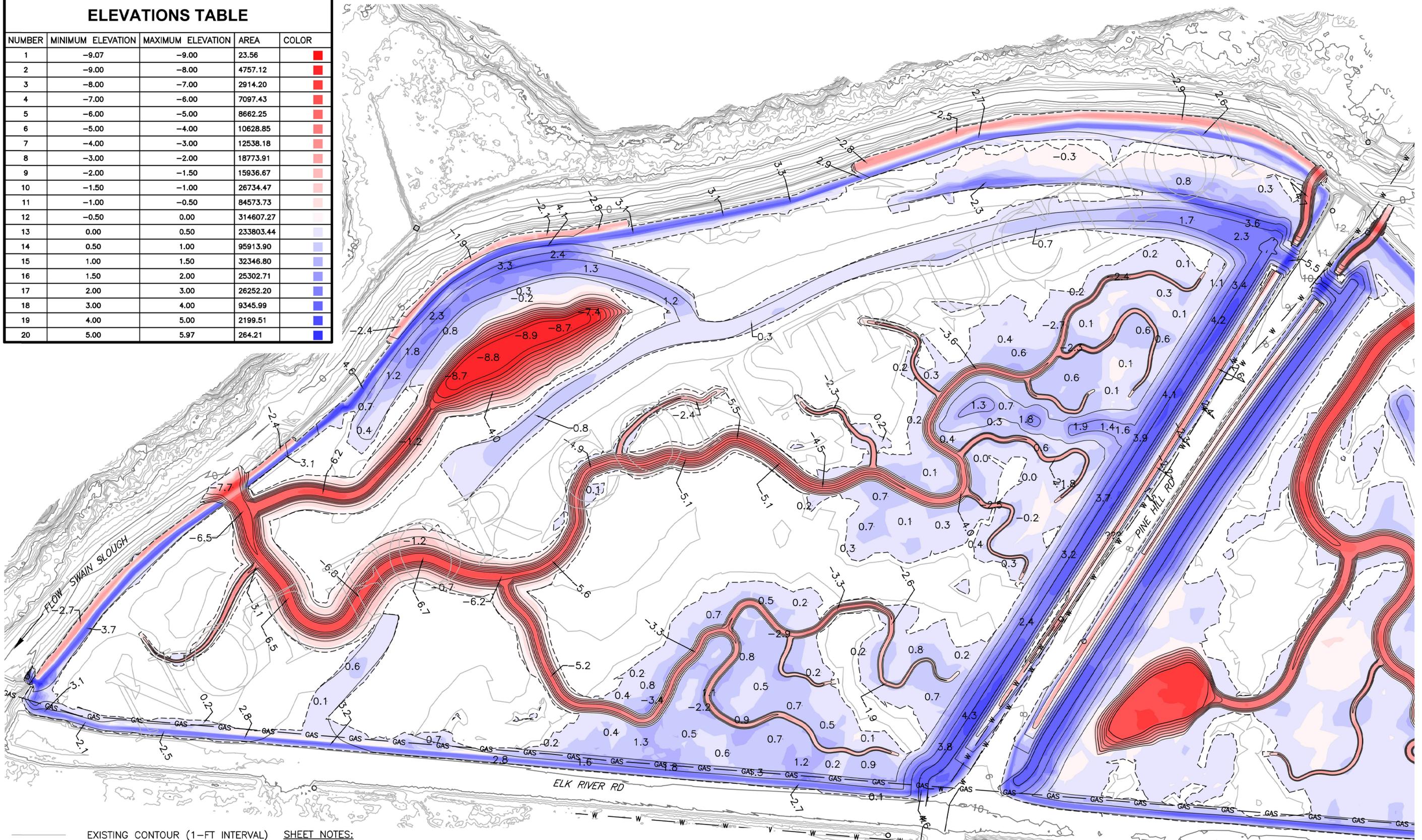


ELK PA1 65% DESIGN: PERMIT SET			
DESIGNED: NHE	SUB SHEET NO. <b>C8</b>	TITLE OF SHEET <b>ISOPACH 1: CUT-FILL LOWER SWAIN SLOUGH PROJECT</b>	SHEET 11 OF 14
TECH. REVIEW: TC	DATE: 10/14/2025	HUMBOLDT COUNTY, CA	

