



**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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2025 SCOUR STUDY

SAN DIEGO CREEK CHANNEL (F05)

**MAXIMUM CAPACITY OF BASIN 2**

STATIONS 82+00 to 98+00

AS-BUILT PLANS: F05-101-1-A STA. 25+00 TO 98+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 #2, STATION 82+00 to 98+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 #2 Template)

| <b>BASELINE</b> | <b>STATION</b>  | <b>STATION</b>           | <b>STATION</b>  | <b>STATION</b>          | <b>MASS</b>                       |
|-----------------|-----------------|--------------------------|-----------------|-------------------------|-----------------------------------|
| <b>STATION</b>  | <b>CUT</b>      | <b>CUT</b>               | <b>FILL</b>     | <b>FILL</b>             | <b>ORDINANCE</b>                  |
| <b>NUMBER</b>   | <b>AREA</b>     | <b>VOLUME</b>            | <b>AREA</b>     | <b>VOLUME</b>           | <b>VOLUME</b>                     |
|                 | <b>(Sq. Ft)</b> | <b>(Cu. Yds)</b>         | <b>(Sq. Ft)</b> | <b>(Cu. Yds)</b>        | <b>(Cu. Yds)</b>                  |
| 82+00           | 658.02          | 0.00                     | 2.17            | 0.00                    | 0.00                              |
| 83+00           | 558.4           | 2252.63                  | 66.77           | 127.66                  | 2124.97                           |
| 84+00           | 525.64          | 2007.49                  | 39.21           | 196.26                  | 3936.20                           |
| 85+00           | 404.97          | 1723.36                  | 9.29            | 89.81                   | 5569.75                           |
| 86+00           | 432.74          | 1551.31                  | 41.83           | 94.66                   | 7026.40                           |
| 87+00           | 467.76          | 1667.59                  | 79.86           | 225.34                  | 8468.65                           |
| 88+00           | 540.11          | 1866.43                  | 81.87           | 299.48                  | 10035.60                          |
| 89+00           | 424.81          | 1786.88                  | 102.31          | 341.07                  | 11481.41                          |
| 90+00           | 346.93          | 1429.13                  | 31.82           | 248.39                  | 12662.15                          |
| 91+00           | 289.38          | 1178.33                  | 43.73           | 139.91                  | 13700.57                          |
| 92+00           | 328.68          | 1144.55                  | 61.29           | 194.50                  | 14650.62                          |
| 93+00           | 296.89          | 1158.46                  | 48.01           | 202.41                  | 15606.67                          |
| 94+00           | 395.01          | 1281.29                  | 25.65           | 136.40                  | 16751.56                          |
| 95+00           | 399.83          | 1471.93                  | 75.97           | 188.18                  | 18035.31                          |
| 96+00           | 427.68          | 1532.43                  | 61.61           | 254.78                  | 19312.96                          |
| 97+00           | 537.51          | 1787.39                  | 76.83           | 256.37                  | 20843.98                          |
| 98+00           | 688.89          | 2271.12                  | 54.54           | 243.29                  | 22871.81                          |
|                 |                 | <b>26,110.32 Cu. Yds</b> |                 | <b>3,238.51 Cu. Yds</b> | <b>NET CUT: 22,871.81 Cu. Yds</b> |

COUNTY of ORANGE  
OC PUBLIC WORKS

OC SURVEY

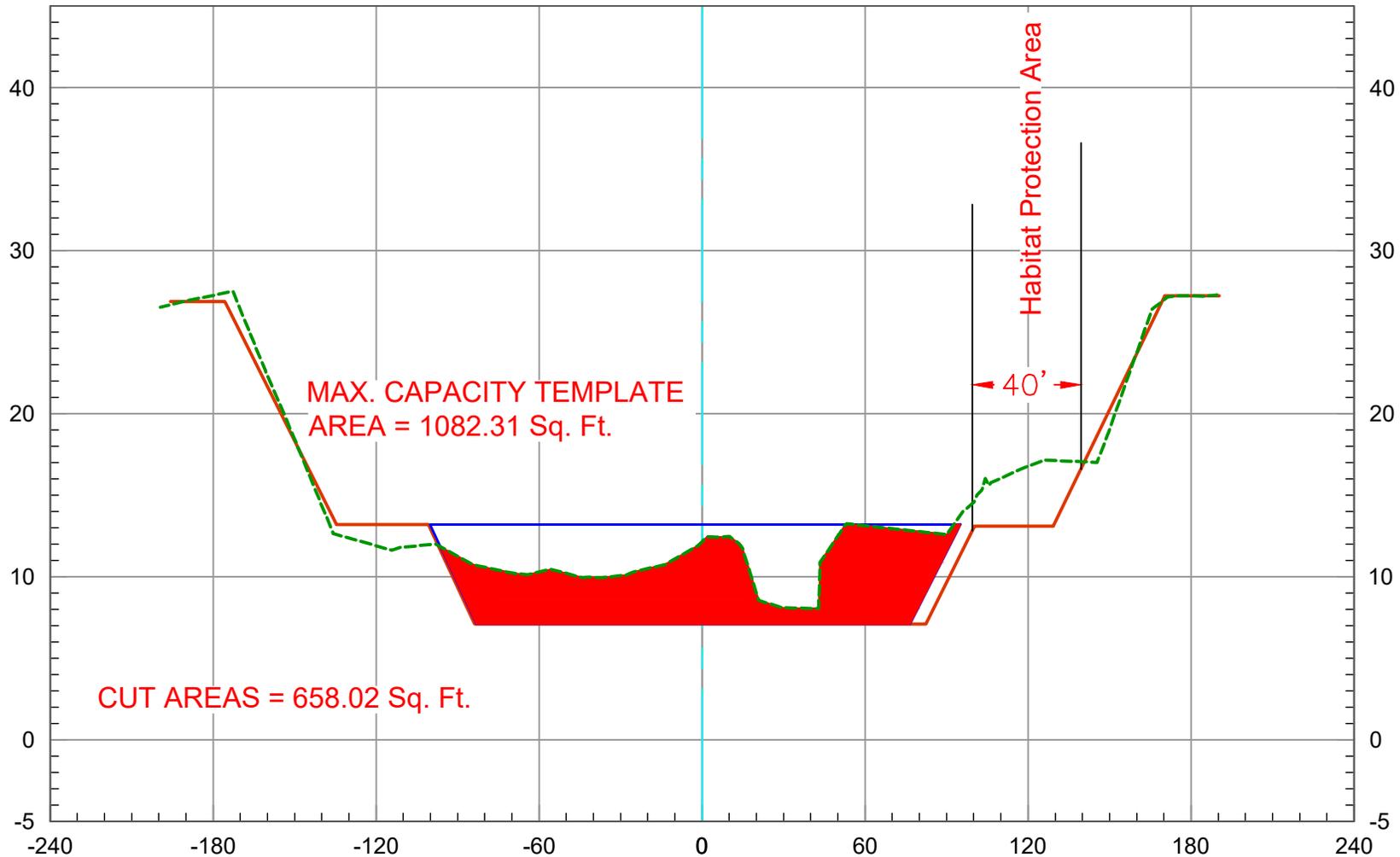
FIELD UNIT-BOUNDARY ANALYSIS & MAPPING

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

SAN DIEGO CREEK (F05) BASIN #2, (STATION 82+00 TO 98+00)

