



COUNTY OF ORANGE

OC PUBLIC WORKS DEPARTMENT

SANTA ANA, CALIFORNIA

KEVIN ONUMA, DIRECTOR

2025 SCOUR STUDY

PREPARED BY:
COUNTY OF ORANGE PUBLIC WORKS

SURVEY FIELD UNIT

ORANGE COUNTY BOARD OF SUPERVISORS

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FIFTH DISTRICT

2025 SCOUR STUDY

SAN DIEGO CREEK CHANNEL (F05)

MAXIMUM CAPACITY OF BASIN 3

STATION 100+00 TO 135+00

AS-BUILT PLANS:
F05-101-6A

STA. 100+00 TO 135+00

NOTE: As-Built plans were used for left side of the basin, the right side of the template was modified based on the San Diego Creek 2004 Emergency Repair Agreement whereas, a 40' Wildlife Corridor was established on the right side of the channel

HORIZONTAL DATUM: NAD 83 (2017.5 EPOCH)

VERTICAL DATUM: NAVD 88 (O.C.S. 1995 ADJUSTMENT)

OFFICE CHECK BY: Michael Kubisty, PLS, Senior Land Surveyor

SURVEY PARTY CHIEF: James Russo, Surveyor III

MAPPING DONE BY: Itai Islas, Surveyor II

COUNTY of ORANGE
OC PUBLIC WORKS
OC SURVEY

FIELD UNIT-BOUNDARY ANALYSIS & MAPPING

2025 SCOURS STUDY (MAX. CAPACITY BASIN TEMPLATE) - VOLUME REPORT

SAN DIEGO CREEK (F05) BASIN #3, STATION 100+00 to 135+00

Date of Survey October 2025

ALIGNMENT: CENTERLINE ALIGNMENT REACH 1

SURFACE 1: SAN DIEGO CREEK BASIN 2 & 3 2025

SURFACE 2: F05B2 MAX CAP (2010 MAX CAP Basin #3 Template)

BASILINE	STATION	STATION	STATION	STATION	MASS
STATION	CUT	CUT	FILL	FILL	ORDINANCE
NUMBER	AREA	VOLUME	AREA	VOLUME	VOLUME
	(Sq. Ft)	(Cu. Yds)	(Sq. Ft)	(Cu. Yds)	(Cu. Yds)
100+00	0.00	0.00	0.00	0.00	0.00
101+00	0.00	0.00	0.00	0.00	0.00
102+00	0.00	0.00	0.00	0.00	0.00
103+00	0.00	0.00	0.00	0.00	0.00
104+00	0.00	0.00	0.00	0.00	0.00
105+00	562.97	1042.54	3.48	6.44	1036.10
106+00	434.78	1847.68	3.62	13.14	2870.64
107+00	411.10	1566.44	7.62	20.81	4416.27
108+00	359.46	1426.96	6.40	25.96	5817.27
109+00	351.81	1317.16	10.27	30.86	7103.57
110+00	305.89	1217.95	1.53	21.84	8299.68
111+00	312.80	1145.72	2.08	6.68	9438.72
112+00	318.46	1169.01	2.22	7.96	10599.77
113+00	308.85	1161.68	7.73	18.42	11743.03
114+00	250.32	1035.18	1.81	17.29	12760.92
115+00	268.54	959.21	1.43	5.83	13714.30
116+00	312.41	1073.26	13.08	25.92	14761.64
117+00	344.80	1214.83	17.59	54.80	15921.67
118+00	334.66	1255.04	20.36	67.81	17108.90
119+00	348.20	1259.32	3.02	41.78	18326.44
120+00	419.84	1417.86	13.08	28.77	19715.53
121+00	365.98	1452.02	10.73	42.54	21125.01
122+00	288.15	1204.42	23.49	62.17	22267.26
123+00	368.98	1207.15	31.08	100.93	23373.48
124+00	315.10	1259.85	62.23	174.36	24458.97
125+00	347.17	1223.24	55.01	218.63	25463.58
126+00	337.96	1264.14	75.08	242.54	26485.18

127+00	280.99	1139.69	68.16	268.50	27356.37
128+00	404.64	1261.44	66.95	253.31	28364.50
129+00	428.80	1534.23	69.59	255.40	29643.33
130+00	346.23	1429.49	52.83	228.70	30844.12
131+00	324.67	1237.02	38.39	167.89	31913.25
132+00	43.22	677.94	59.89	179.21	32411.98
133+00	0.00	80.41	0.00	109.76	32382.63
134+00	0.00	0.00	0.00	0.00	32382.63
135+00	0.00	0.00	0.00	0.00	32382.63
		35,080.88 Cu. Yds		2,698.25 Cu. Yds	NET: 32,382.63 Cu. Yds

COUNTY of ORANGE
OC PUBLIC WORKS

OC SURVEY
FIELD UNIT-BOUNDARY ANALYSIS & MAPPING

2025 SCOURS STUDY- % MAX. CAPACITY BASIN TEMPLATE - VOLUME REPORT (OCTOBER 30, 2025)

SAN DIEGO CREEK (F05) BASIN #3, (STATION 100+00 TO 135+00)

STATION	CUT AREA	CUT VOLUME	MAX CAP AREA	MAX CAP VOLUME	% of CAPACITY
	(Sq. Ft)	(Cu. Yds)	(Sq. Ft)	(Cu. Yds)	
100+00	0.00	0.00	0.00	0.00	0.00%
101+00	0.00	0.00	0.00	0.00	0.00%
102+00	0.00	0.00	0.00	0.00	0.00%
103+00	0.00	0.00	0.00	0.00	0.00%
104+00	0.00	0.00	0.00	0.00	0.00%
105+00	562.97	1042.54	905.20	1676.30	62.19%
106+00	434.78	1847.69	869.31	3286.13	56.23%
107+00	411.1	1566.44	884.37	3247.55	48.23%
108+00	359.46	1426.96	906.00	3315.50	43.04%
109+00	351.81	1317.17	909.24	3361.56	39.18%
110+00	305.89	1217.96	859.99	3276.36	37.17%
111+00	312.8	1145.72	904.03	3266.71	35.07%
112+00	318.46	1169	890.80	3323.75	35.17%
113+00	308.85	1161.69	886.51	3291.31	35.30%
114+00	250.32	1035.5	885.14	3280.84	31.56%
115+00	268.54	960.85	878.73	3266.43	29.42%
116+00	312.41	1075.83	884.43	3265.11	32.95%
117+00	344.80	1217.06	897.33	3299.55	36.89%
118+00	334.66	1258.26	909.33	3345.67	37.61%
119+00	348.20	1264.56	923.82	3394.73	37.25%
120+00	419.84	1422.30	976.93	3519.90	40.41%

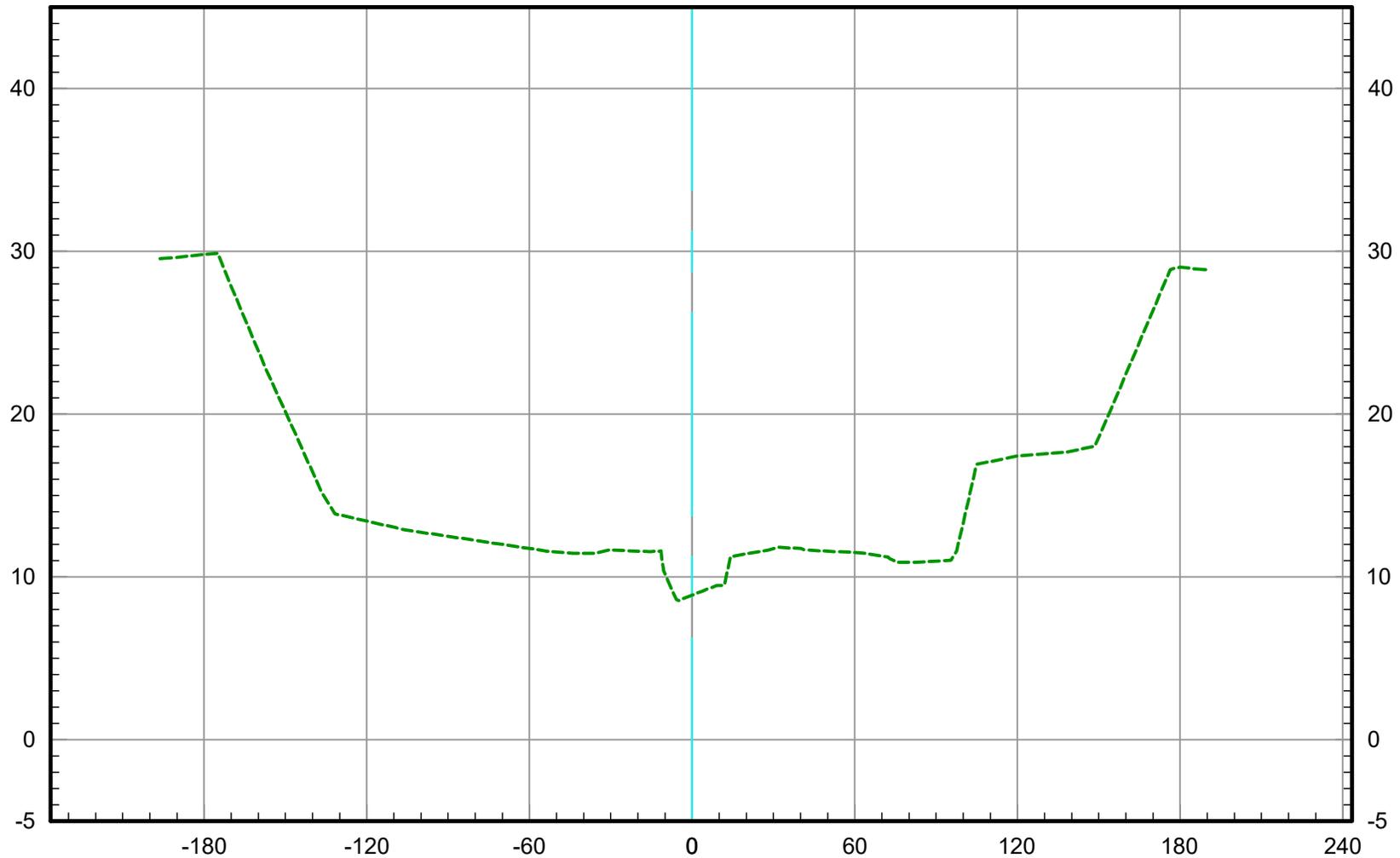
121+00	365.98	1455.22	937.10	3544.50	41.06%
122+00	288.15	1211.35	906.05	3413.25	35.49%
123+00	368.98	1216.91	937.85	3414.63	35.64%
124+00	315.10	1266.81	974.71	3541.77	35.77%
125+00	347.17	1226.43	947.97	3560.51	34.45%
126+00	337.96	1268.76	958.62	3530.72	35.93%
127+00	280.99	1146.20	1039.40	3700.03	30.98%
128+00	404.64	1269.69	999.57	3775.87	33.63%
129+00	428.80	1543.41	1014.08	3728.99	41.39%
130+00	346.23	1435.24	1065.82	3851.66	37.26%
131+00	324.67	1242.41	1039.52	3898.77	31.87%
132+00	43.22	681.28	0.00	1922.00	35.45%
133+00	0.00	80.04	0.00	0.00	0.00%
134+00	0.00	0.00	0.00	0.00	0.00%
135+00	0.00	0.00	0.00	0.00	0.00%
		TOTAL CUT VOLUME		MAX. CAPACITY BASIN 3 VOLUME	TOTAL % OF CAPACITY
		35,173.26 Cu. Yds		93,300.10 Cu. Yds	37.70%

U.S. Survey Foot

OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



100+00

2025 Ground
As-Built Plan



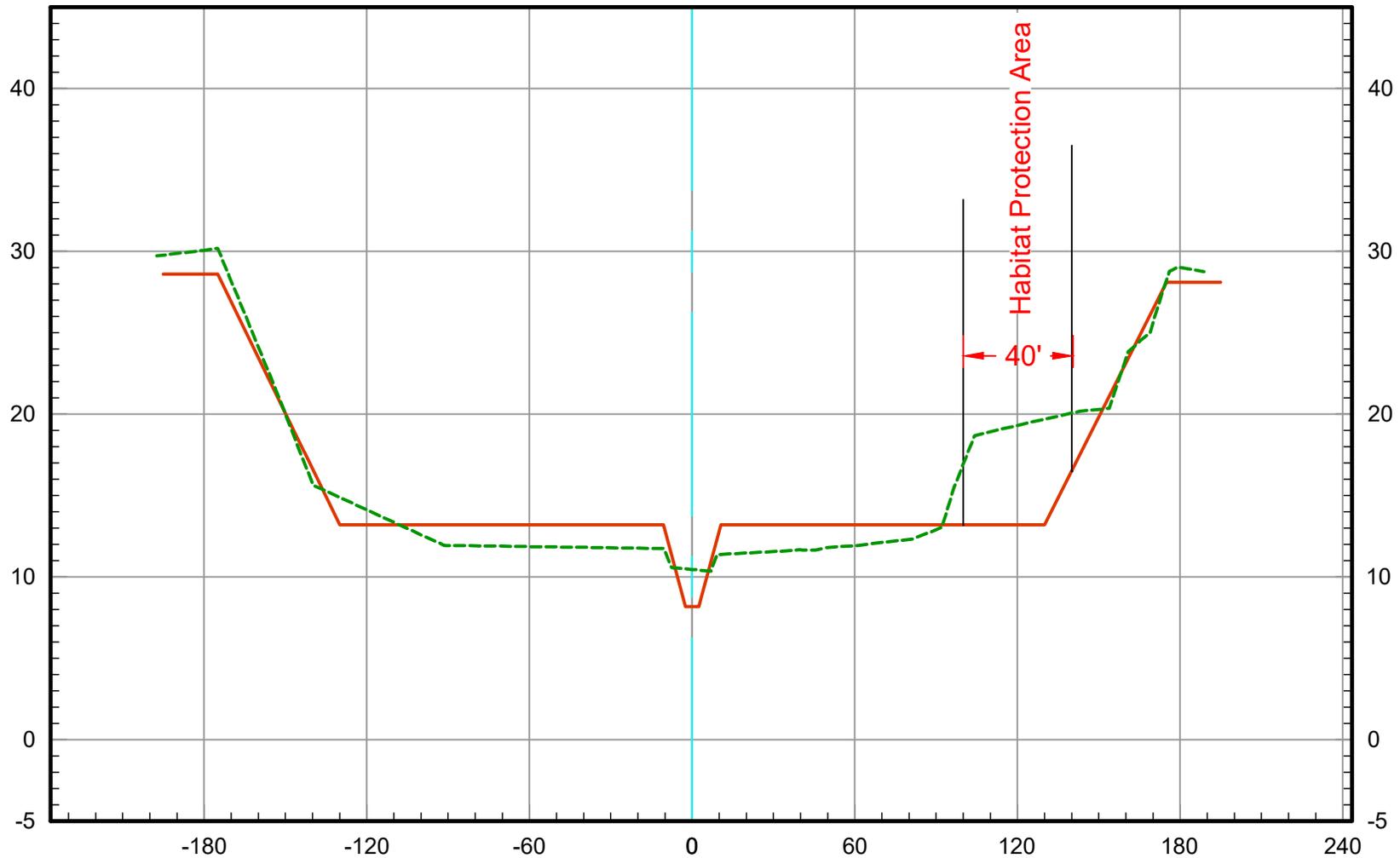
Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

U.S. Survey Foot

OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



101+00

2025 Ground
As-Built Plan



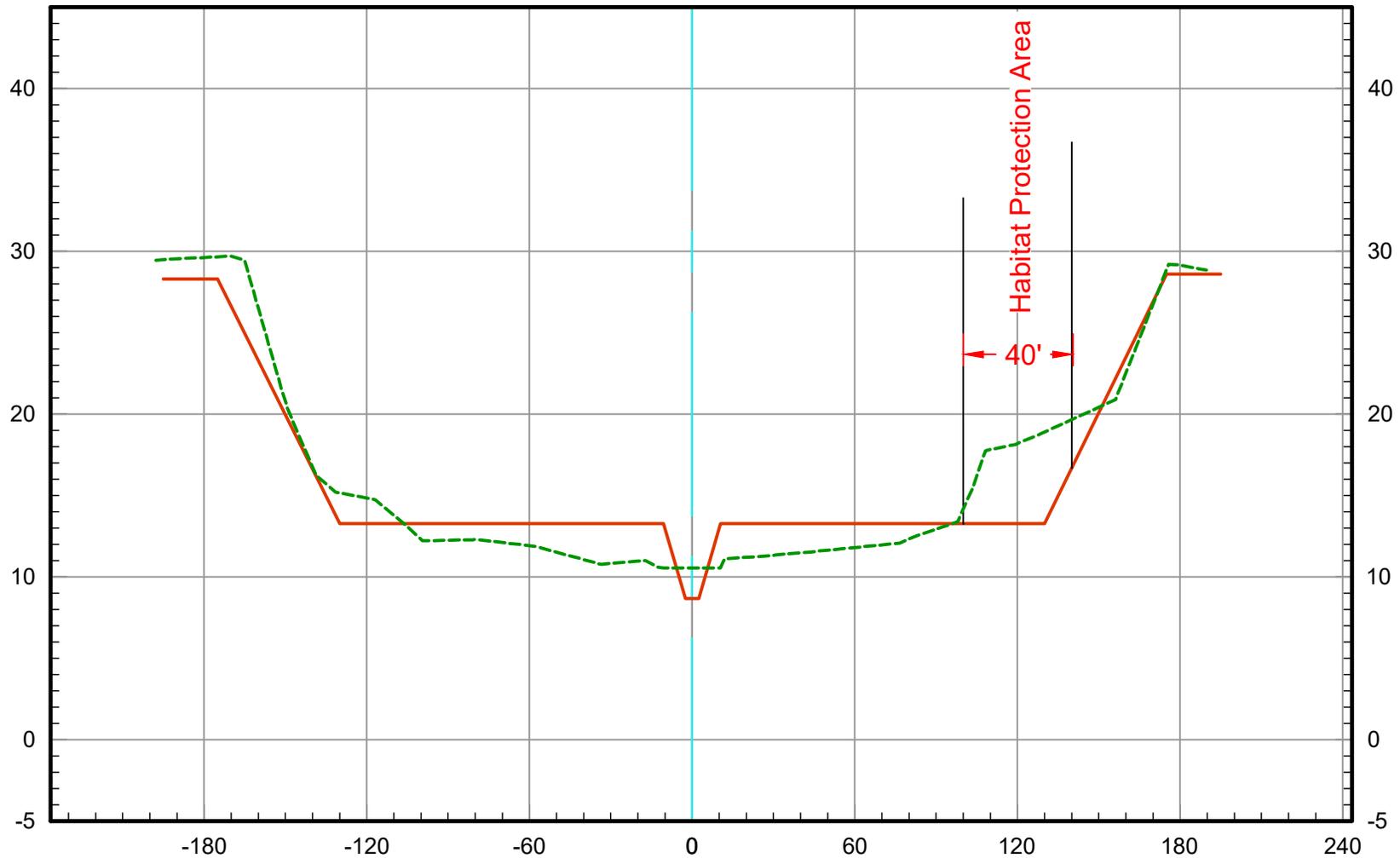
Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