Plotted: 10/14/2025 2:30 PM - By: LICENSED USER - R17.1 - File: 03\_LOWER-SWAIN-PRELIM-65PER-DRAFT-ISOPACH-2

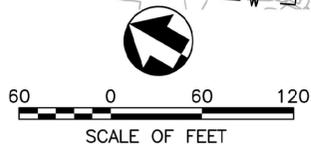
### ELEVATIONS TABLE

NUMBER	MINIMUM ELEVATION	MAXIMUM ELEVATION	AREA	COLOR
1	-9.07	-9.00	23.56	Red
2	-9.00	-8.00	4757.12	Red
3	-8.00	-7.00	2914.20	Red
4	-7.00	-6.00	7097.43	Red
5	-6.00	-5.00	8662.25	Red
6	-5.00	-4.00	10628.85	Red
7	-4.00	-3.00	12538.18	Red
8	-3.00	-2.00	18773.91	Red
9	-2.00	-1.50	15936.67	Red
10	-1.50	-1.00	26734.47	Red
11	-1.00	-0.50	84573.73	Red
12	-0.50	0.00	314607.27	Red
13	0.00	0.50	233803.44	Light Blue
14	0.50	1.00	95913.90	Light Blue
15	1.00	1.50	32346.80	Light Blue
16	1.50	2.00	25302.71	Light Blue
17	2.00	3.00	26252.20	Light Blue
18	3.00	4.00	9345.99	Light Blue
19	4.00	5.00	2199.51	Light Blue
20	5.00	5.97	264.21	Dark Blue



- EXISTING CONTOUR (1-FEET INTERVAL)
- EXISTING CONTOUR (5-FEET INTERVAL)
- DESIGN CONTOUR (1-FEET INTERVAL)
- DESIGN CONTOUR (5-FEET INTERVAL)
- - - GRADING BOUNDARY
- - - GAS LINE
- - - WATER LINE
- CULVERT (E)
- TIDE GATE (E)

- SHEET NOTES:**
- 1) THE INTENT OF THIS DRAWING IS TO SHOW FINISHED GRADE CUT/FILL DEPTHS RELATIVE TO EXISTING GRADE (EG).
  - 2) ISOPACH LABELS REPRESENT CUT/FILL DEPTHS IN FEET (RELATIVE TO EG).
  - 3) SEE SHEETS C1C-C7 FOR ADDITIONAL GRADING DETAILS.