| STATION | CUT AREA | CUT VOLUME               | MAX CAP AREA | MAX CAP VOLUME                      | % of CAPACITY              |
|---------|----------|--------------------------|--------------|-------------------------------------|----------------------------|
|         | (Sq. Ft) | (Cu. Yds)                | (Sq. Ft)     | (Cu. Yds)                           |                            |
| 82+00   | 658.02   | 1218.56                  | 1082.31      | 0.00                                |                            |
| 83+00   | 558.40   | 2252.63                  | 1104.24      | 4049.00                             | 55.63%                     |
| 84+00   | 525.64   | 2007.48                  | 1042.63      | 3976.00                             | 50.49%                     |
| 85+00   | 404.97   | 1723.35                  | 970.78       | 3729.00                             | 46.21%                     |
| 86+00   | 432.74   | 1551.31                  | 974.99       | 3603.00                             | 43.06%                     |
| 87+00   | 467.76   | 1667.59                  | 1005.25      | 3667.00                             | 45.48%                     |
| 88+00   | 540.11   | 1866.43                  | 1048.59      | 3803.00                             | 49.08%                     |
| 89+00   | 424.81   | 1786.89                  | 1268.96      | 4292.00                             | 41.63%                     |
| 90+00   | 346.93   | 1429.15                  | 1506.45      | 5140.00                             | 27.80%                     |
| 91+00   | 289.38   | 1178.35                  | 1577.62      | 5711.00                             | 20.63%                     |
| 92+00   | 328.68   | 1144.56                  | 1473.94      | 5651.00                             | 20.25%                     |
| 93+00   | 296.89   | 1158.46                  | 1610.97      | 5713.00                             | 20.28%                     |
| 94+00   | 395.01   | 1281.30                  | 1286.18      | 5365.00                             | 23.88%                     |
| 95+00   | 399.83   | 1471.93                  | 1737.43      | 5599.00                             | 26.29%                     |
| 96+00   | 427.68   | 1532.43                  | 1816.07      | 6581.00                             | 23.29%                     |
| 97+00   | 537.51   | 1787.39                  | 1911.00      | 6902.00                             | 25.90%                     |
| 98+00   | 688.89   | 2271.11                  | 1920.00      | 7094.00                             | 32.01%                     |
|         |          |                          |              |                                     |                            |
|         |          | <b>TOTAL CUT VOLUME</b>  |              | <b>MAX. CAPACITY BASIN 3 VOLUME</b> | <b>TOTAL % OF CAPACITY</b> |
|         |          | <b>27,328.91 Cu. Yds</b> |              | <b>80,875.00 Cu. Yds</b>            | <b>33.79%</b>              |