U.S. Survey Foot

OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



2025 Ground
As-Built Plan



102+00

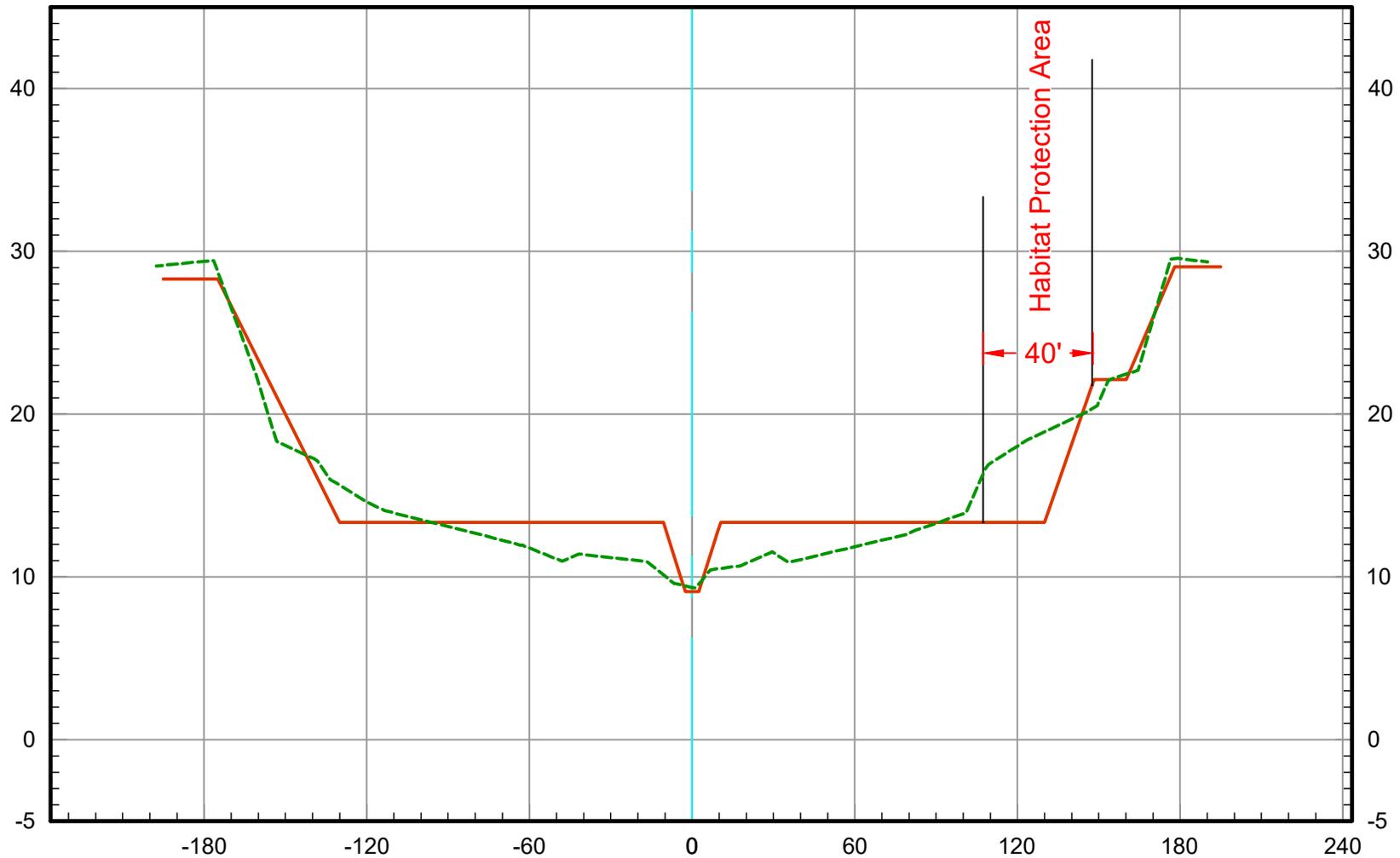
Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

U.S. Survey Foot

OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



103+00

2025 Ground
As-Built Plan



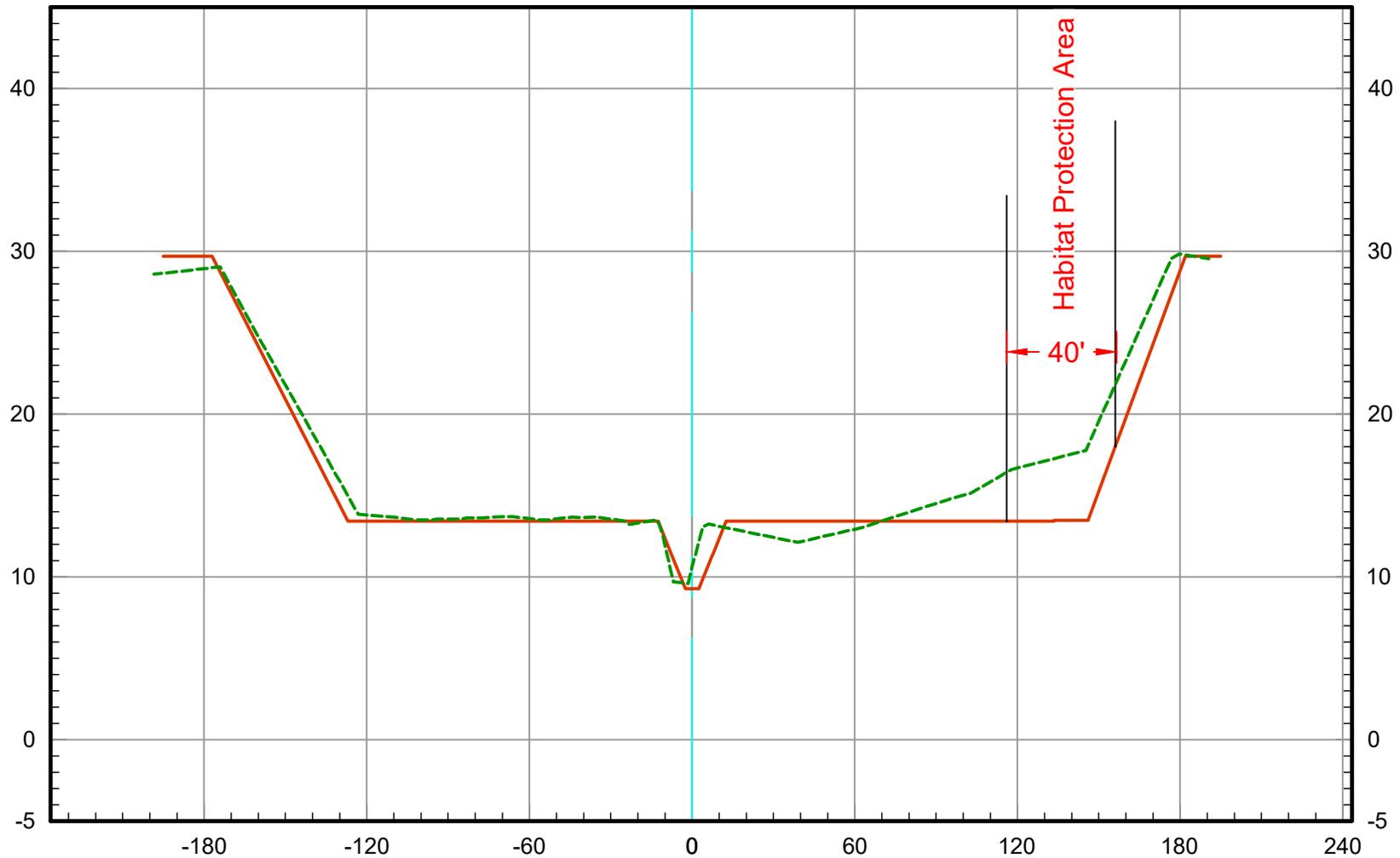
Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