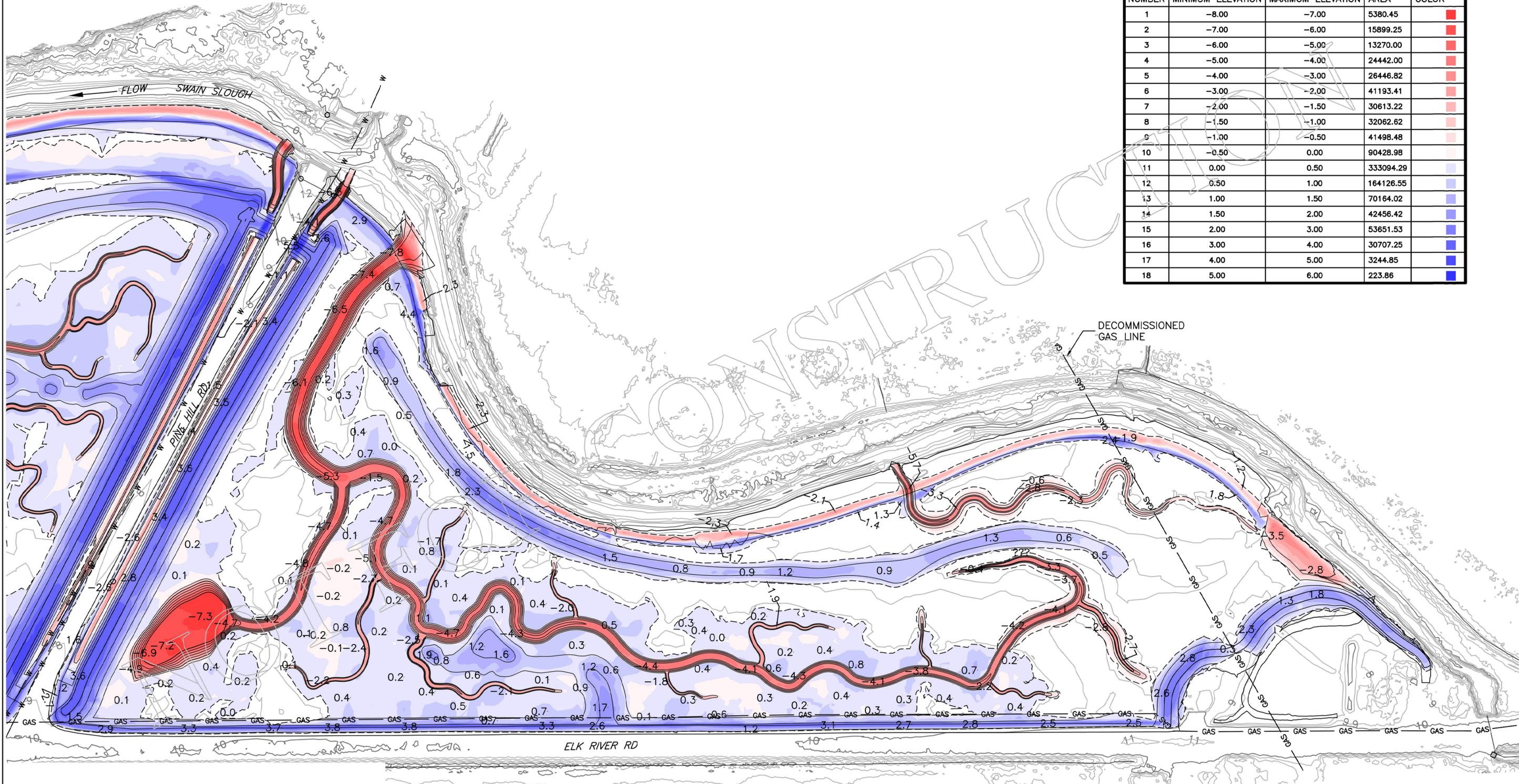


ELK PA1 65% DESIGN: PERMIT SET		SHEET 12 OF 14	
DESIGNED: NHE GADD TC	SUB SHEET NO. <b>C9</b>	TITLE OF SHEET <b>ISOPACH 2: CUT-FILL LOWER SWAIN SLOUGH PROJECT</b>	
TECH. REVIEW:	DATE: 10/14/2025	HUMBOLDT COUNTY, CA	

Plotted: 10/14/2025 2:35 PM - By: LICENSED USER - R17.1 - File: 03\_LOWER-SWAIN-PRELIM-65PER-DRAFT-ISOPACH-3

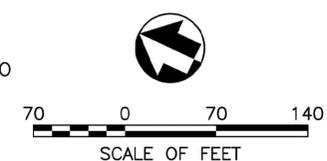
### ELEVATIONS TABLE

NUMBER	MINIMUM ELEVATION	MAXIMUM ELEVATION	AREA	COLOR
1	-8.00	-7.00	5380.45	Red
2	-7.00	-6.00	15899.25	Red
3	-6.00	-5.00	13270.00	Red
4	-5.00	-4.00	24442.00	Red
5	-4.00	-3.00	26446.82	Red
6	-3.00	-2.00	41193.41	Red
7	-2.00	-1.50	30613.22	Red
8	-1.50	-1.00	32062.62	Red
9	-1.00	-0.50	41498.48	Red
10	-0.50	0.00	90428.98	Red
11	0.00	0.50	333094.29	Light Blue
12	0.50	1.00	164126.55	Light Blue
13	1.00	1.50	70164.02	Light Blue
14	1.50	2.00	42456.42	Light Blue
15	2.00	3.00	53651.53	Light Blue
16	3.00	4.00	30707.25	Light Blue
17	4.00	5.00	3244.85	Light Blue
18	5.00	6.00	223.86	Light Blue