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

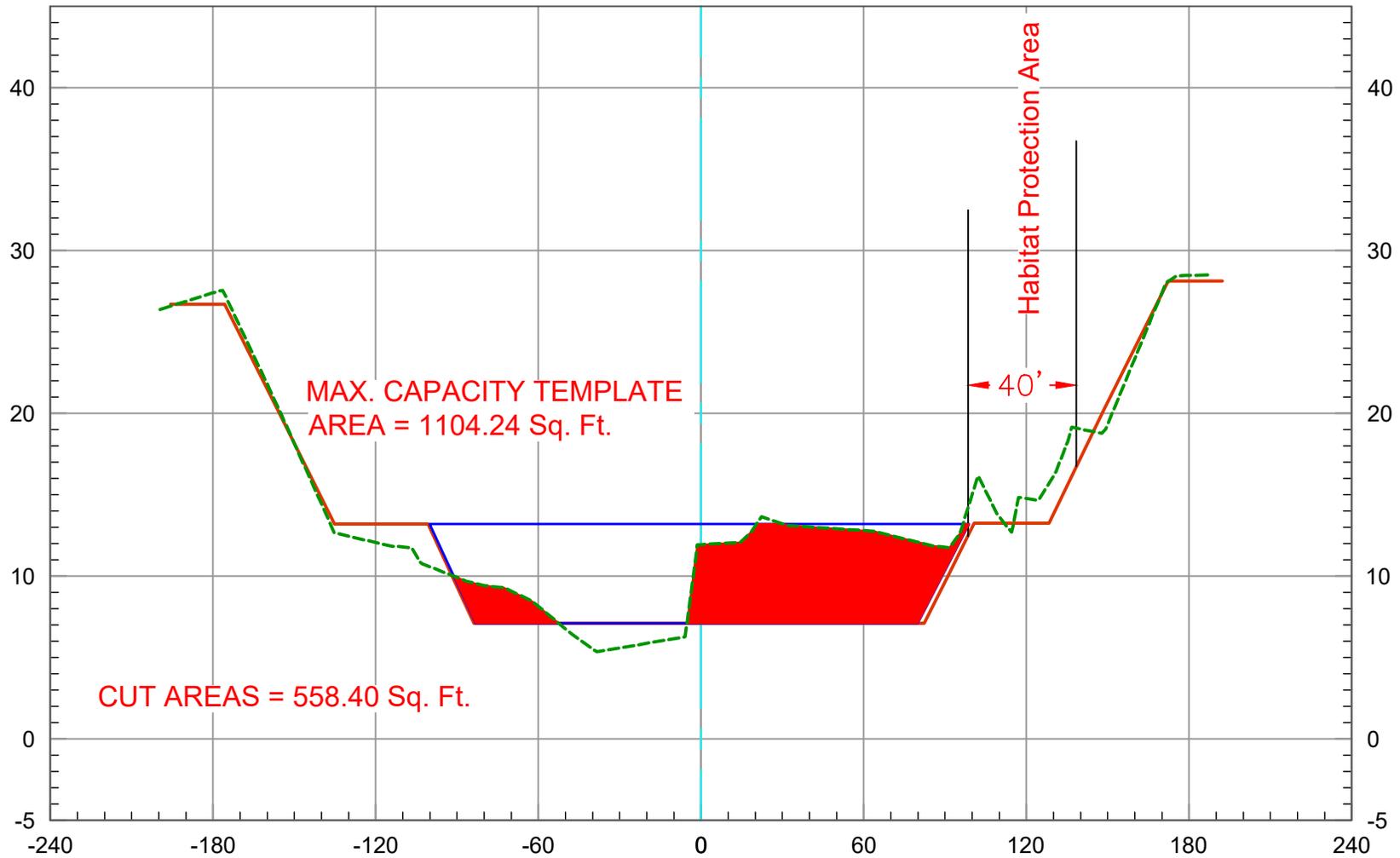


2025 Ground -----  
As-Built Plan —————  
Maximum Capacity —————

**82+00**

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

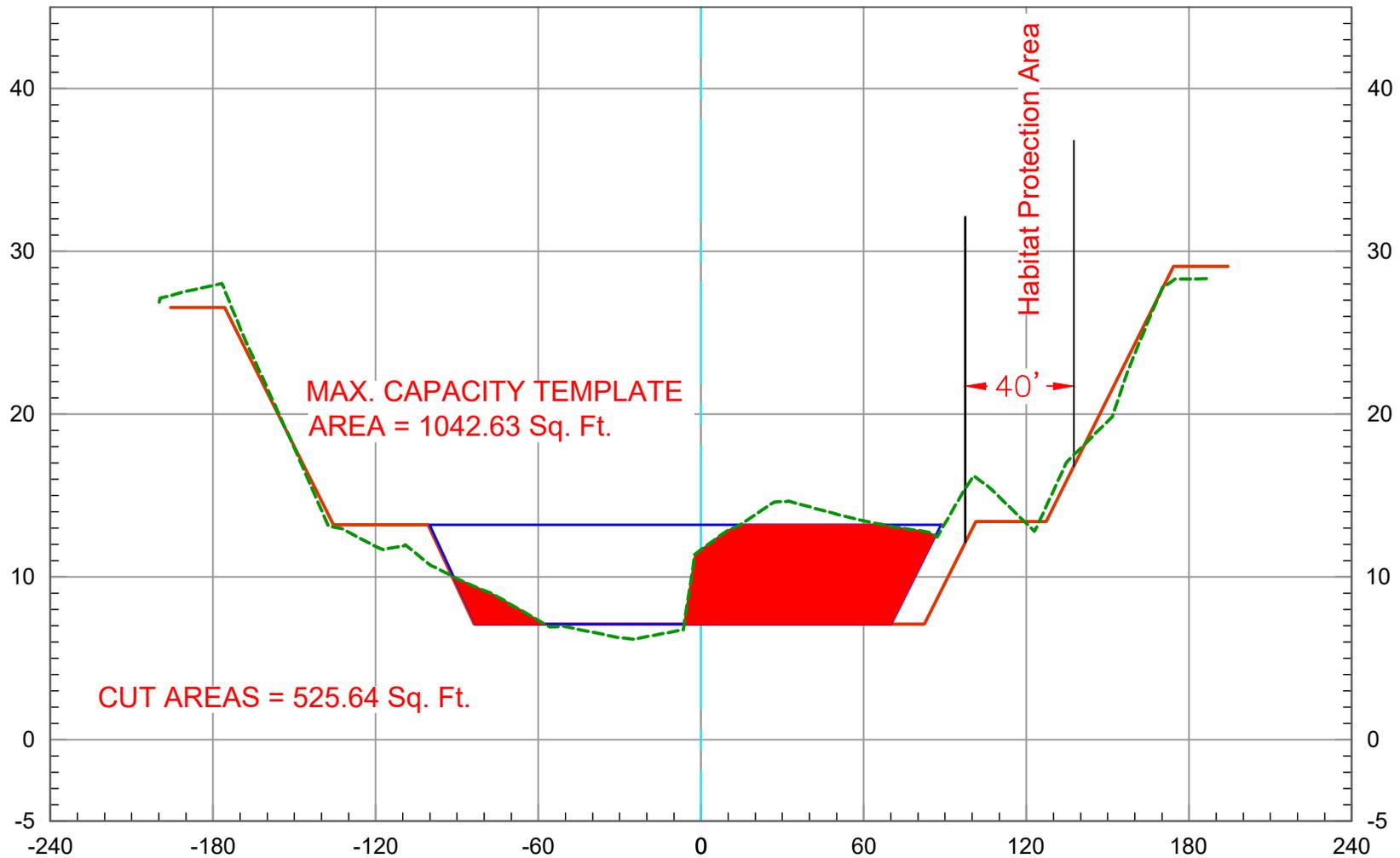


2025 Ground -----  
As-Built Plan —————  
Maximum Capacity —————

**83+00**

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