U.S. Survey Foot

OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



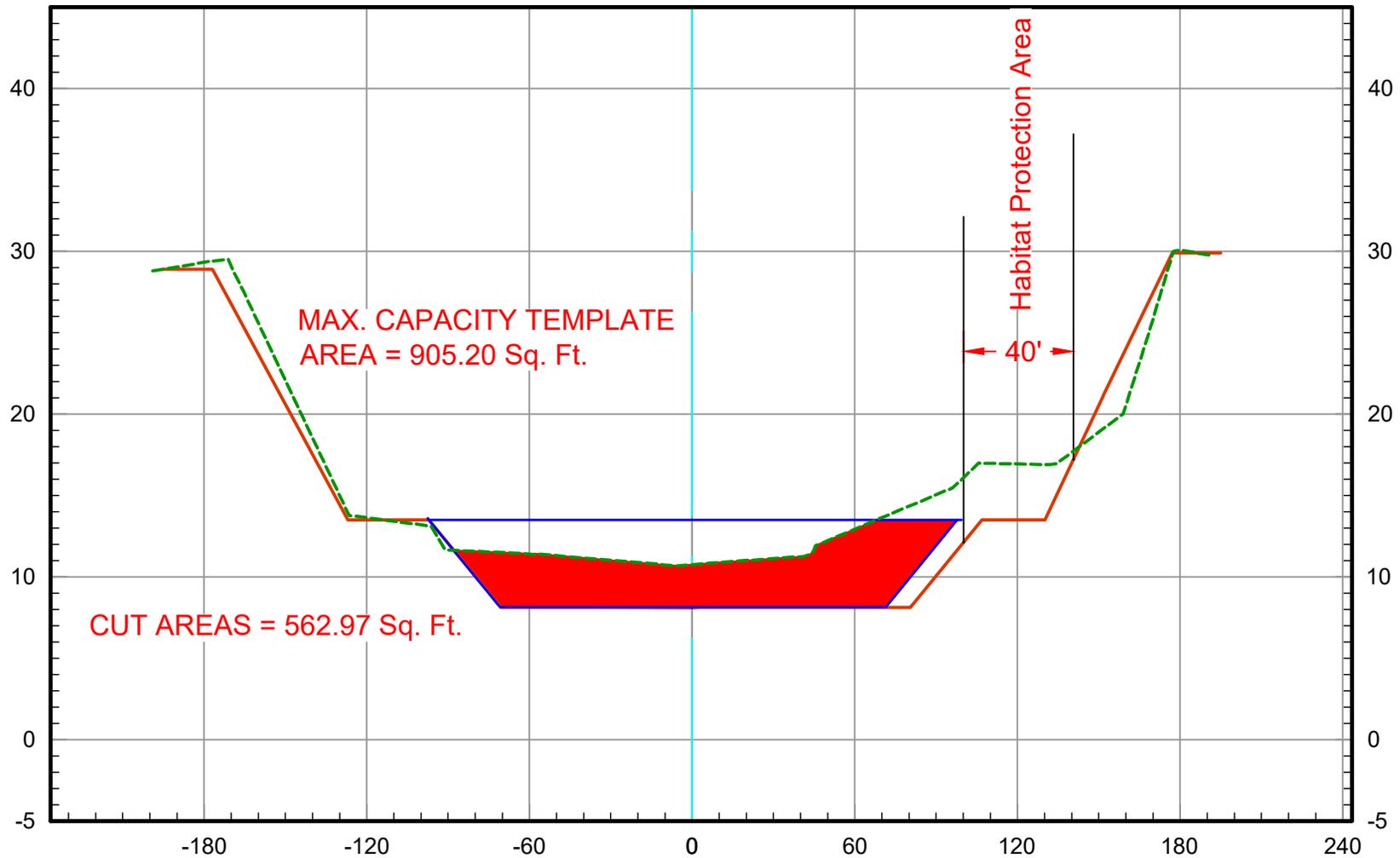
2025 Ground
As-Built Plan



104+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

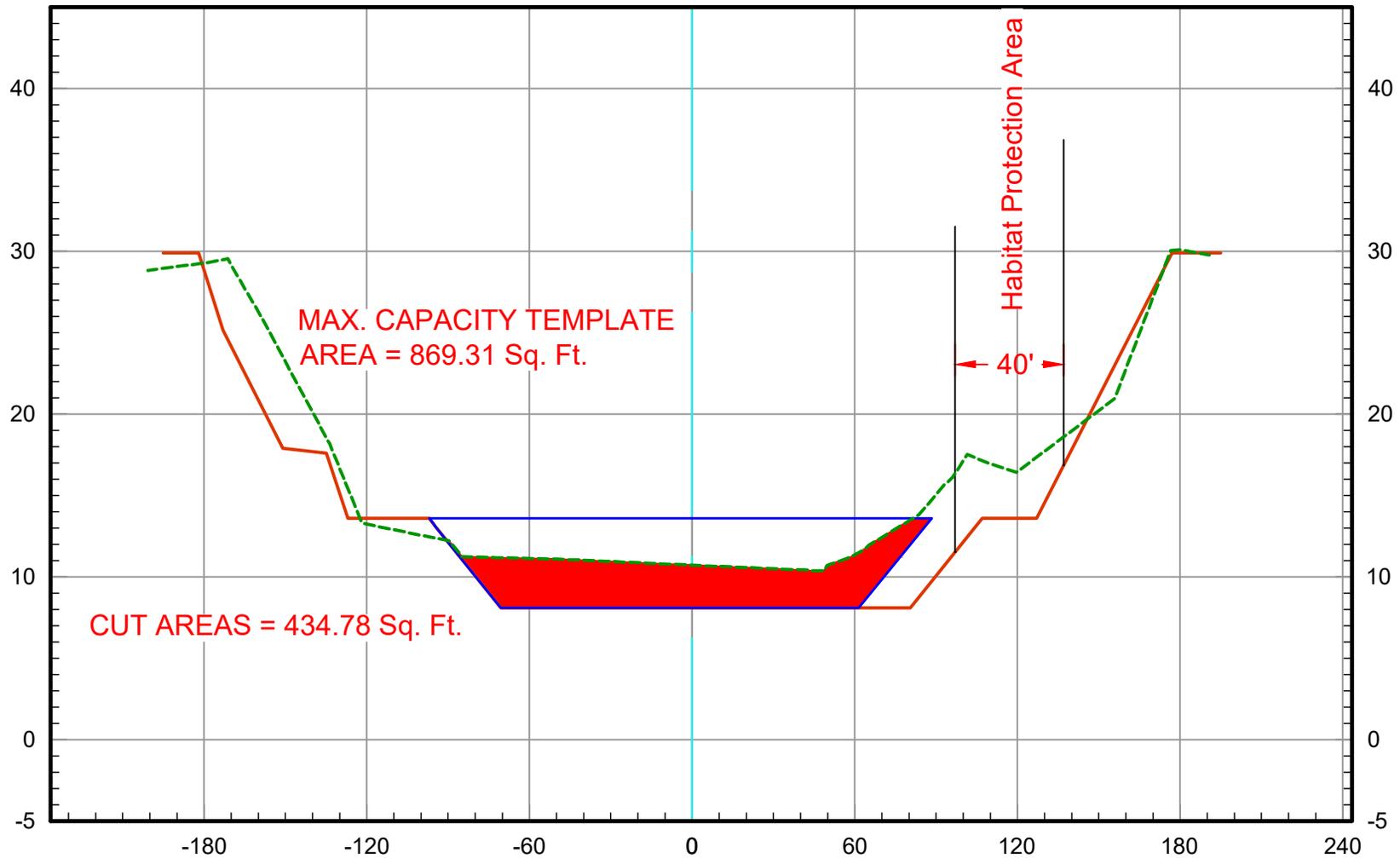


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

105+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

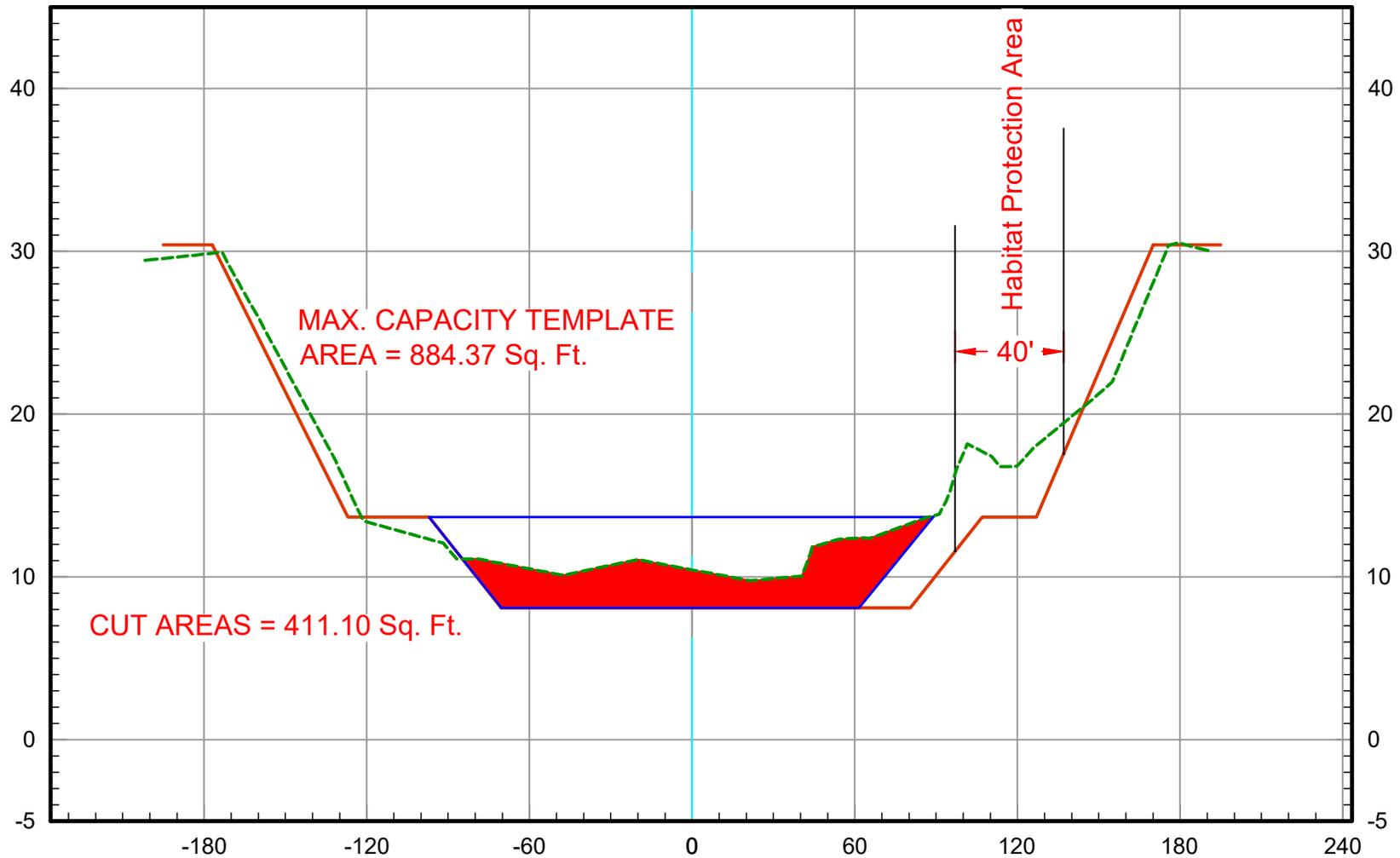


2025 Ground 
As-Built Plan 
Maximum Capacity 

106+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

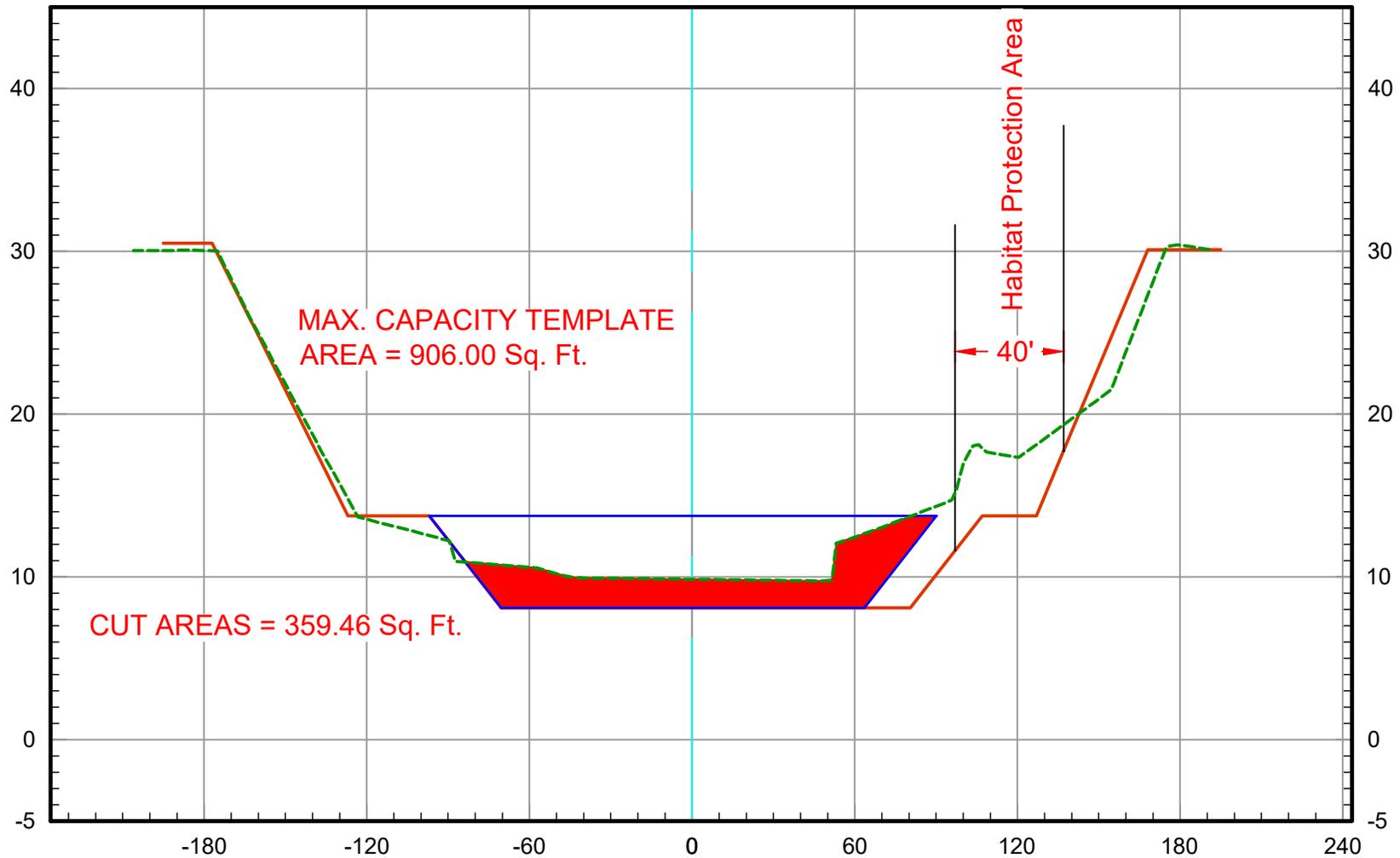


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

107+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

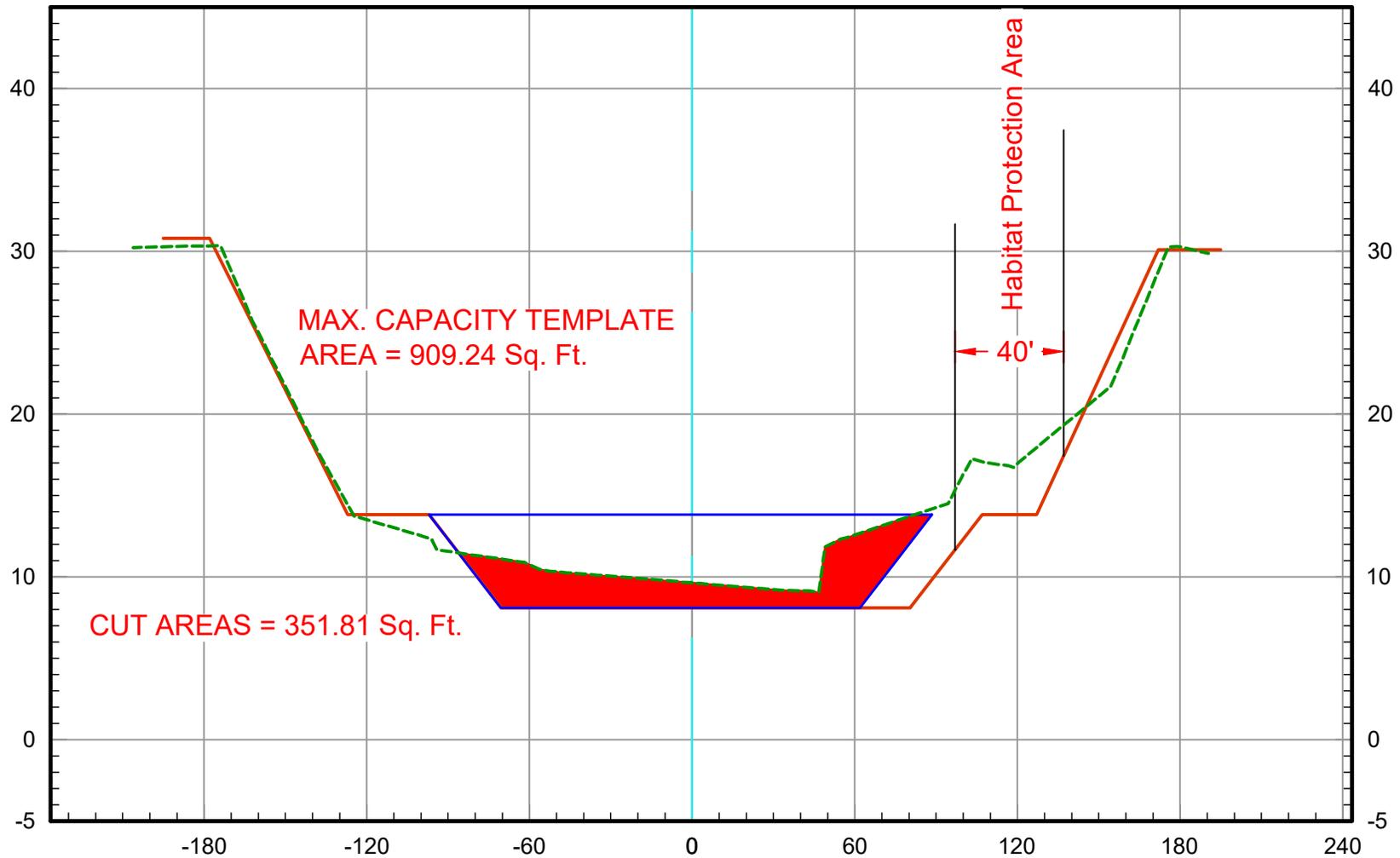