- EXISTING CONTOUR (1-FT INTERVAL)
- EXISTING CONTOUR (5-FT INTERVAL)
- DESIGN CONTOUR (1-FT INTERVAL)
- DESIGN CONTOUR (5-FT INTERVAL)
- - - GRADING BOUNDARY
- - - GAS
- - - W
- CULVERT (E)
- TIDE GATE (E)

- SHEET NOTES:**
- 1) THE INTENT OF THIS DRAWING IS TO SHOW FINISHED GRADE CUT/FILL DEPTHS RELATIVE TO EXISTING GRADE (EG).
  - 2) ISOPACH LABELS REPRESENT CUT/FILL DEPTHS IN FEET (RELATIVE TO EG).
  - 3) SEE SHEETS C1C-C7 FOR ADDITIONAL GRADING DETAILS.



ELK PA1 65% DESIGN: PERMIT SET		SHEET	
DESIGNED: NHE	SUB SHEET NO. <b>C10</b>	TITLE OF SHEET <b>ISOPACH 3: CUT-FILL LOWER SWAIN SLOUGH PROJECT</b>	13
TC	TECH. REVIEW:	HUMBOLDT COUNTY, CA	OF
DATE: 10/14/2025			14



DETAIL 1: LWS INSTALLATION AND INTEGRATION ALONG STREAM BANK. PHOTO OF LWS INSTALLED AT PRAIRIE CREEK, HUMBOLDT COUNTY.



DETAIL 3: LWS INSTALLATION WITHIN FLOODPLAIN. PHOTO OF LWS INSTALLED AT PRAIRIE CREEK, HUMBOLDT COUNTY.



DETAIL 5: DUCK BILL TIDE GATE TO BE USED FOR DRAINAGE STRUCTURES INTO SWAIN SLOUGH THROUGH ECO-LEVEES. PHOTO OF DUCK BILL TIDE GATE INSTALLED AT COCHRAN CREEK, HUMBOLDT COUNTY.



DETAIL 2: LWS INSTALLATION AND INTEGRATION ALONG STREAM BANK. PHOTO OF LWS INSTALLED AT PRAIRIE CREEK, HUMBOLDT COUNTY.



DETAIL 4: LWS INSTALLATION WITHIN FLOODPLAIN. PHOTO OF LWS INSTALLED AT PRAIRIE CREEK, HUMBOLDT COUNTY.

Plotted: 10/15/2025 10:39 AM - By: LICENSED USER - R17.1 - File: CX-DETAILS-65PER-PERMIT

**SHEET NOTES:**

1. THE INTENT OF THIS SHEET IS TO SHOW GENERAL EXAMPLES OF THE TYPES OF LARGE WOOD STRUCTURES TO BE INSTALLED.
2. THIS SHEET SHOWS APPROXIMATE LARGE WOOD STRUCTURE CONFIGURATIONS AND INSTALLATION TECHNIQUES USING LOG PILES AS PINNING LOG ANCHORS. ACTUAL LOG STRUCTURES WILL VARY DEPENDING ON VARIABLE FIELD CONDITIONS, LOG VARIABILITY, AND OTHER UNFORESEEN CONDITIONS.
3. THIS SHEET SHOWS GENERAL TIDE GATE STRUCTURE TYPES AND FUNCTIONALITY. ACTUAL TIDE GATE SHAPE, SUCH AS ROUND OR RECTANGULAR, MAY VARY.



ELK PA1 65% DESIGN: PERMIT SET			
DESIGNED: NHE	SUB SHEET NO. <b>C11</b>	TITLE OF SHEET <b>DETAILS</b>	SHEET 14
TECH. REVIEW: BD			OF 14
DATE: 10/15/2025		HUMBOLDT COUNTY, CA	