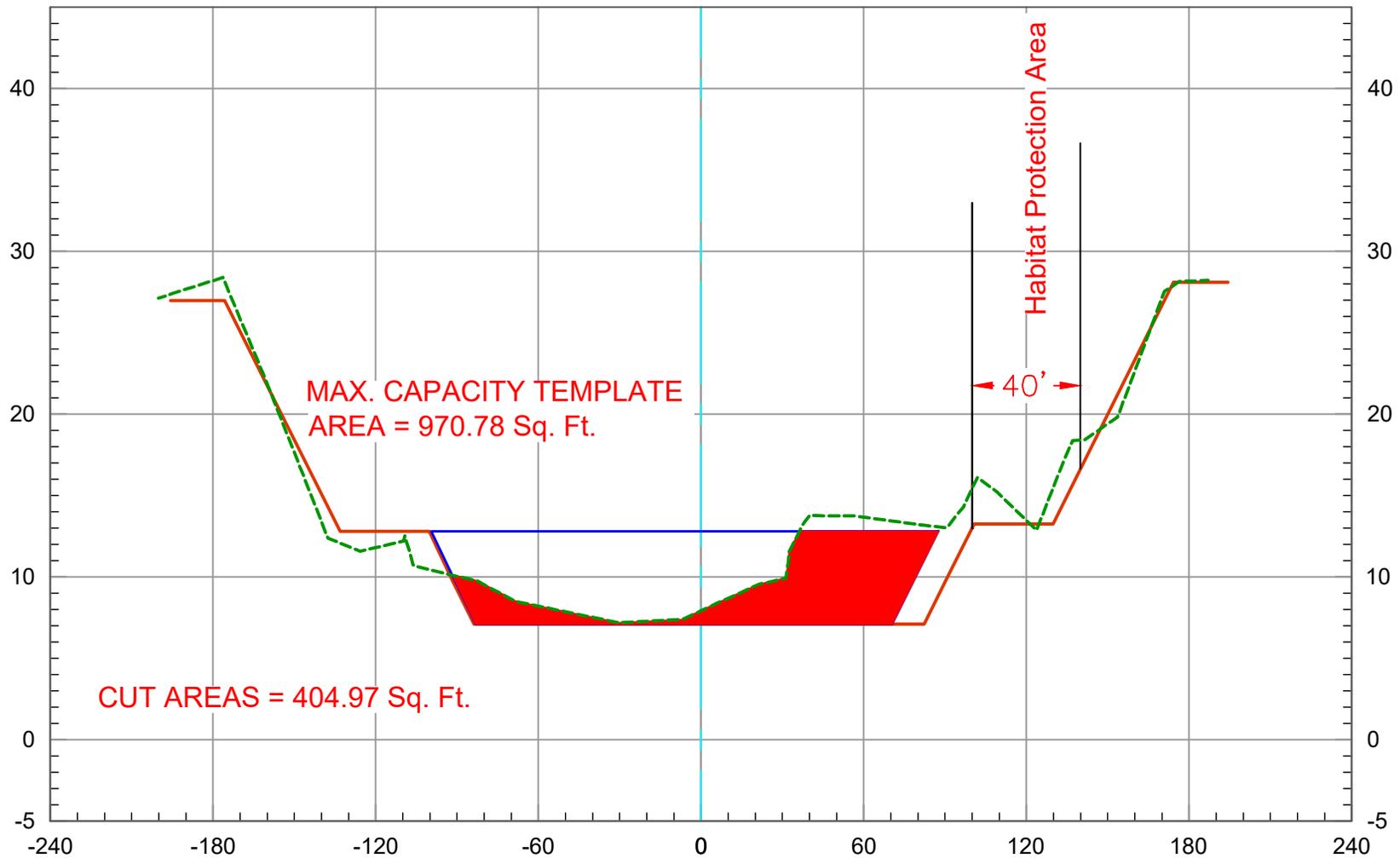


2025 Ground        
As-Built Plan      
Maximum Capacity 

**84+00**

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

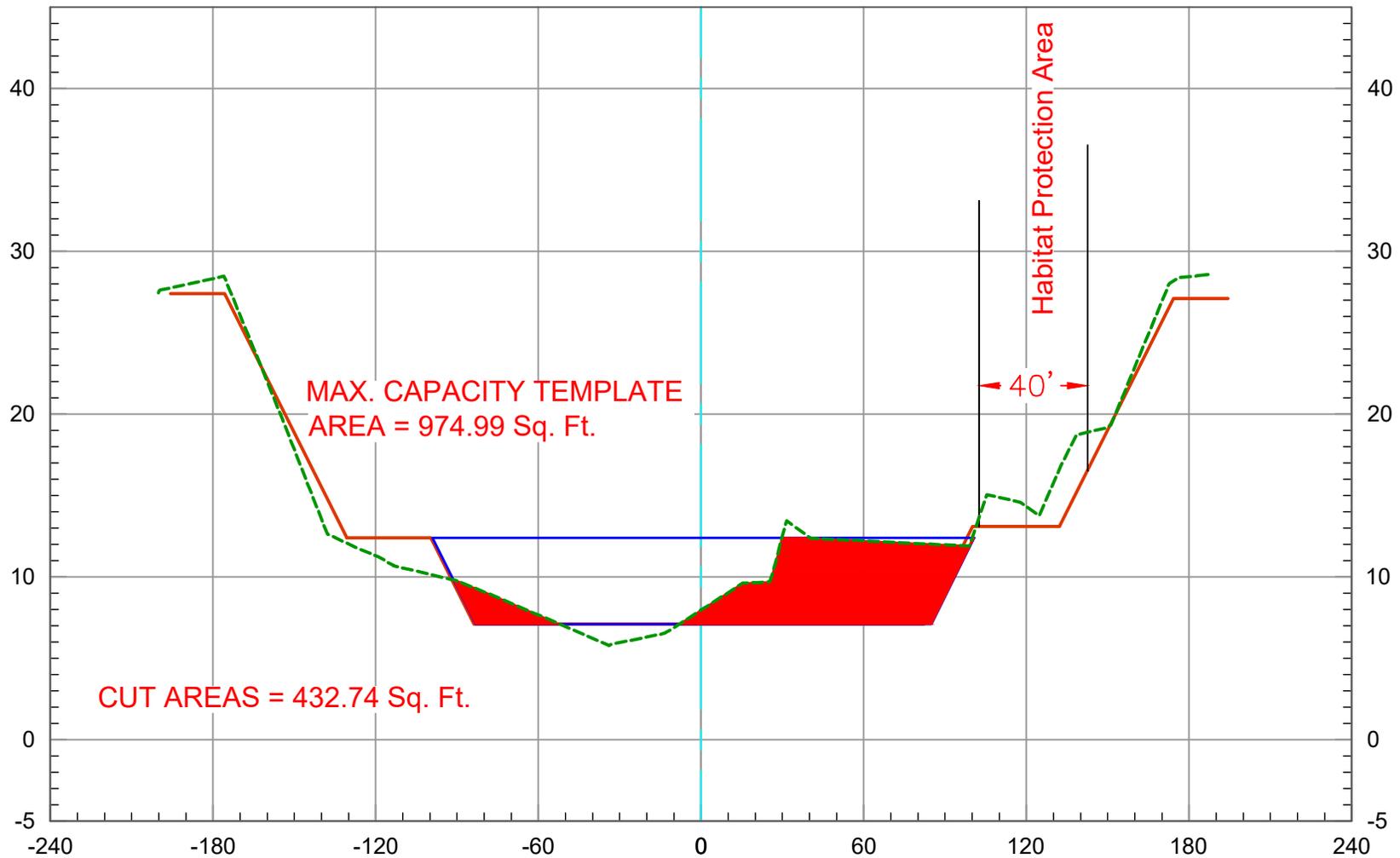


2025 Ground -----  
As-Built Plan —————  
Maximum Capacity —————

85+00

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