2025 Ground 
As-Built Plan 
Maximum Capacity 

108+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

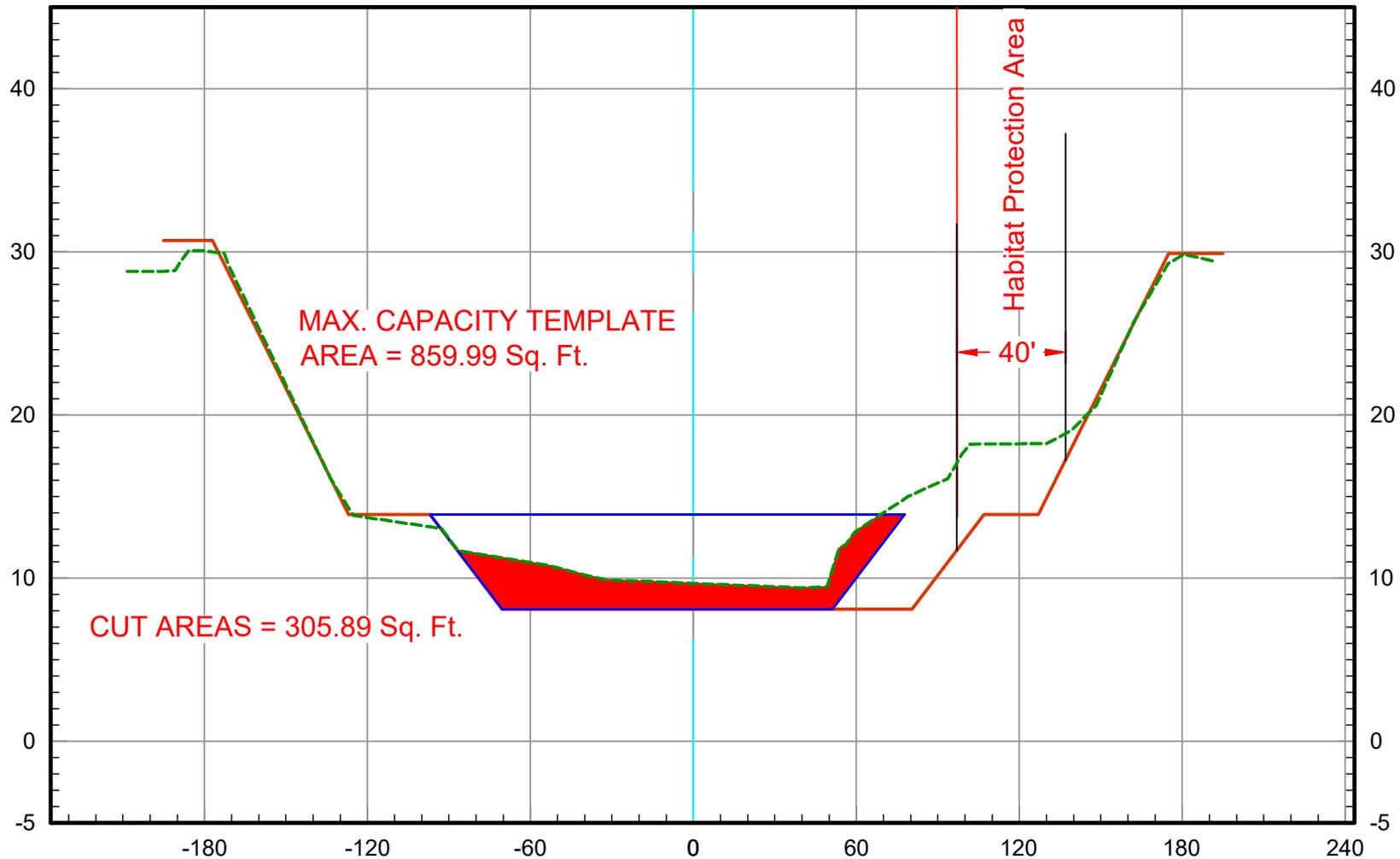


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

109+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

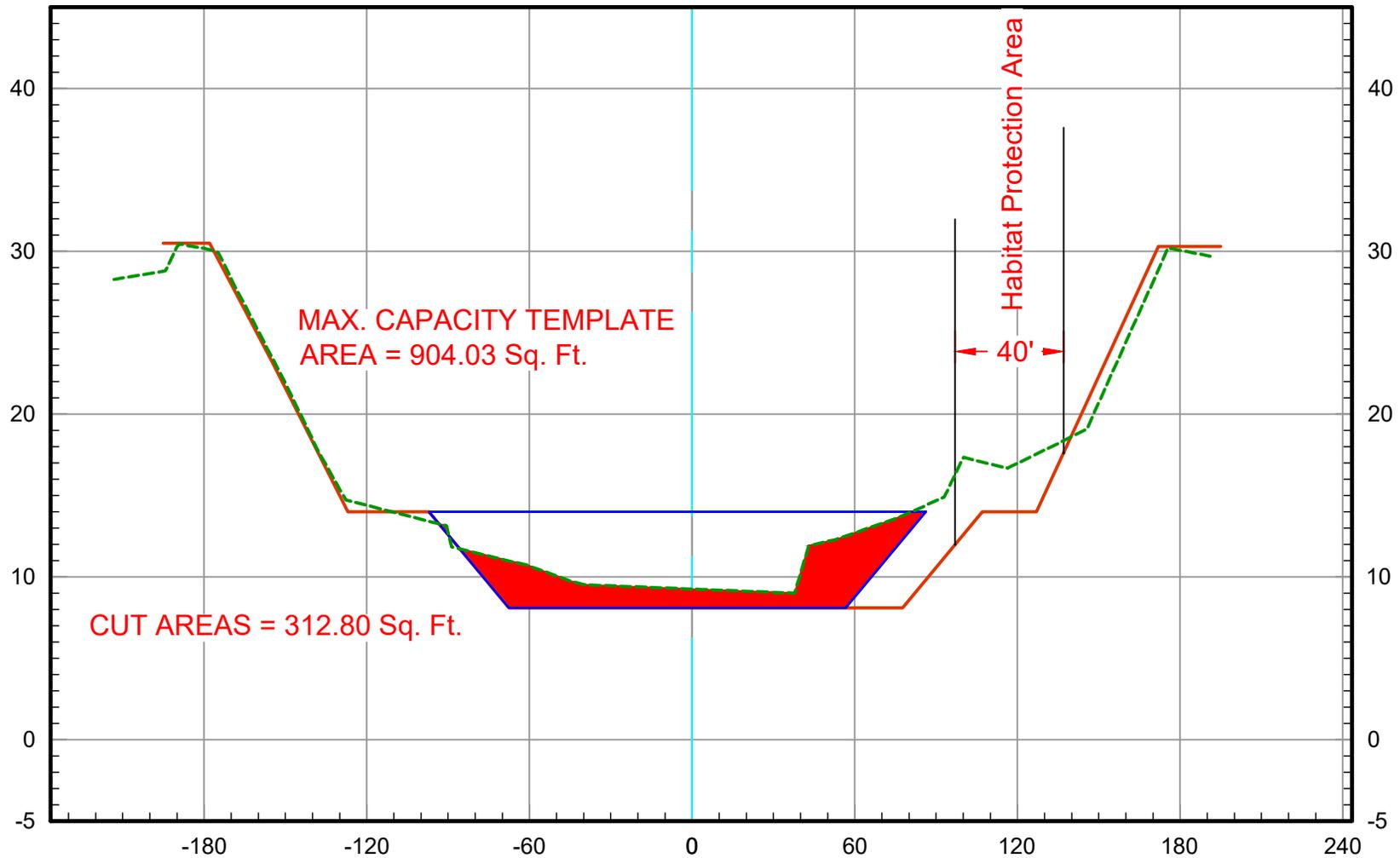


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

110+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

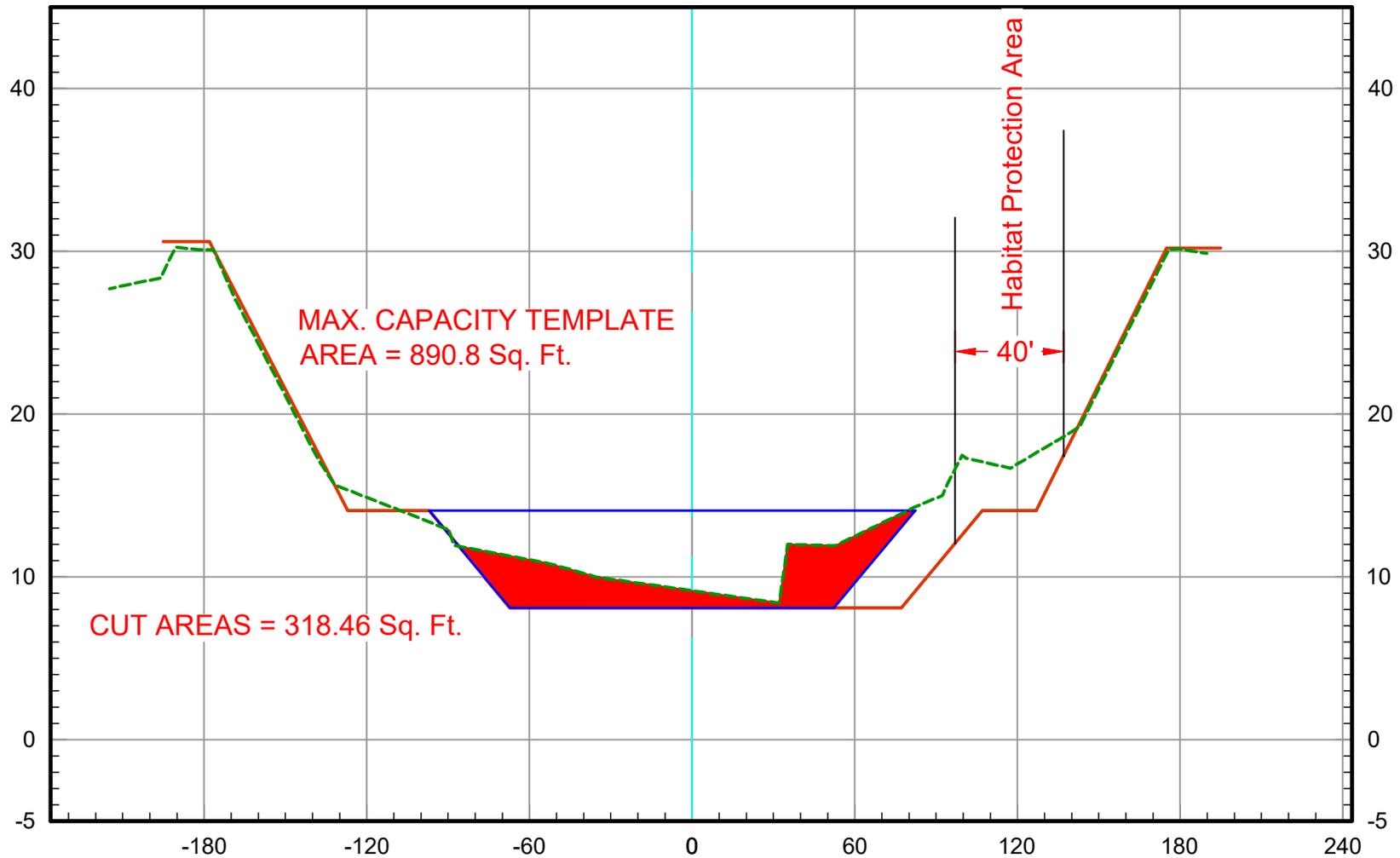


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

111+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

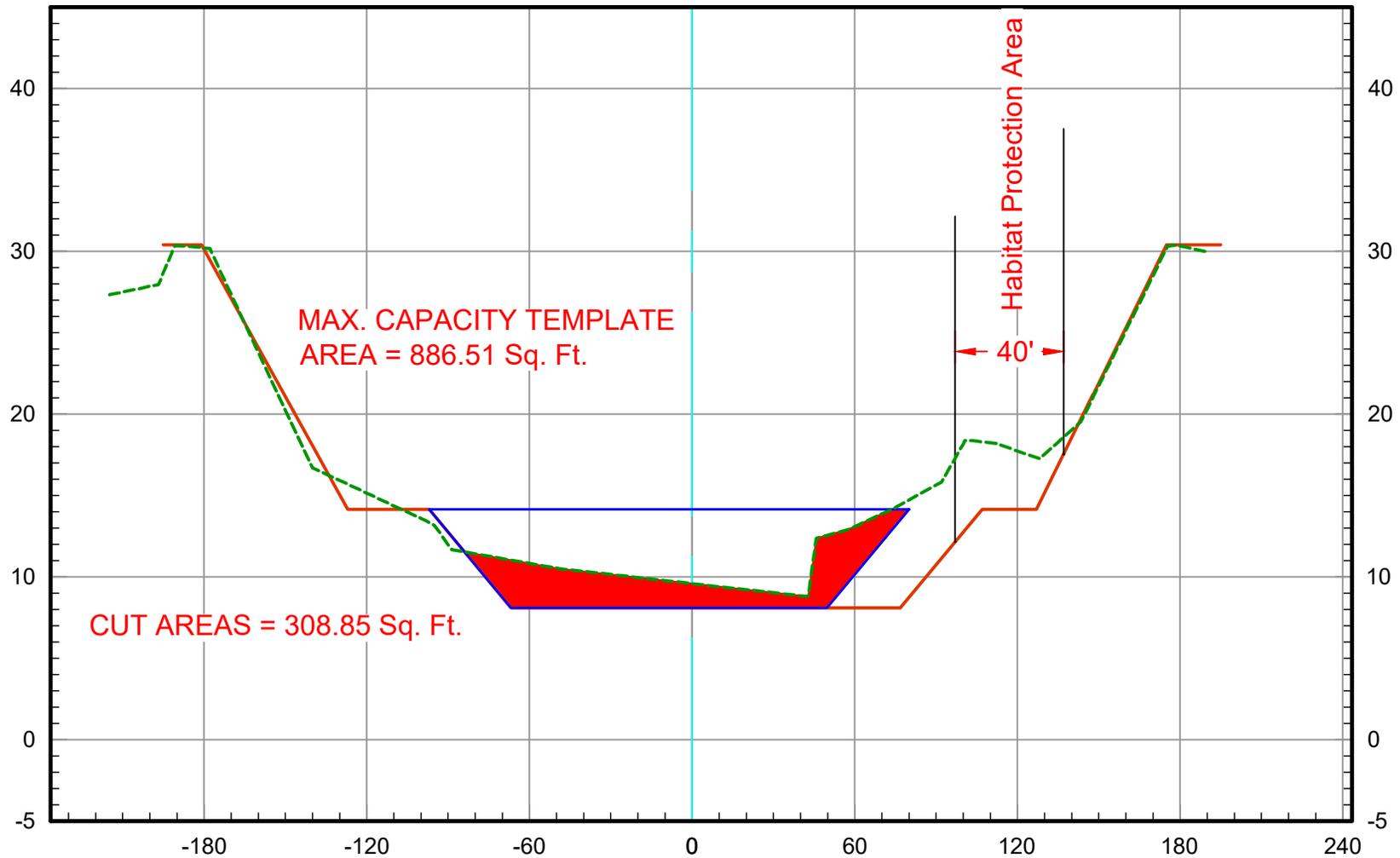
SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