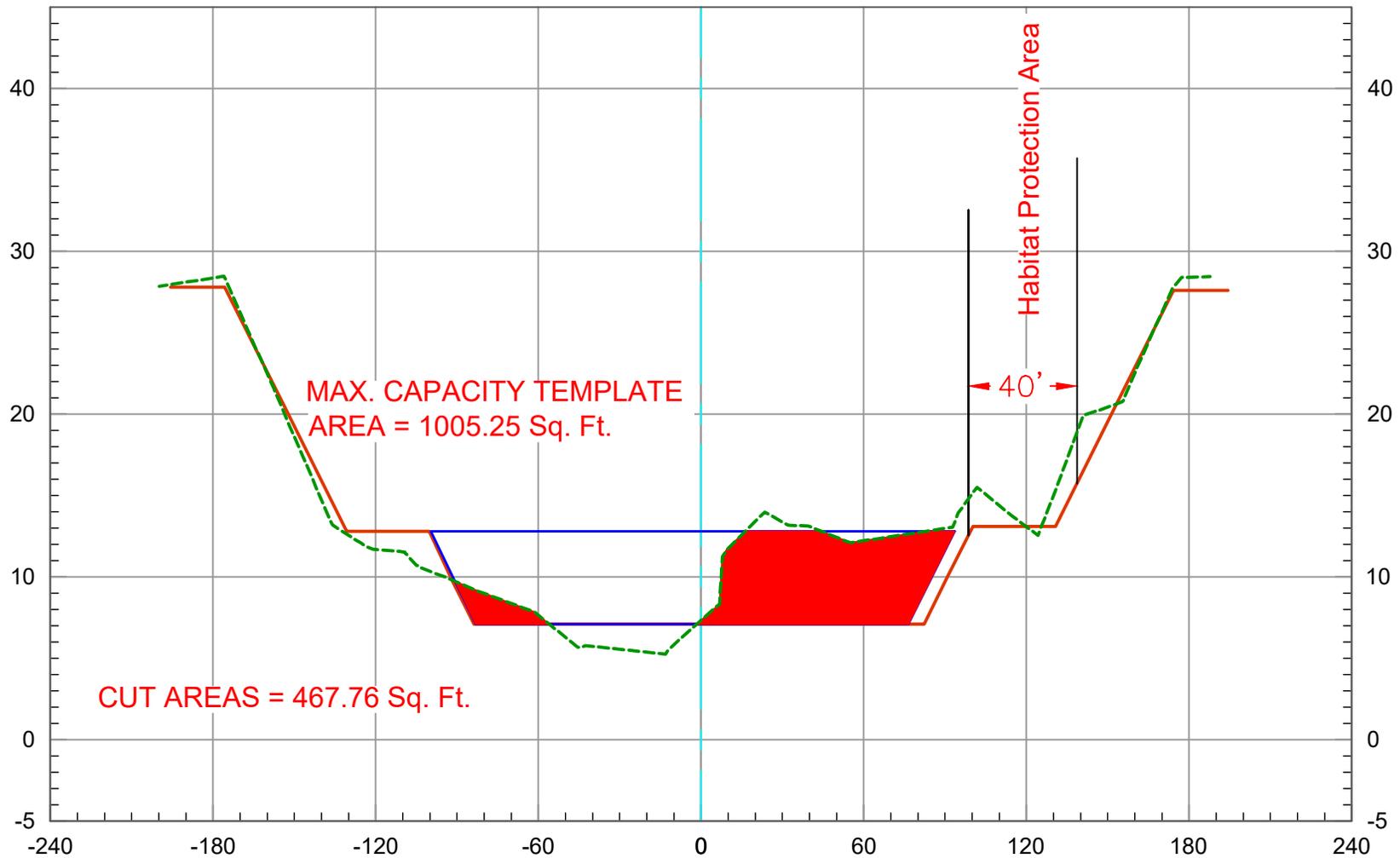


2025 Ground        
As-Built Plan      
Maximum Capacity 

**86+00**

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

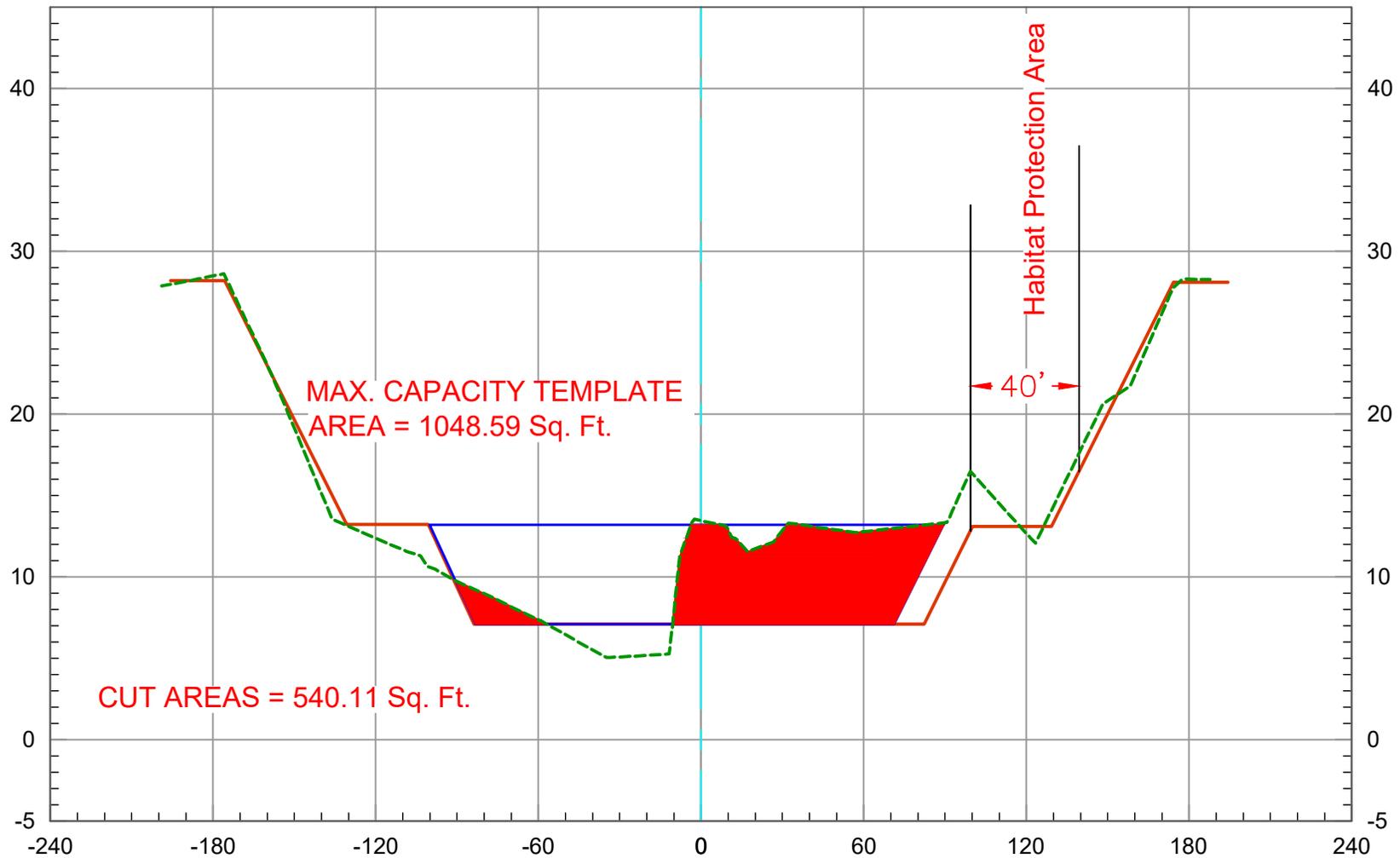


2025 Ground -----  
As-Built Plan —————  
Maximum Capacity —————

87+00

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

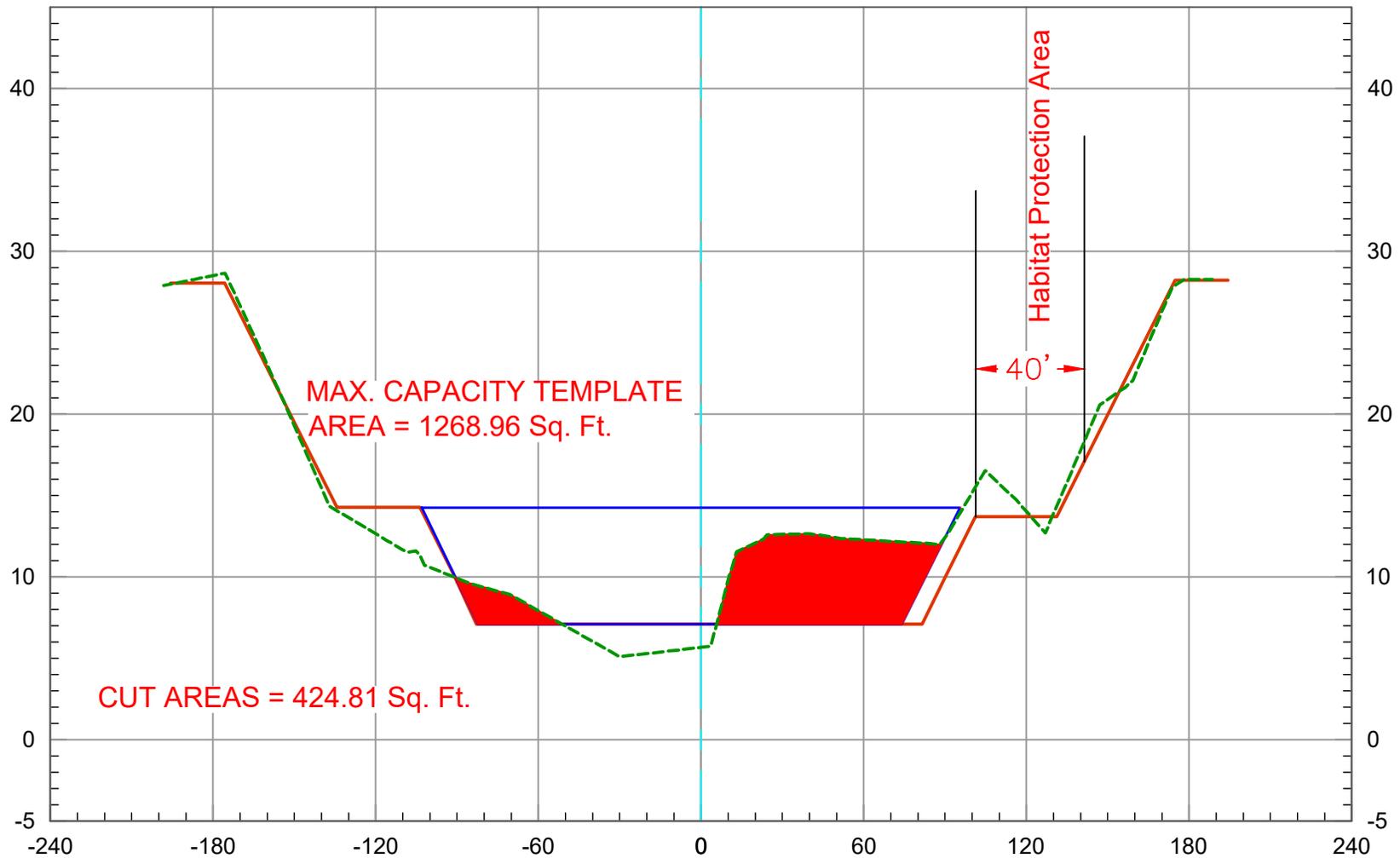


2025 Ground -----  