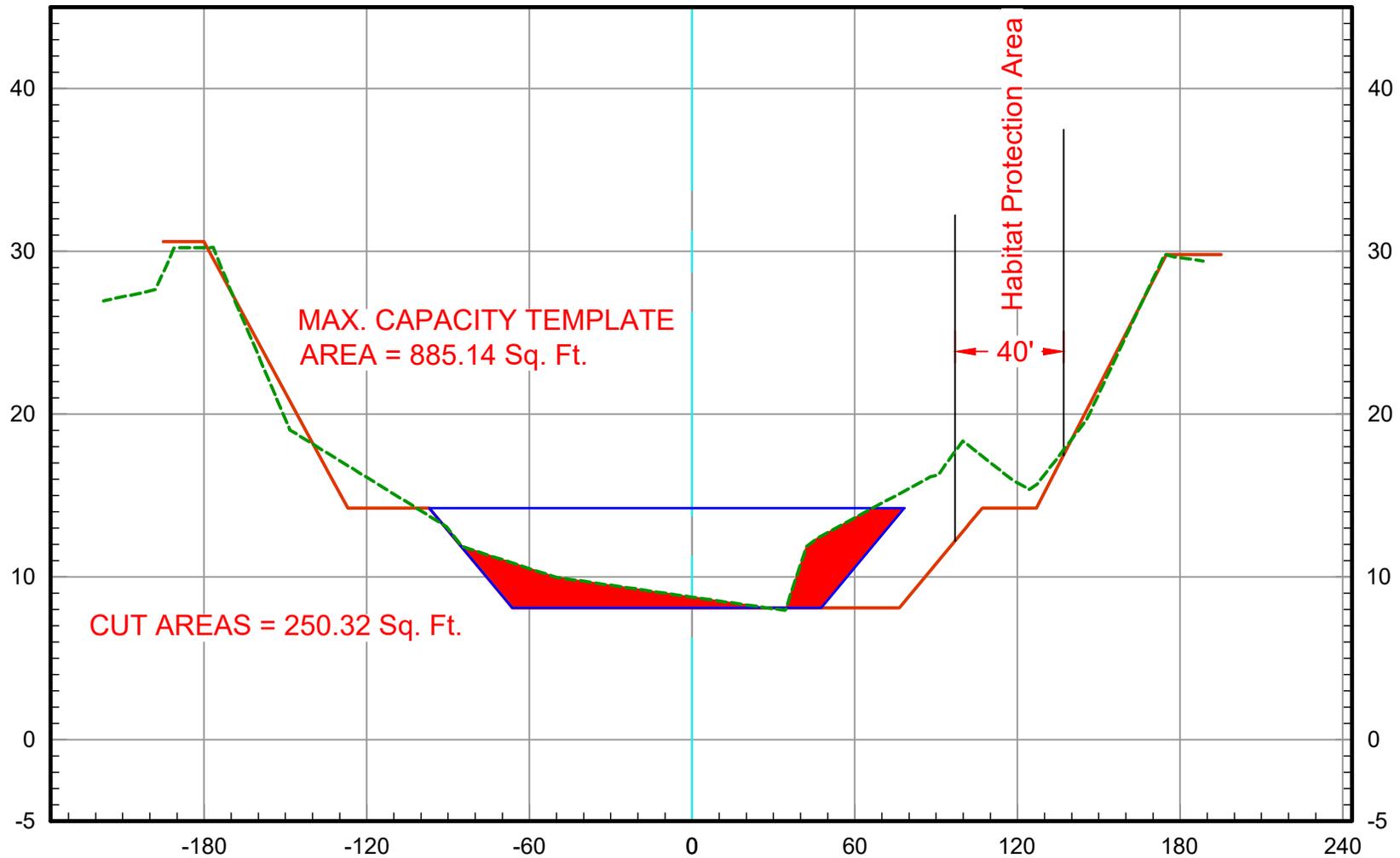


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

113+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

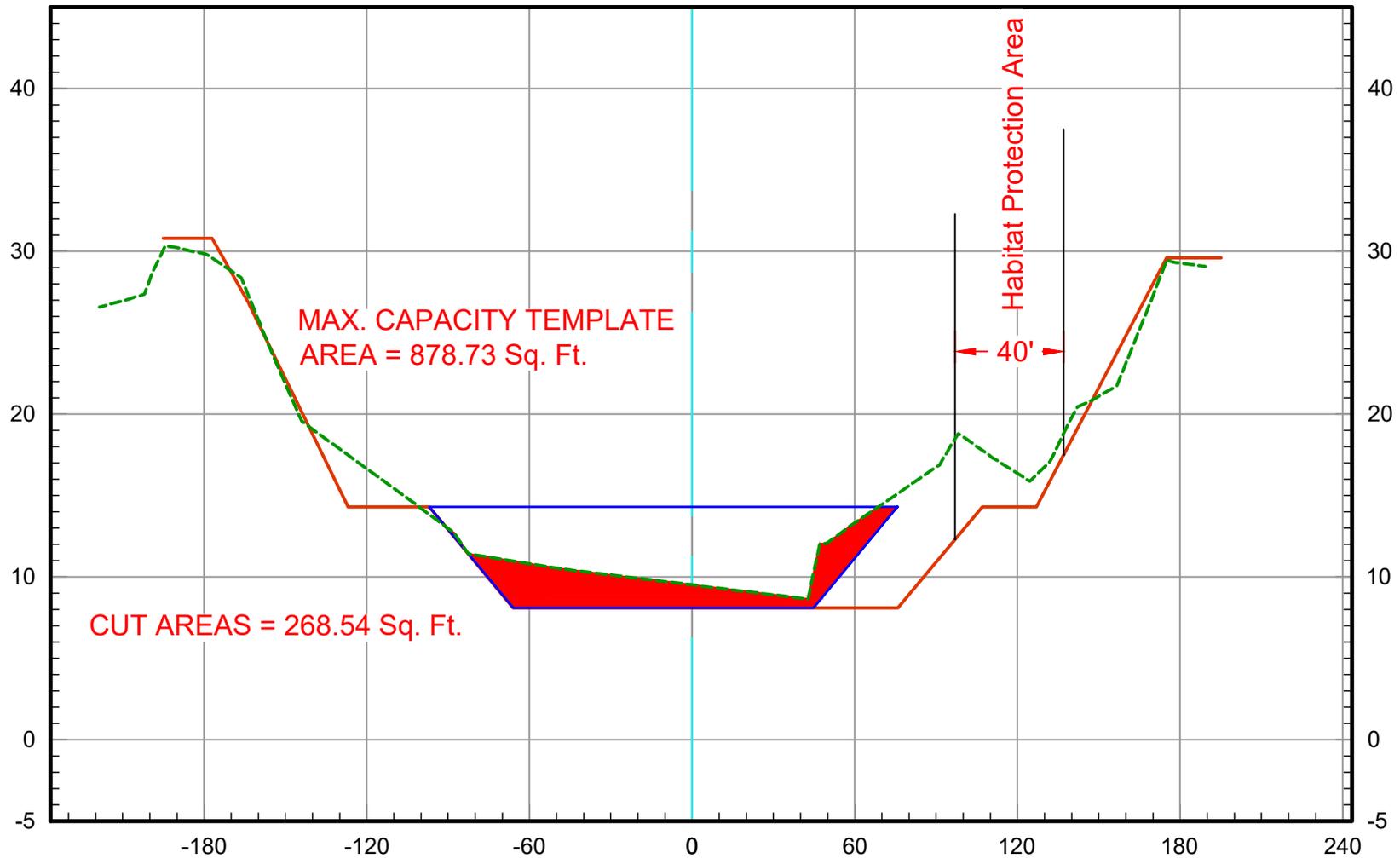


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

114+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

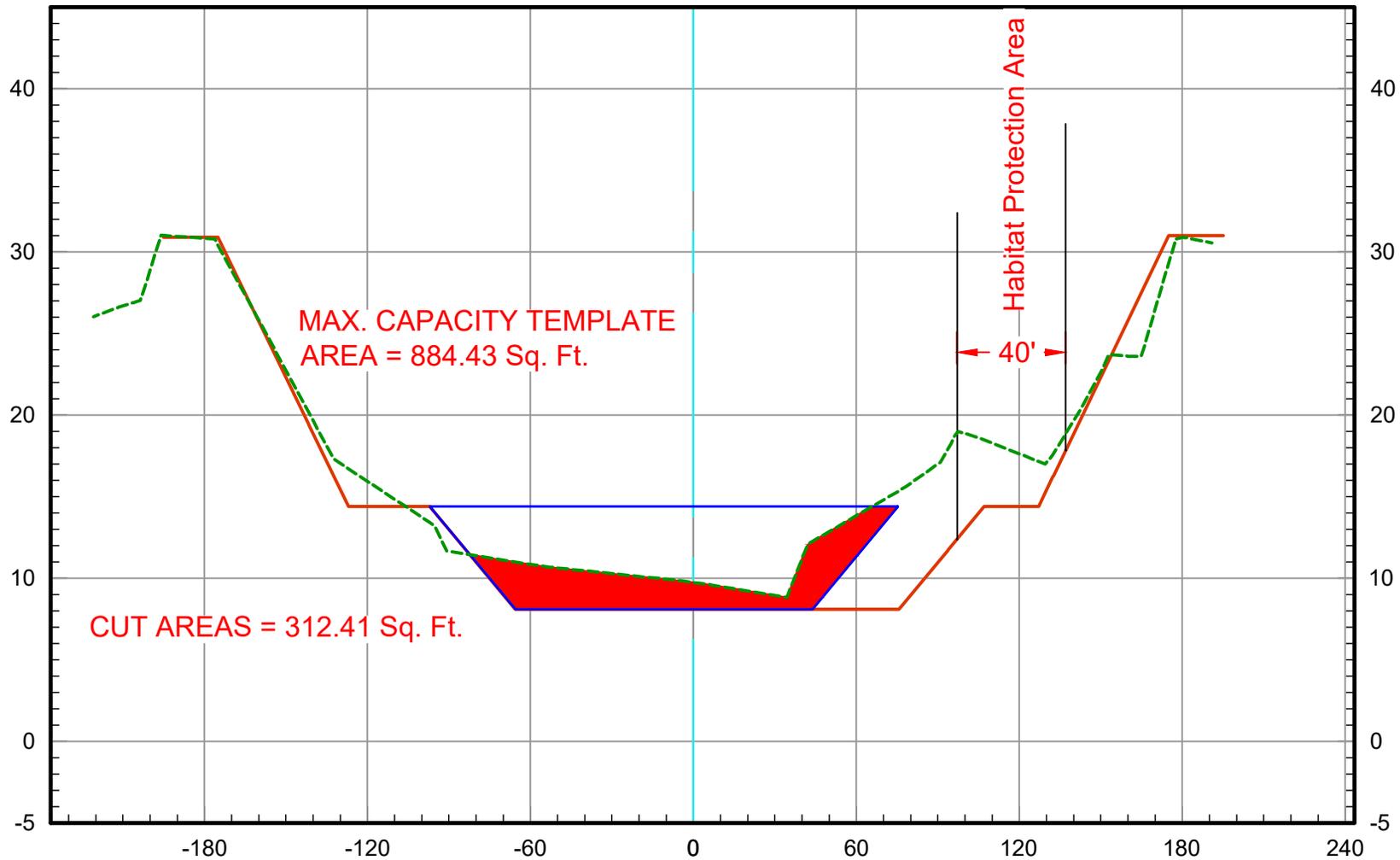


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

115+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

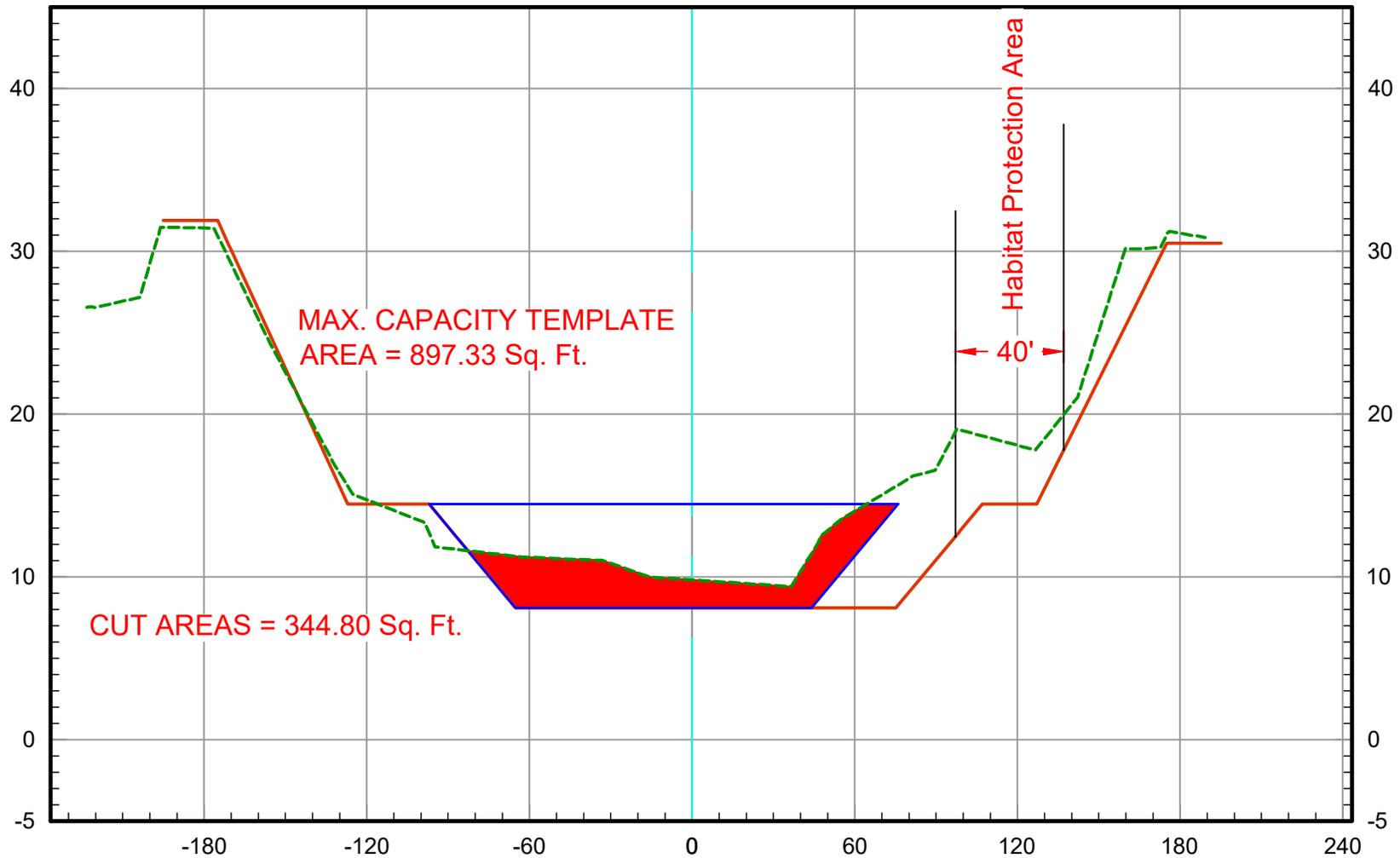


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

116+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

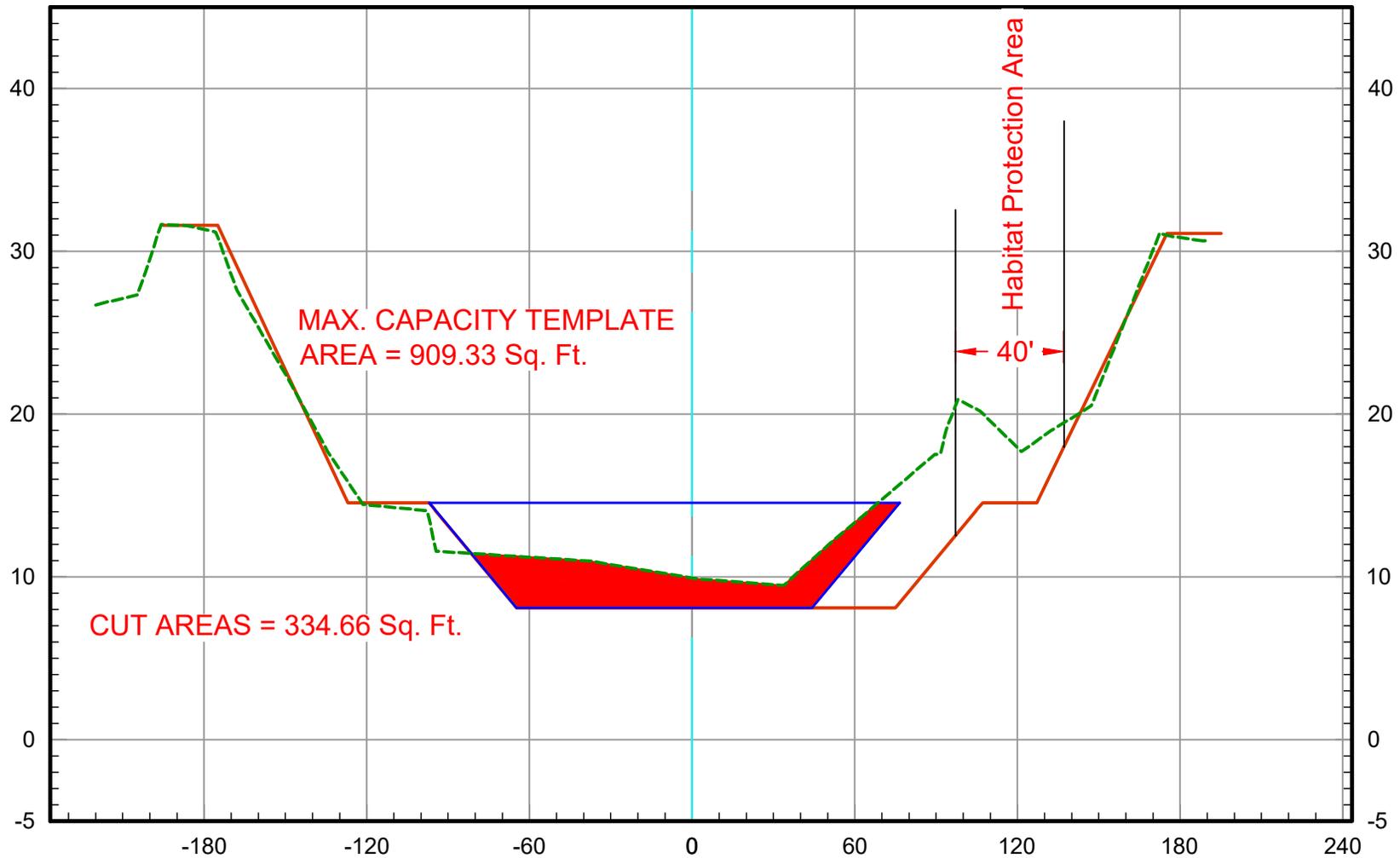


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

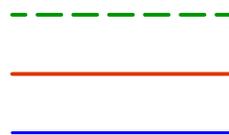
117+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



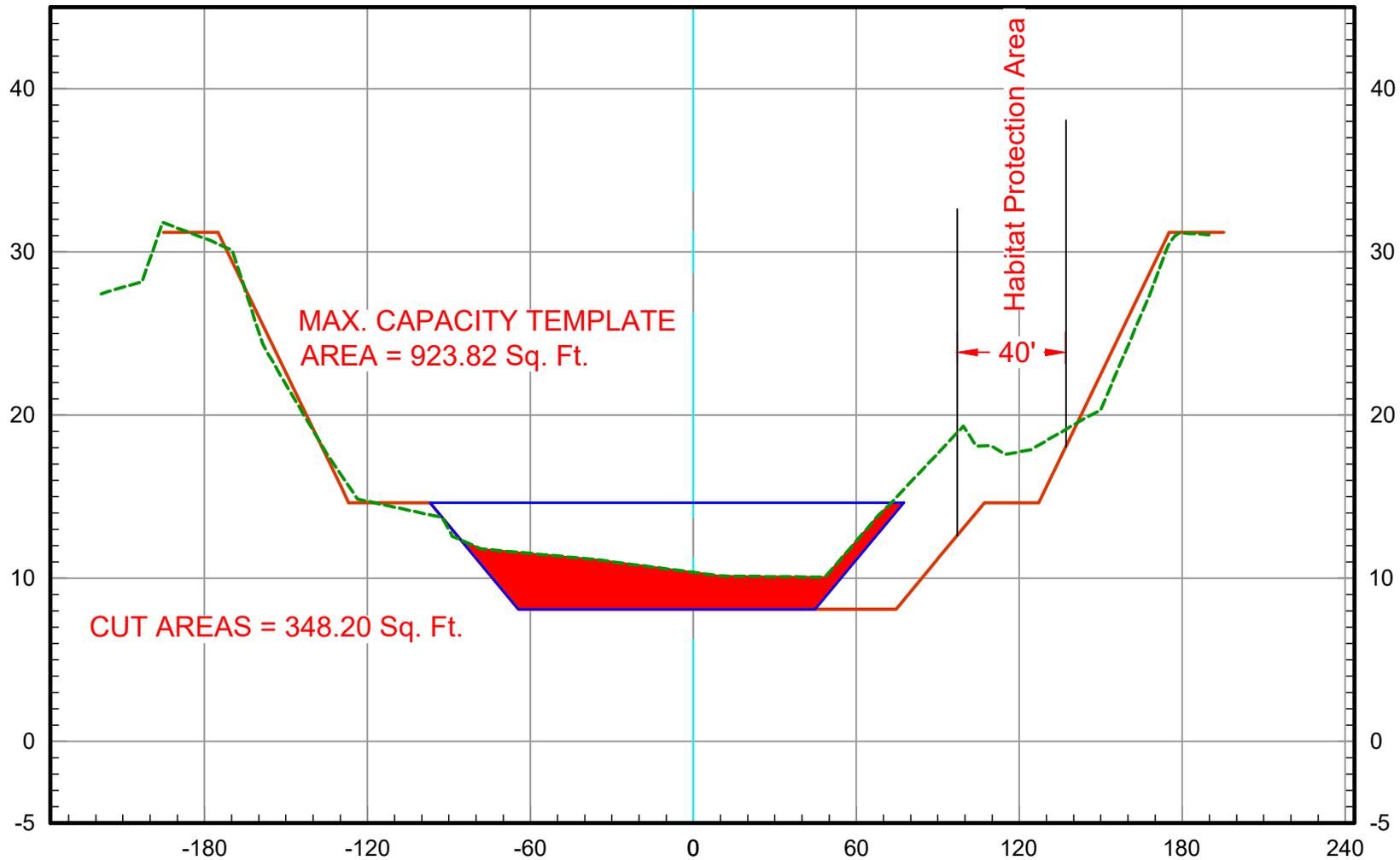
2025 Ground
As-Built Plan
Maximum Capacity