As-Built Plan —————  
Maximum Capacity —————

**88+00**

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

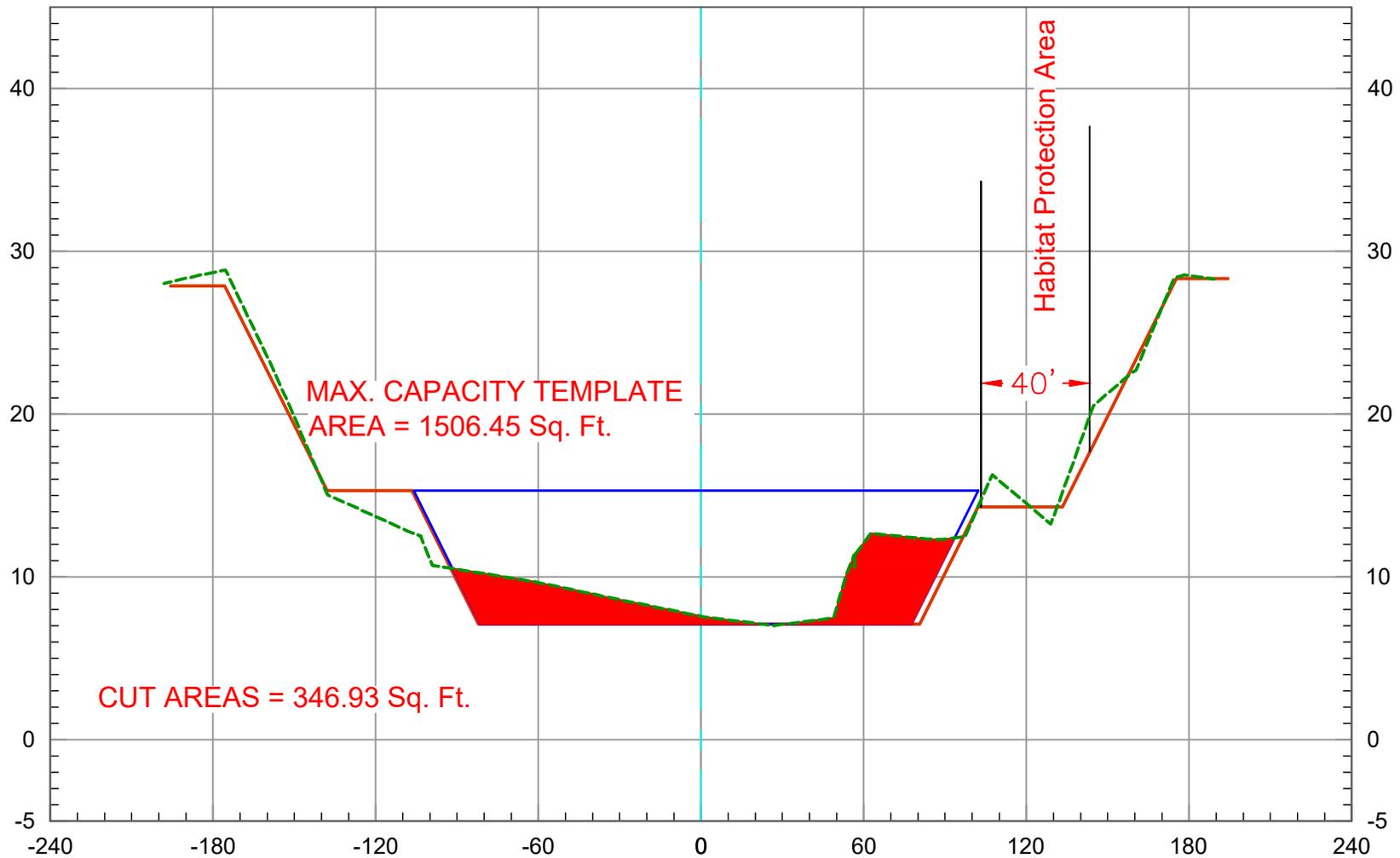


2025 Ground -----  
As-Built Plan —————  
Maximum Capacity —————

**89+00**

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

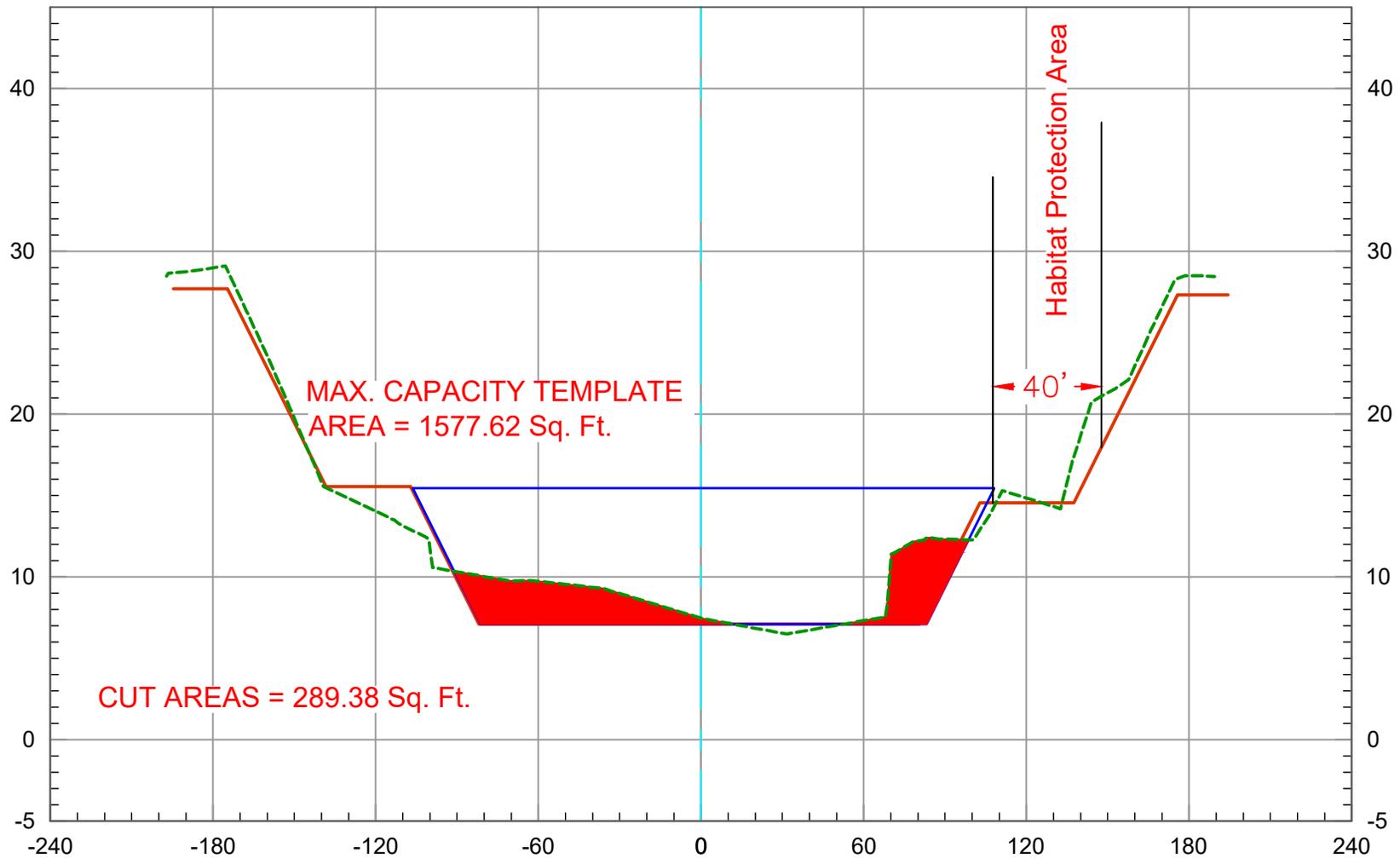


2025 Ground -----  
As-Built Plan —————  
Maximum Capacity —————

**90+00**

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

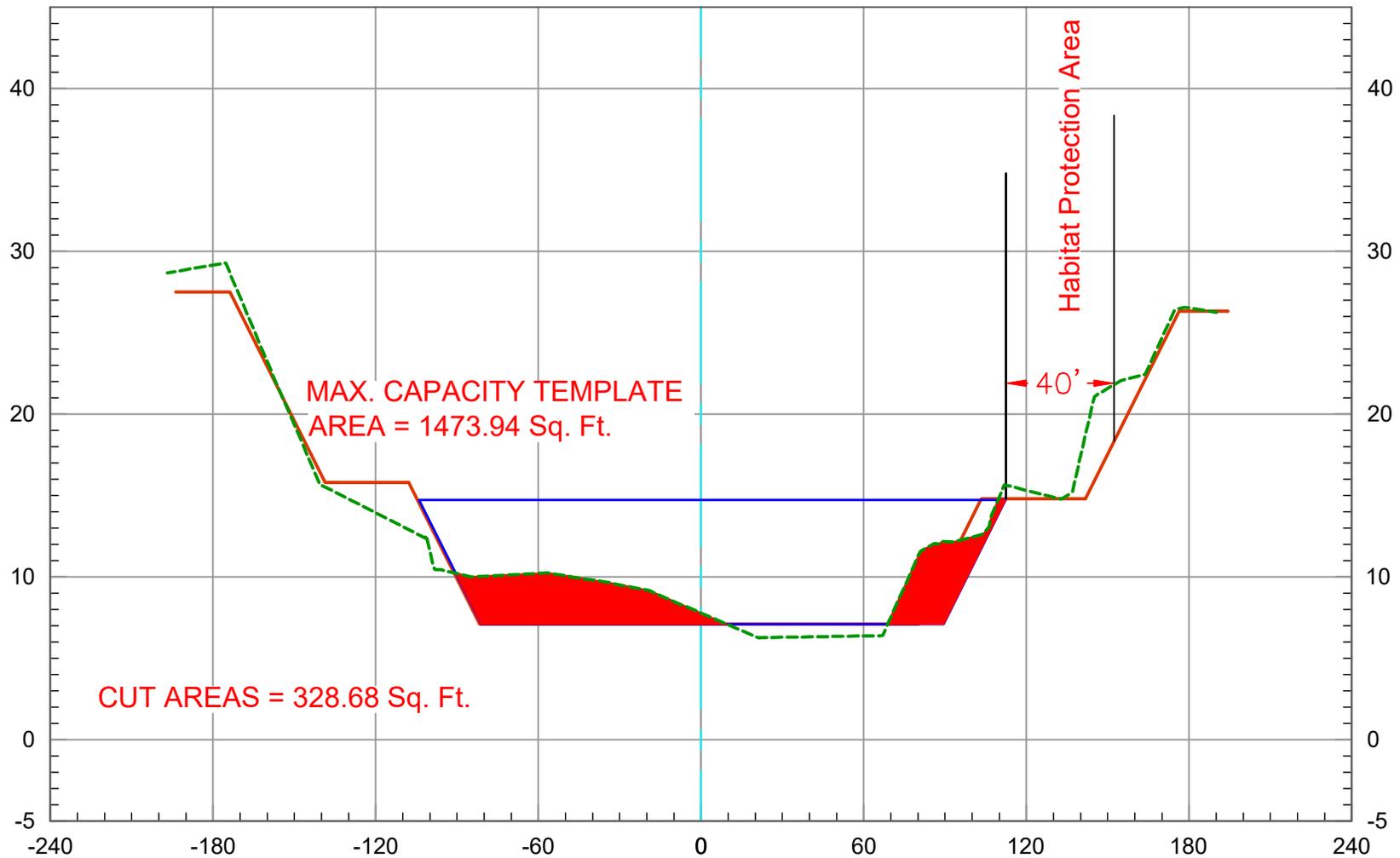


2025 Ground        
As-Built Plan      
Maximum Capacity 

**91+00**

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

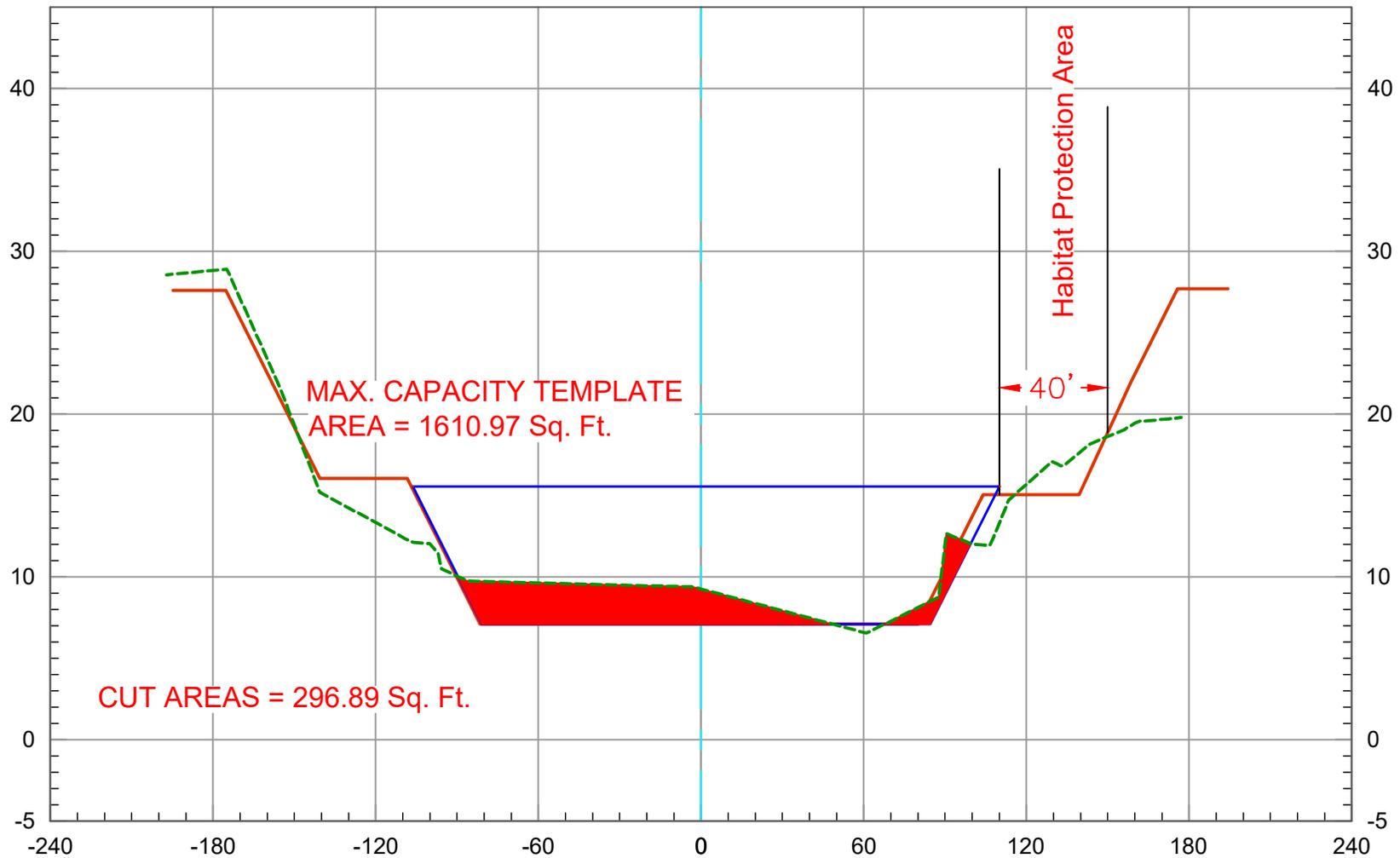


2025 Ground -----  
As-Built Plan —————  
Maximum Capacity —————