118+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

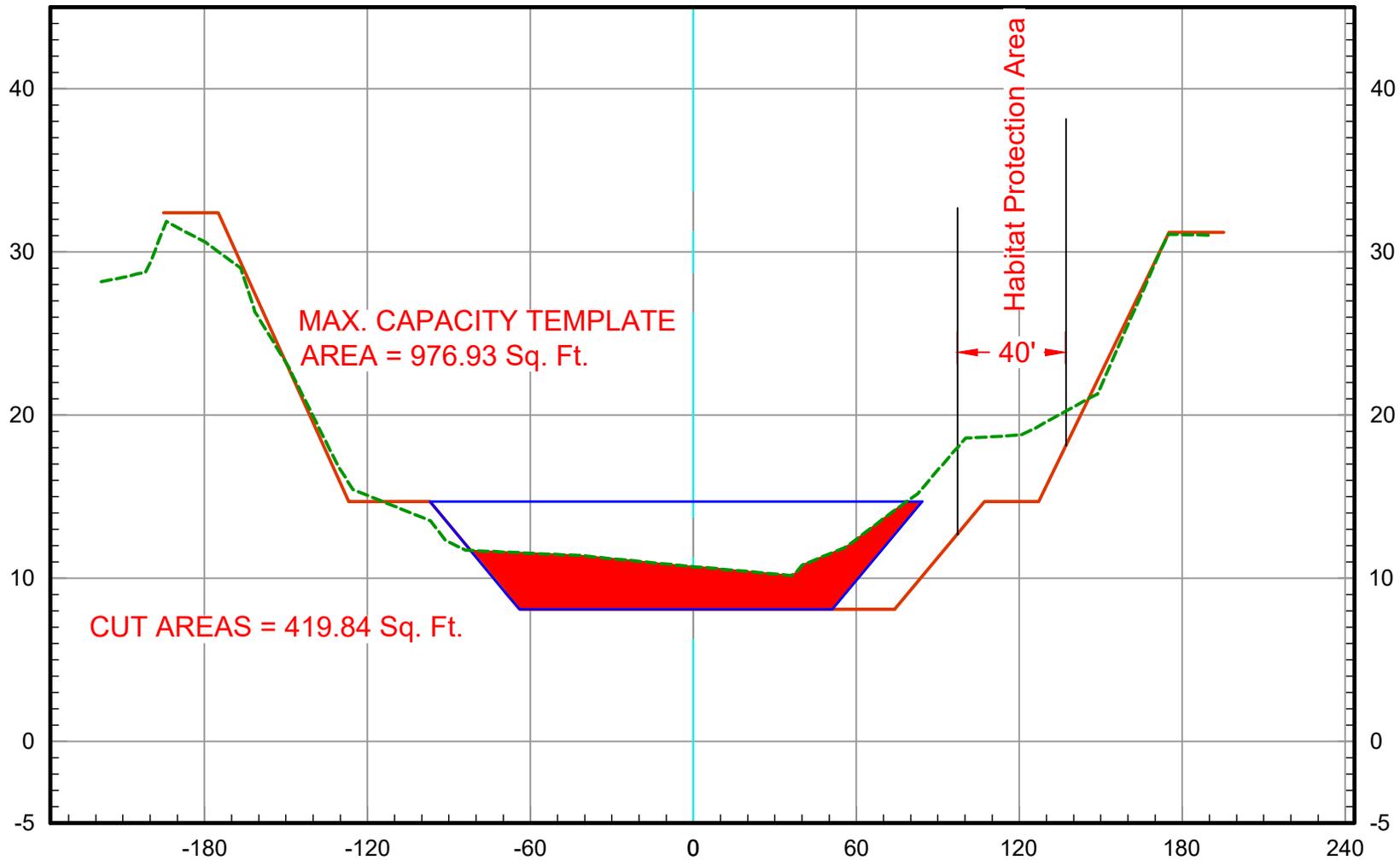


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

119+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

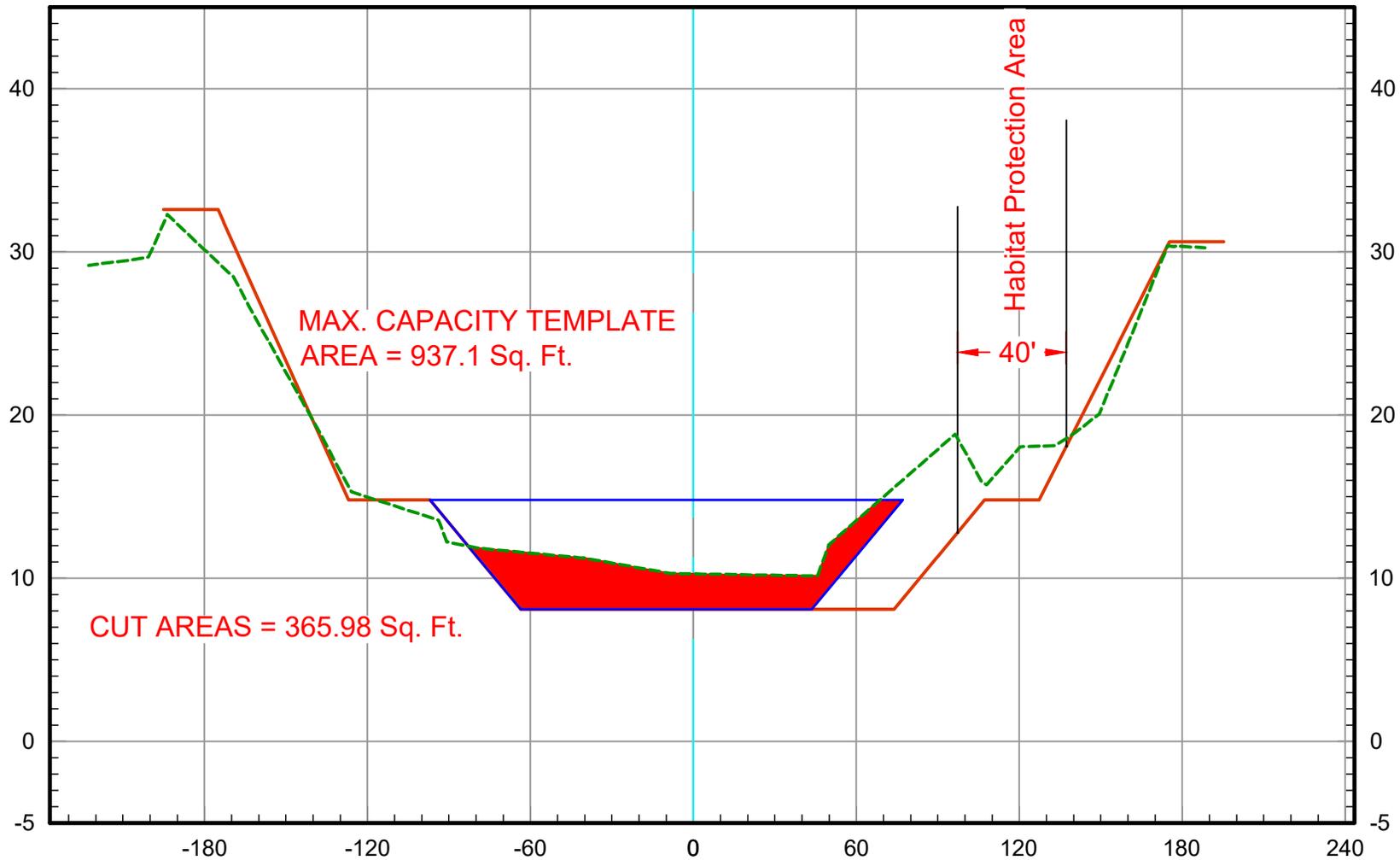


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

120+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

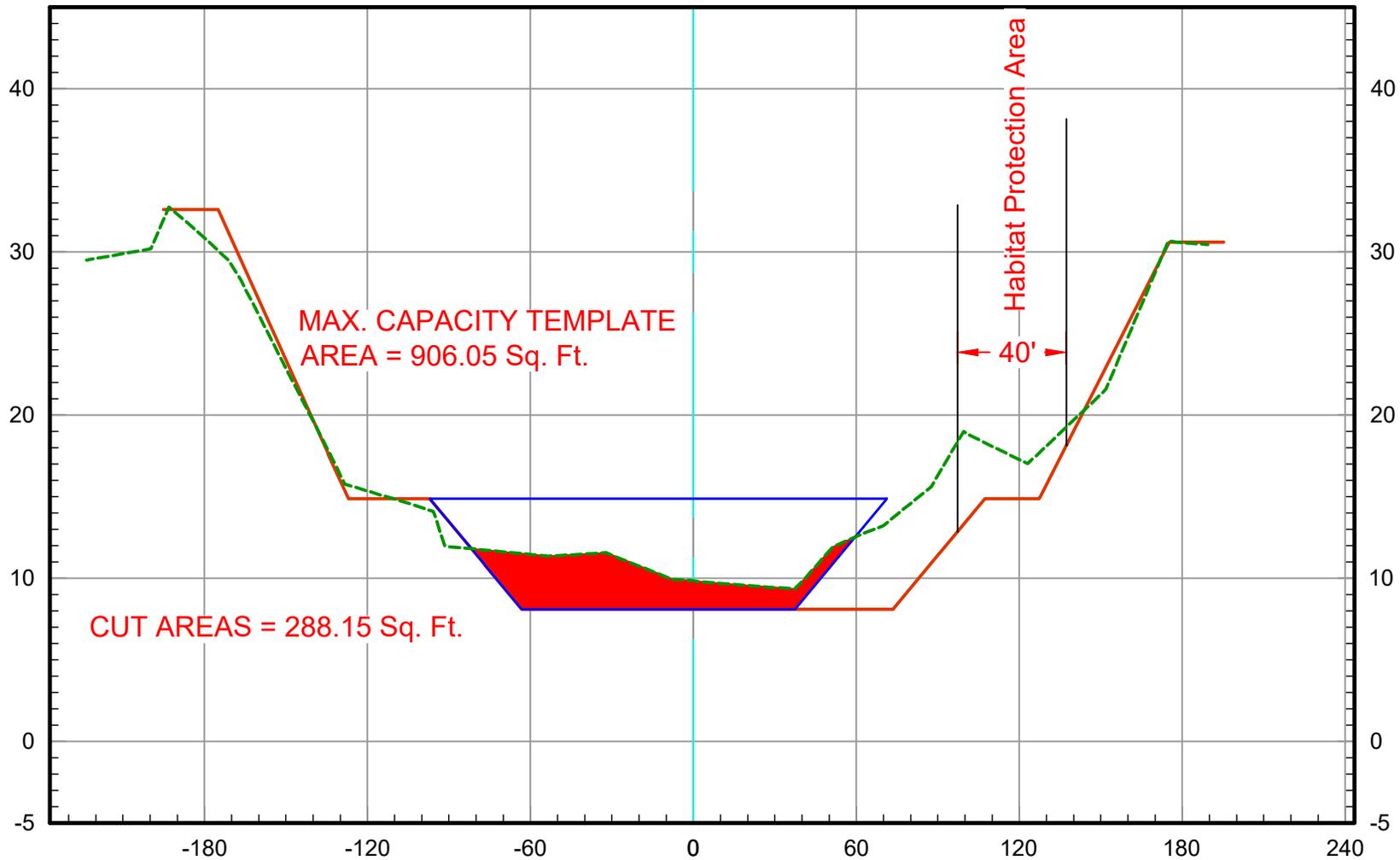


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

121+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



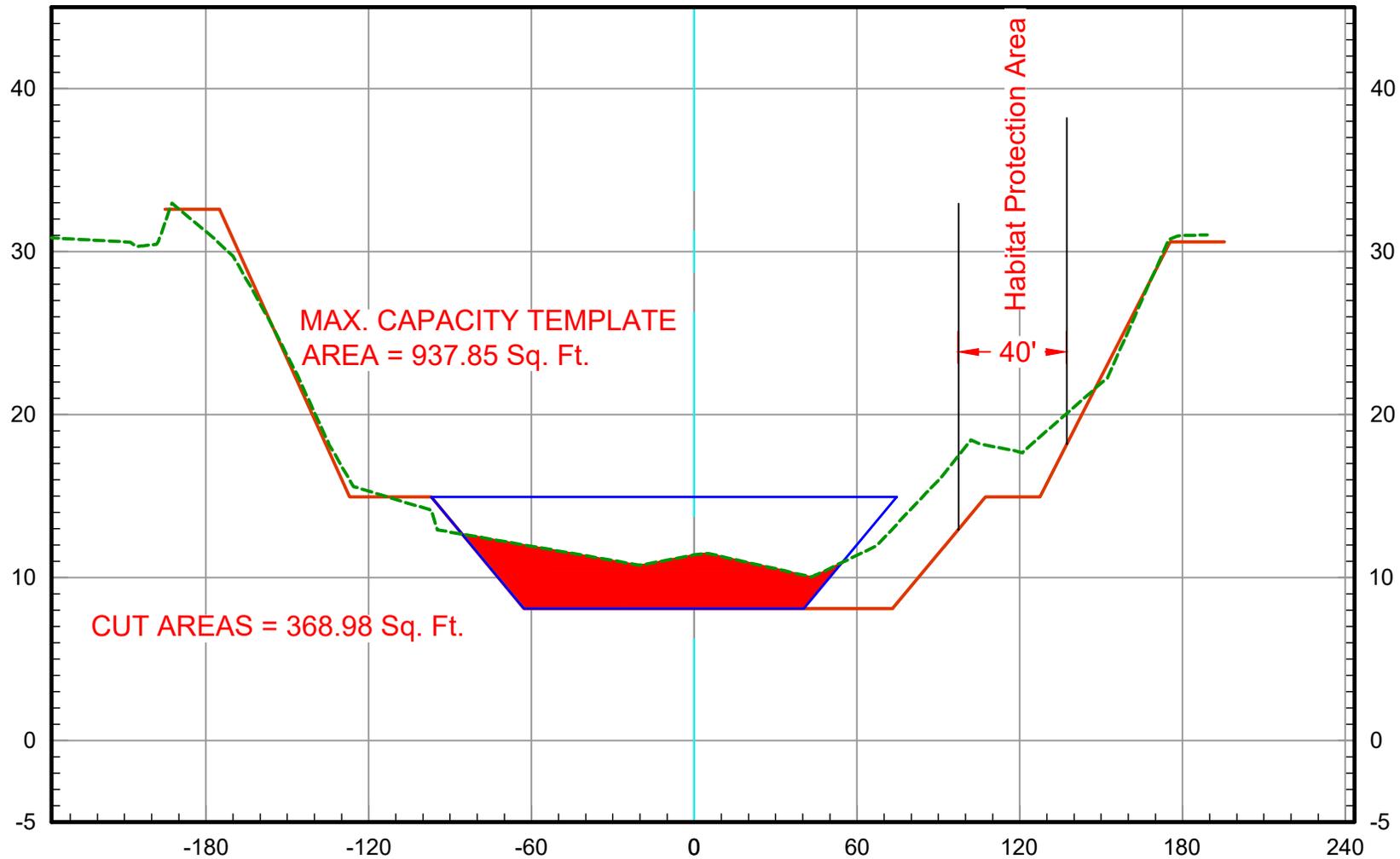
2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

122+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'



SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

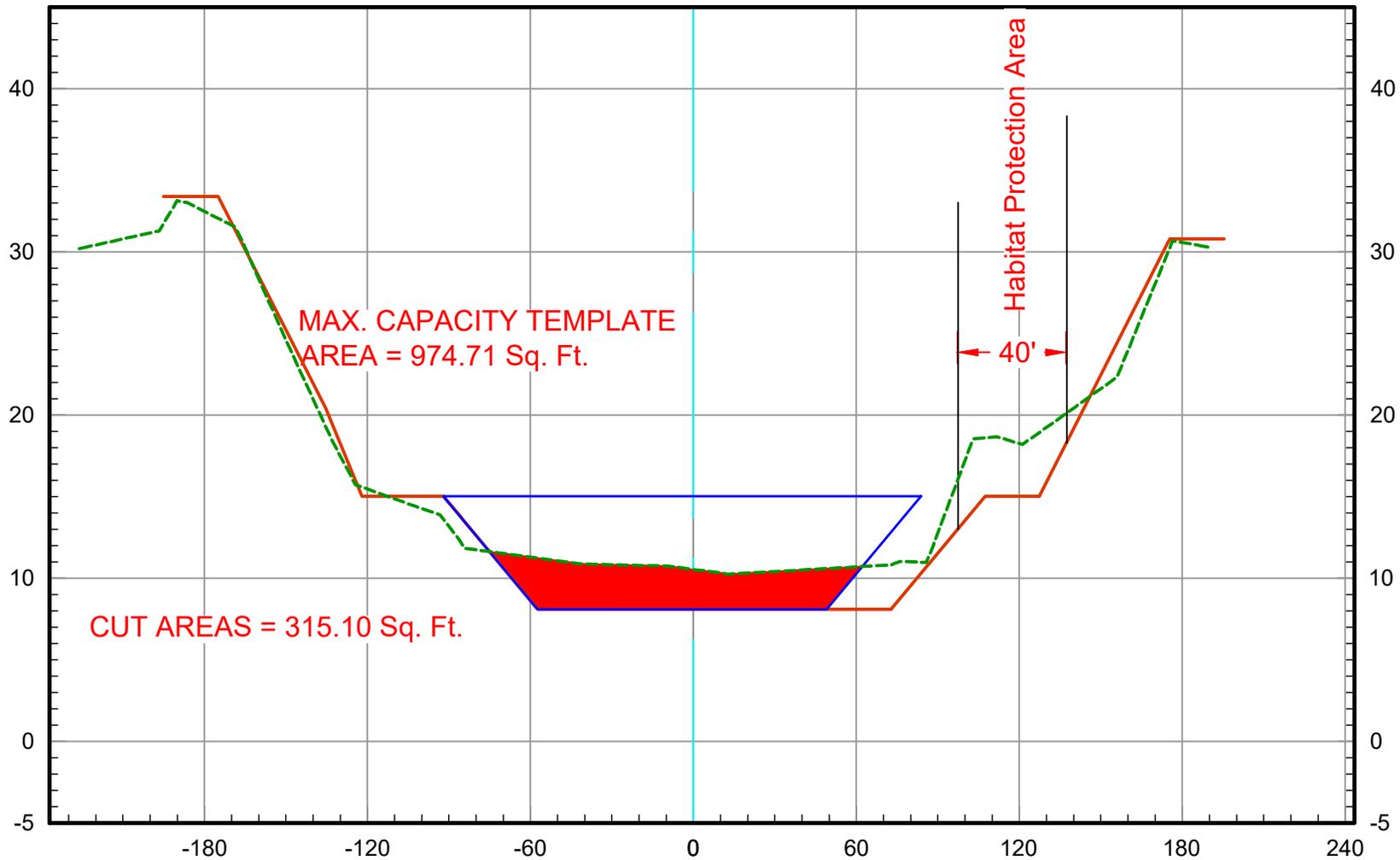


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

123+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

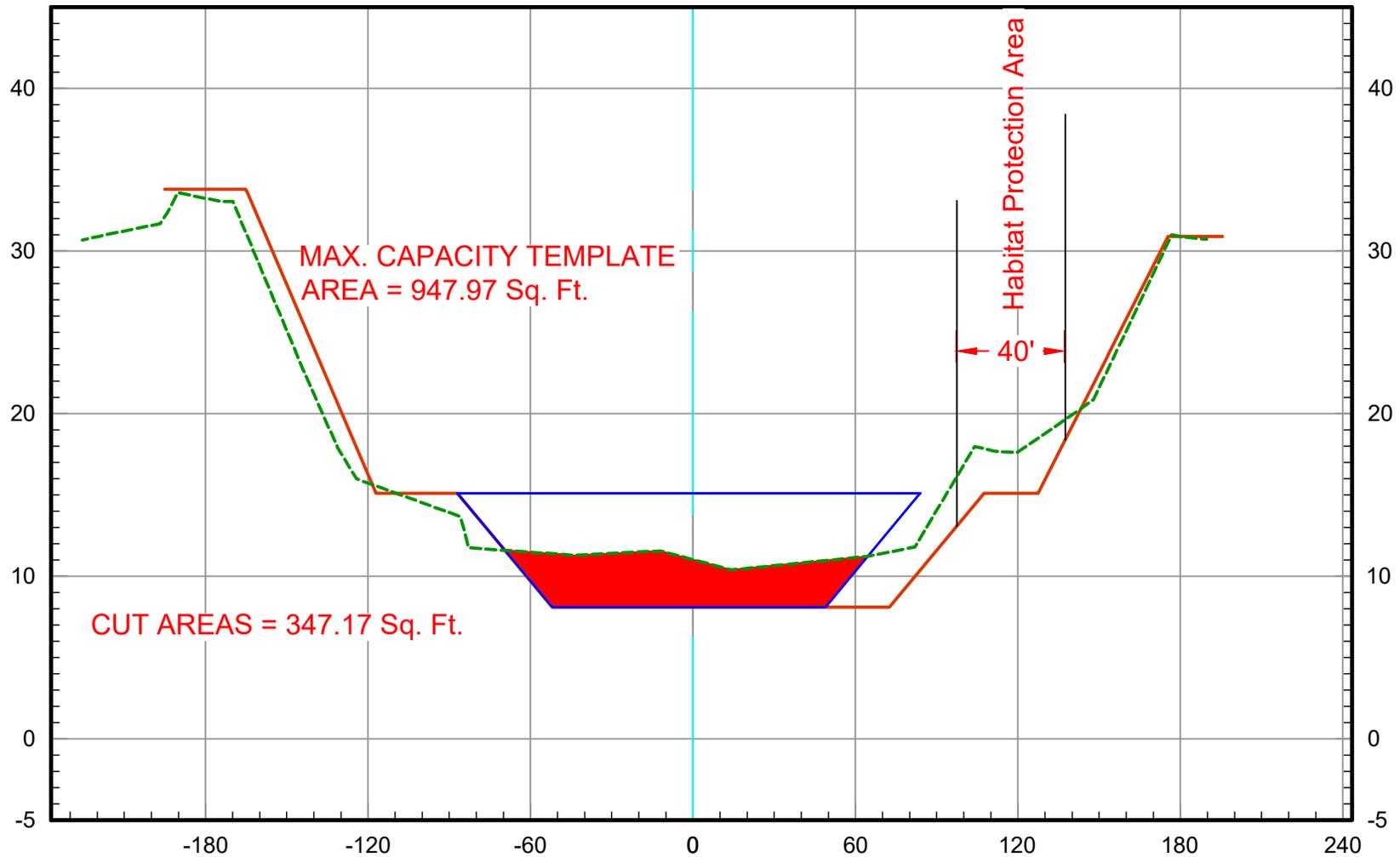


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

124+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

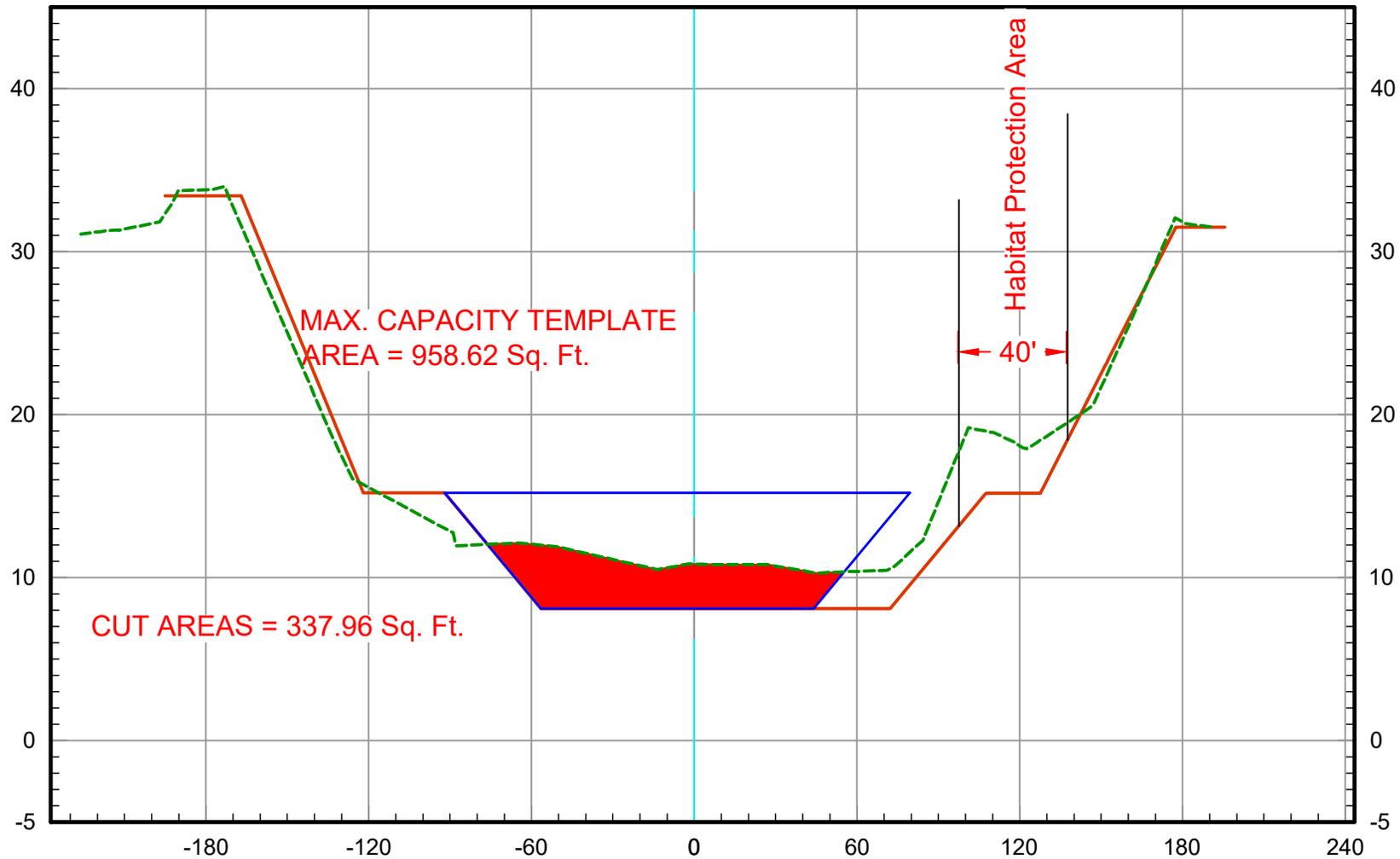


2025 Ground 
As-Built Plan 
Maximum Capacity 

125+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

126+00

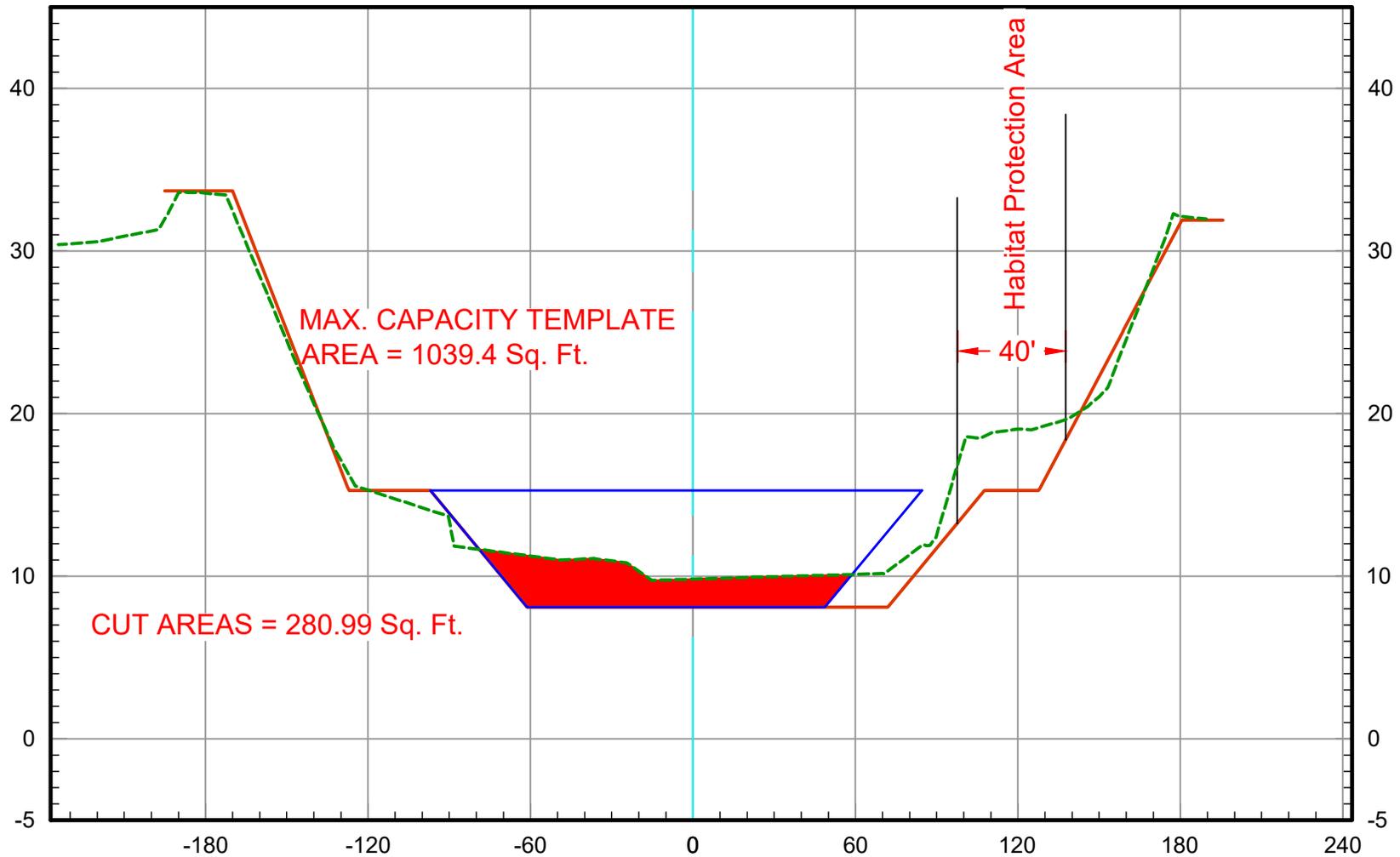
Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

U.S. Survey Foot

OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

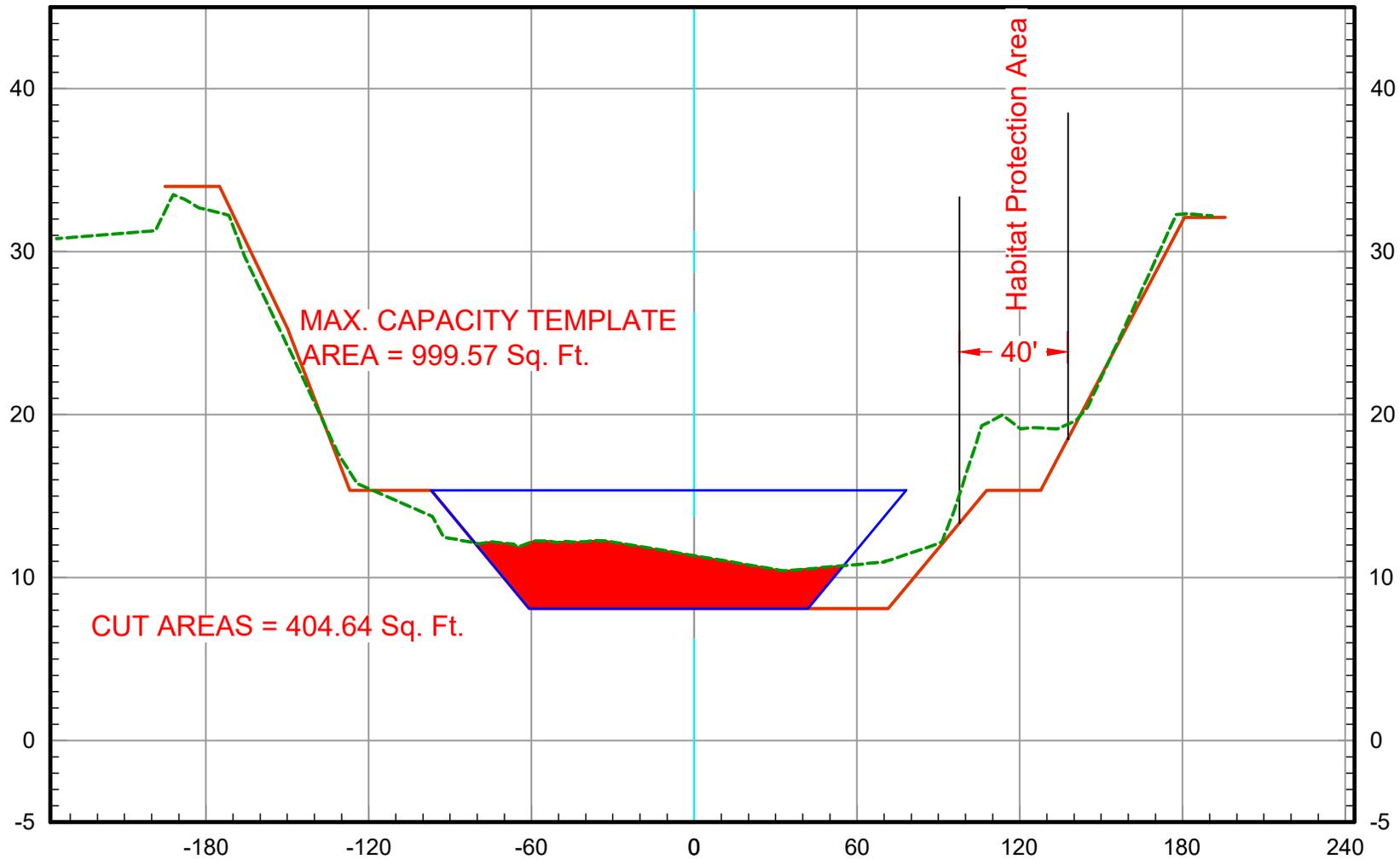


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

127+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

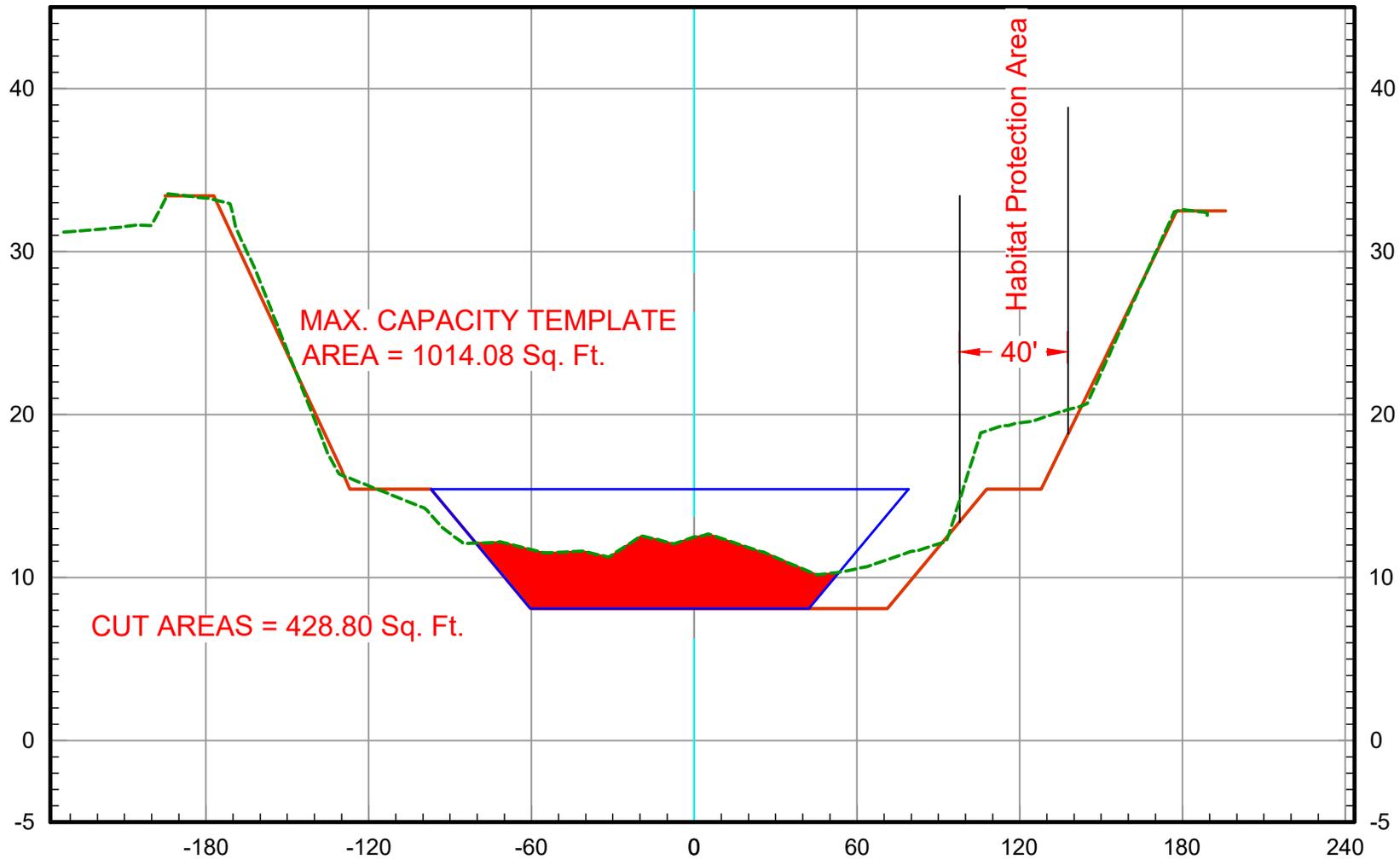


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

128+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

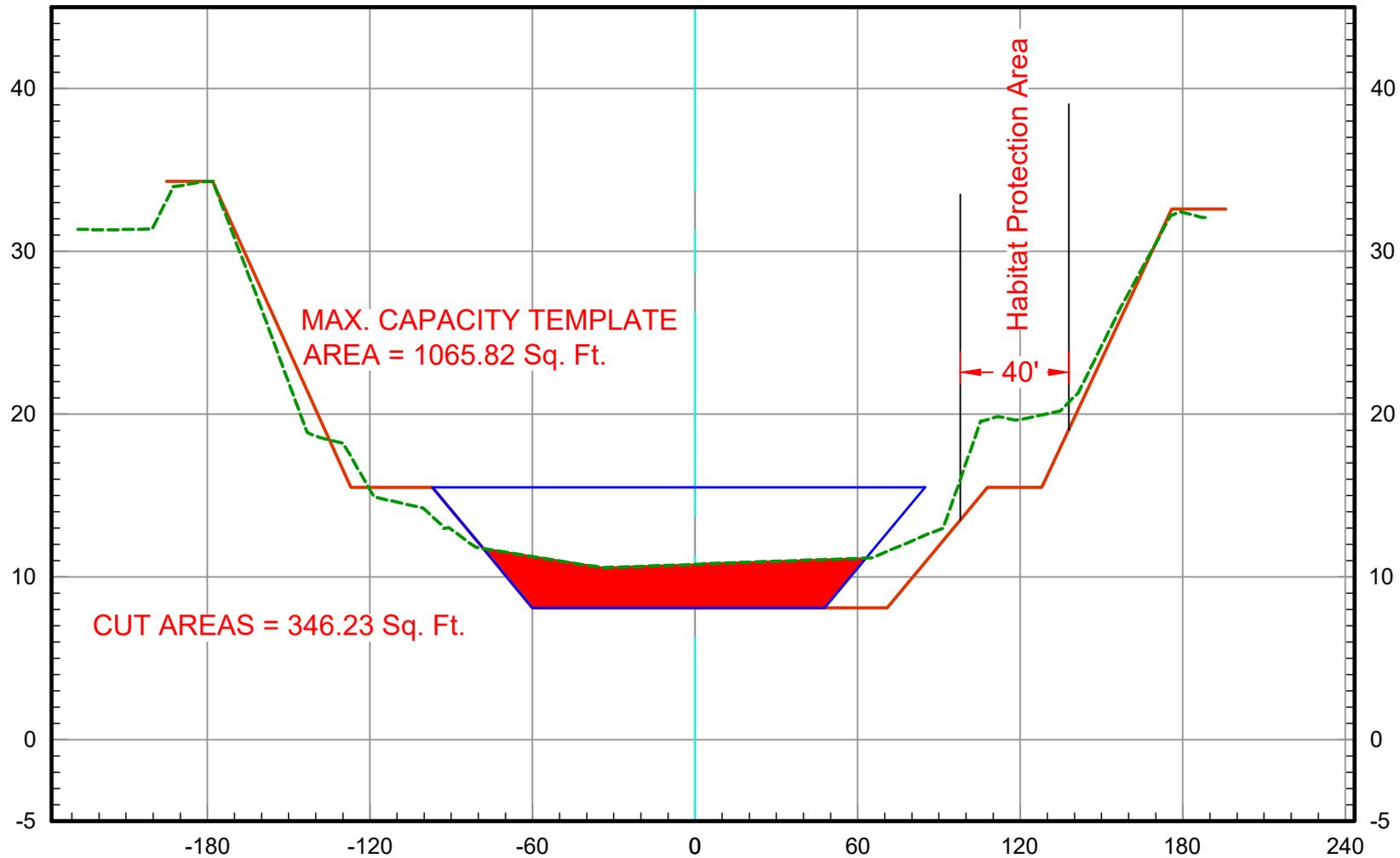


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

129+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL

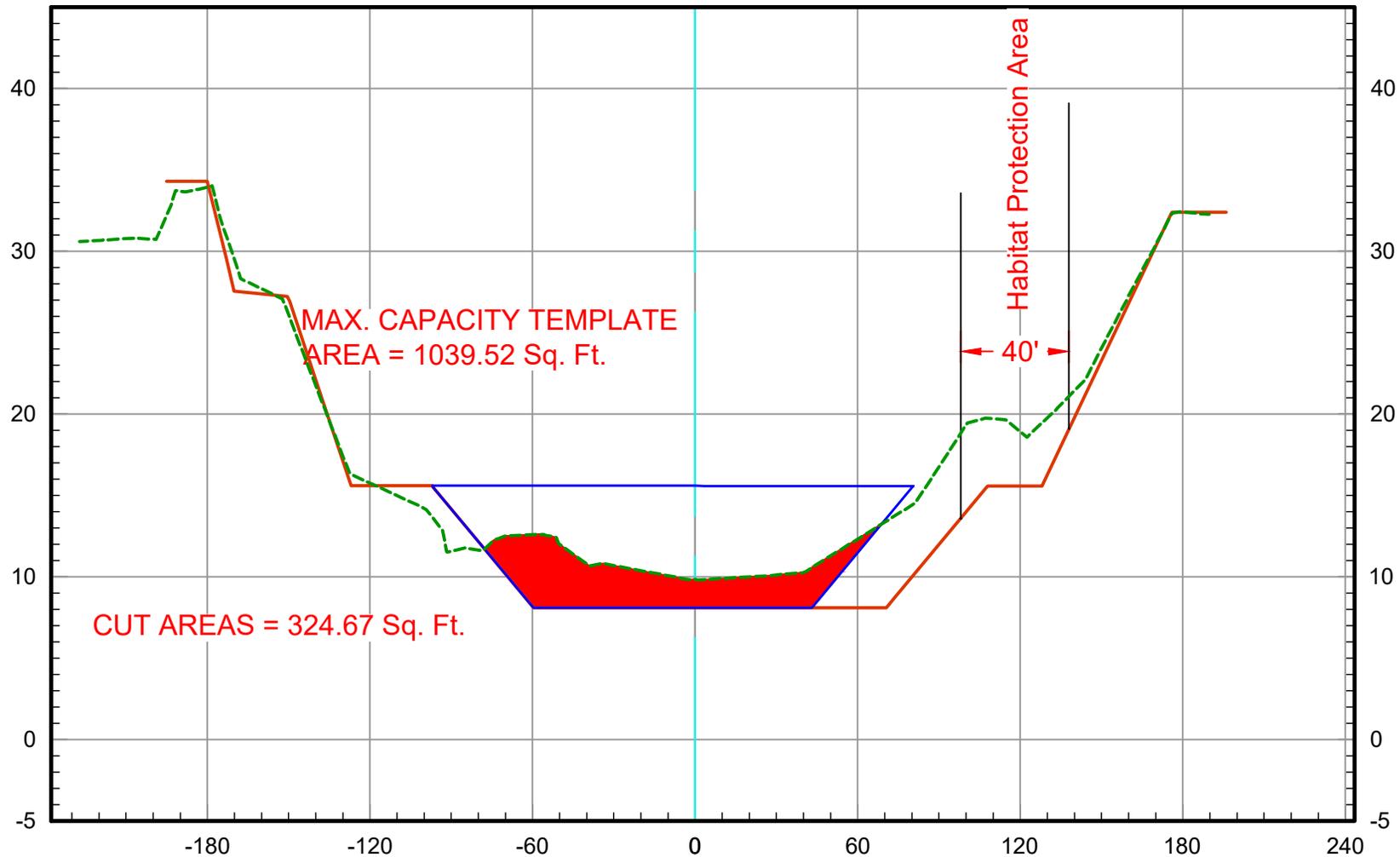


2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

130+00

Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



2025 Ground -----
As-Built Plan —————
Maximum Capacity —————

131+00

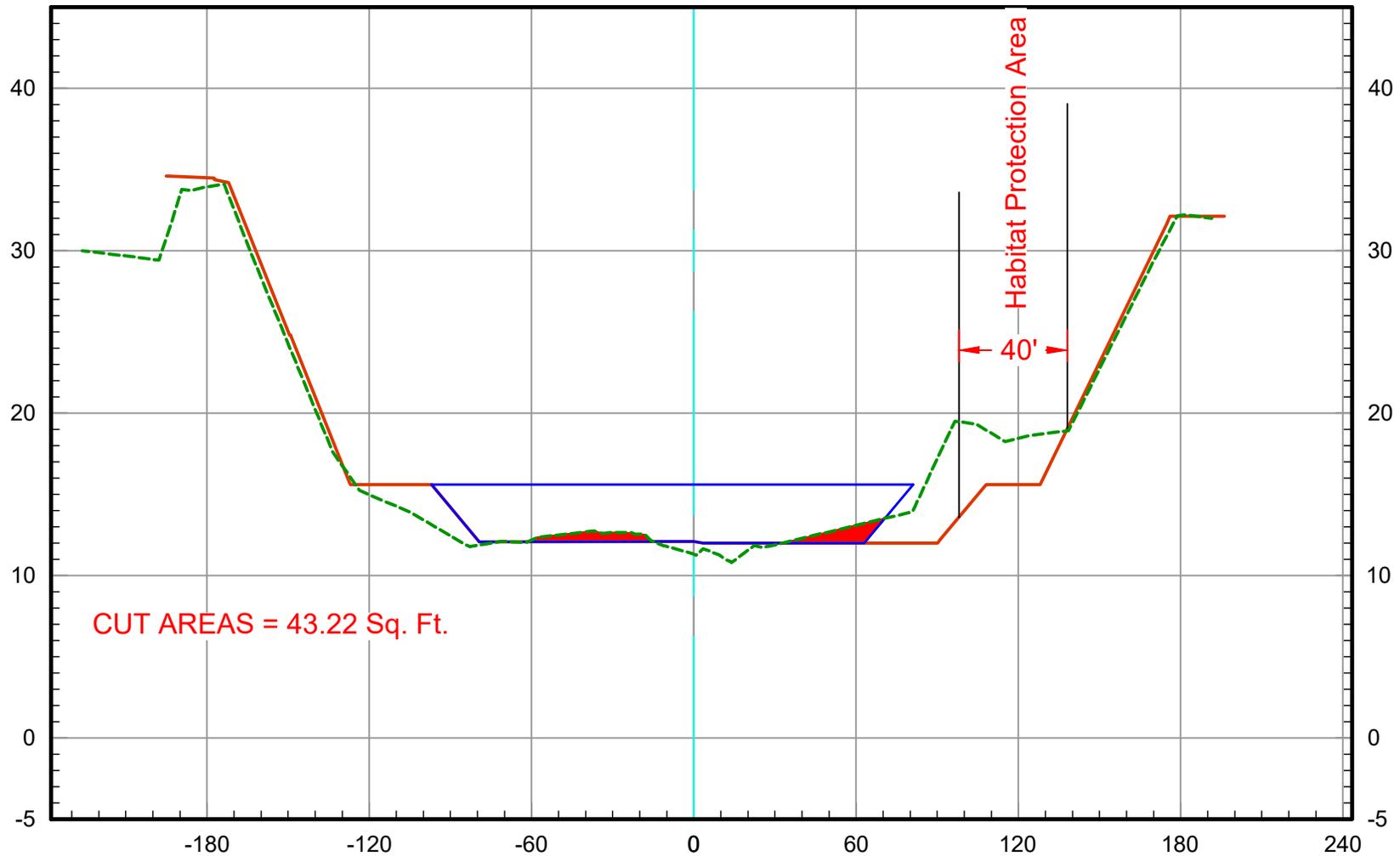
Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

U.S. Survey Foot

OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



CUT AREAS = 43.22 Sq. Ft.

Habitat Protection Area

40'

132+00

2023 Ground
As-Built Plan



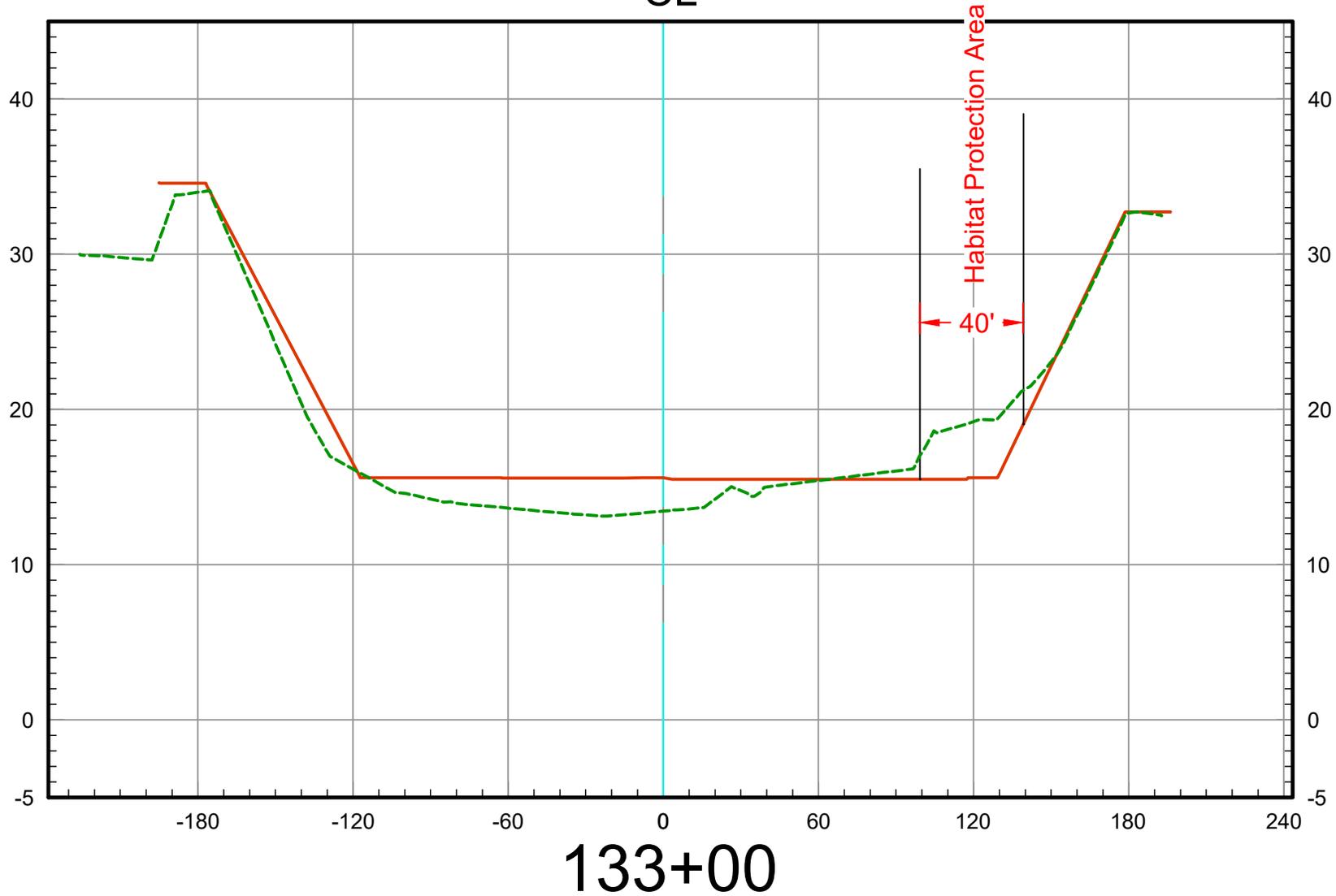
Vert. Scale: 1" = 10'
Horiz. Scale: 1" = 60'

U.S. Survey Foot

OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



2023 Ground
As-Built Plan



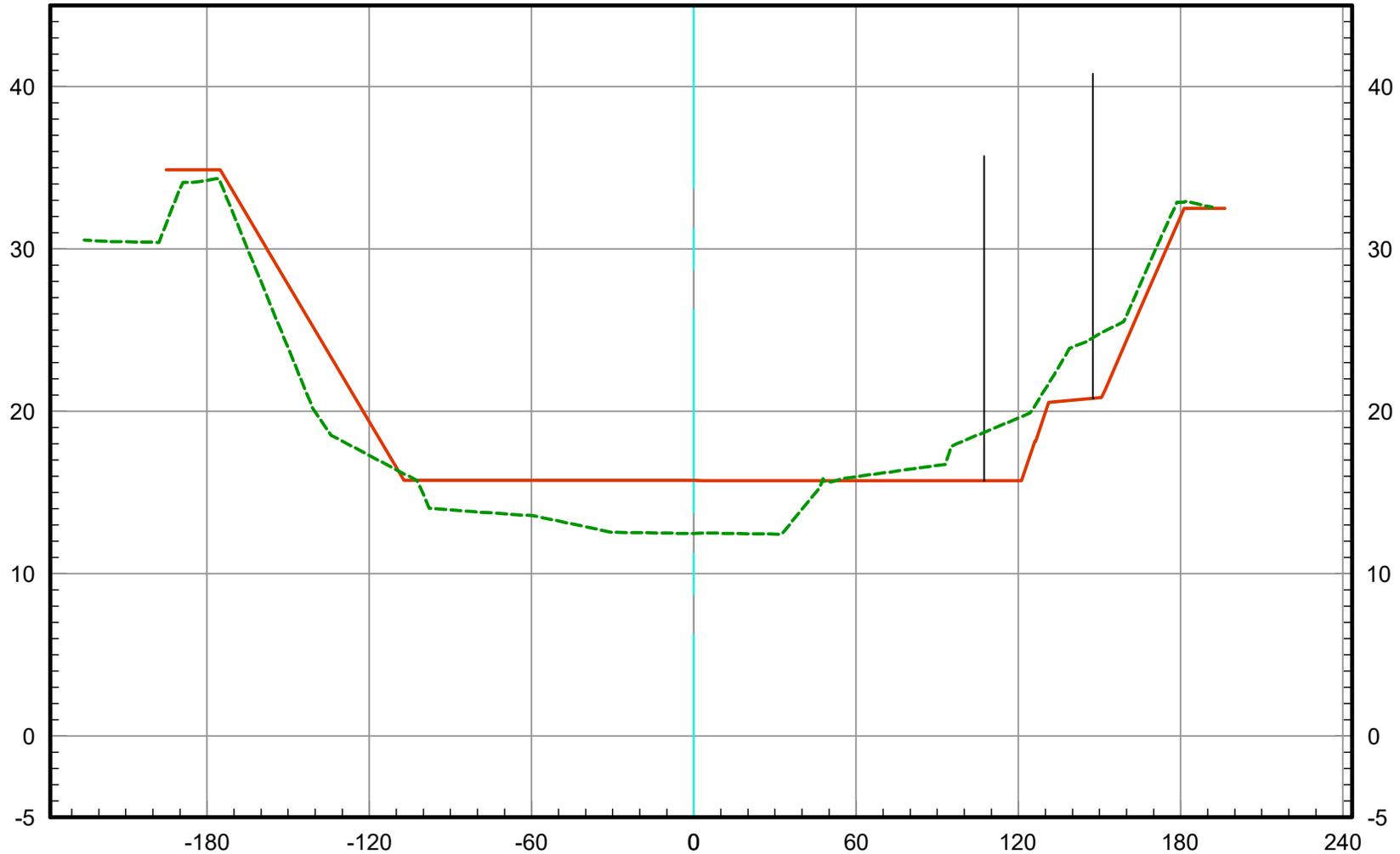
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U.S. Survey Foot

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SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



134+00

2023 Ground 
As-Built Plan 

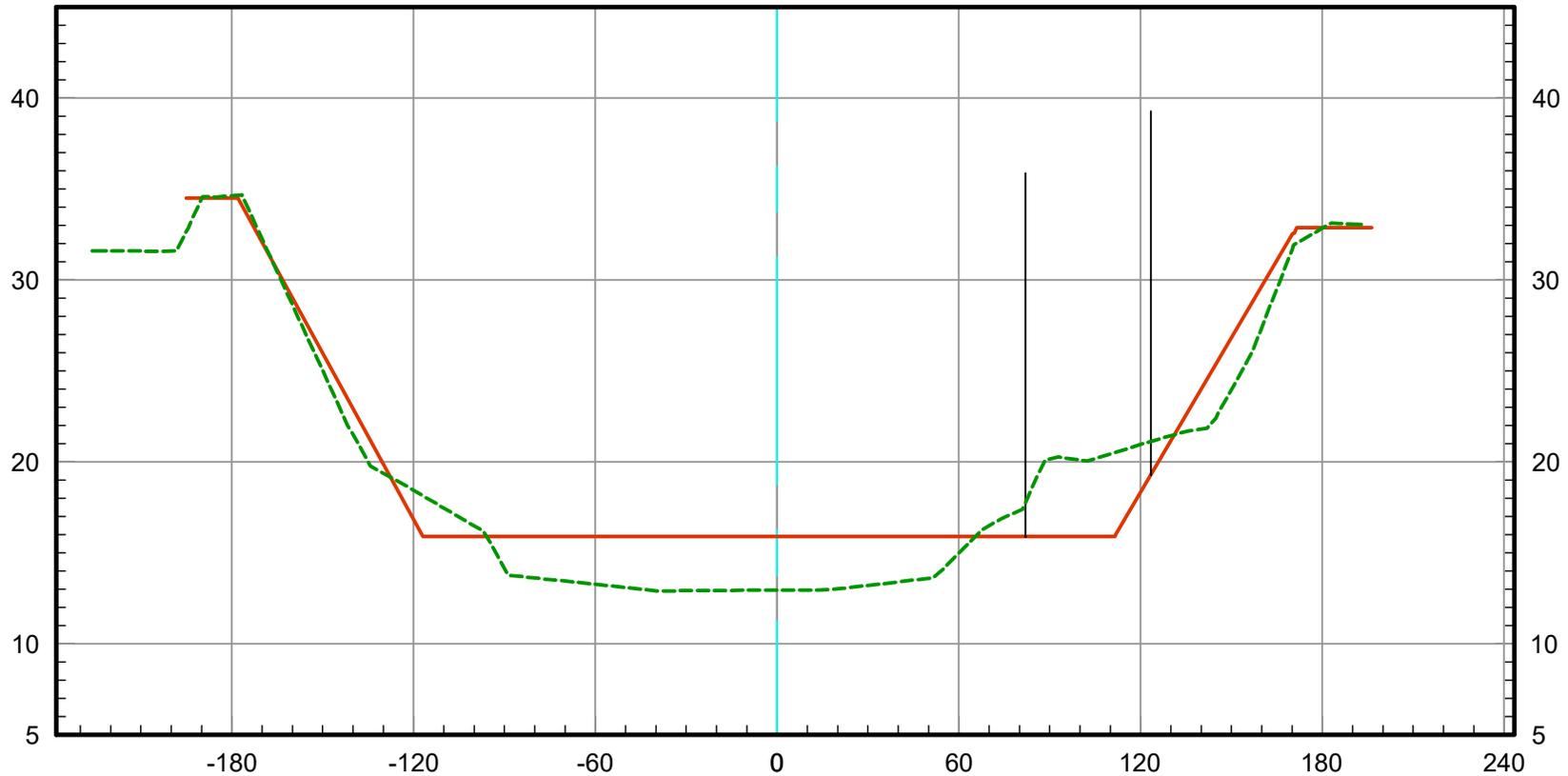
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U.S. Survey Foot

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SAN DIEGO CREEK (F05) BASIN 3 - 2025 SCOURS CL



135+00

2023 Ground 
As-Built Plan 

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