**92+00**

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL



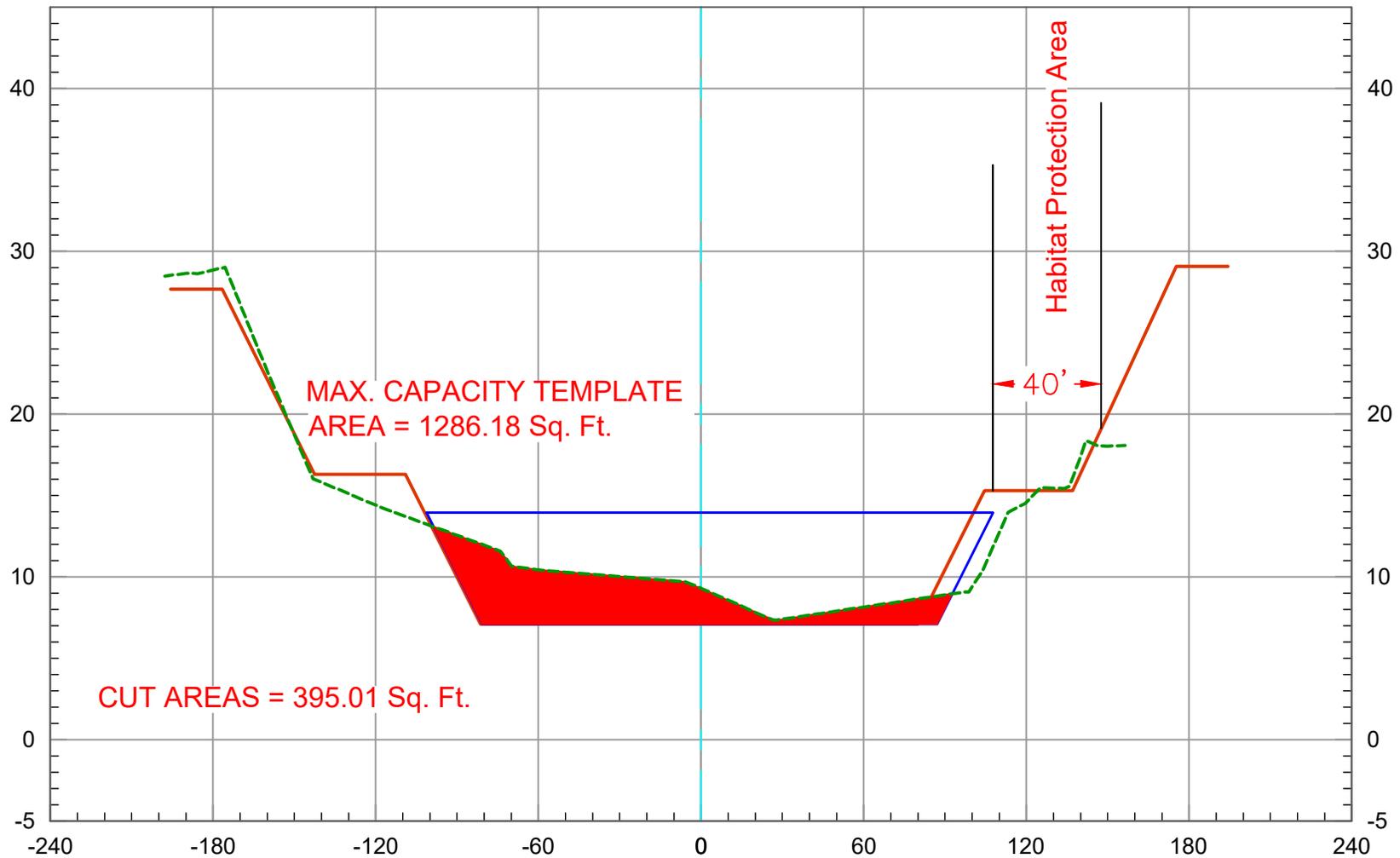
2025 Ground -----  
As-Built Plan —————  
Maximum Capacity —————

**93+00**

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



# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL



MAX. CAPACITY TEMPLATE  
AREA = 1286.18 Sq. Ft.

CUT AREAS = 395.01 Sq. Ft.

Habitat Protection Area

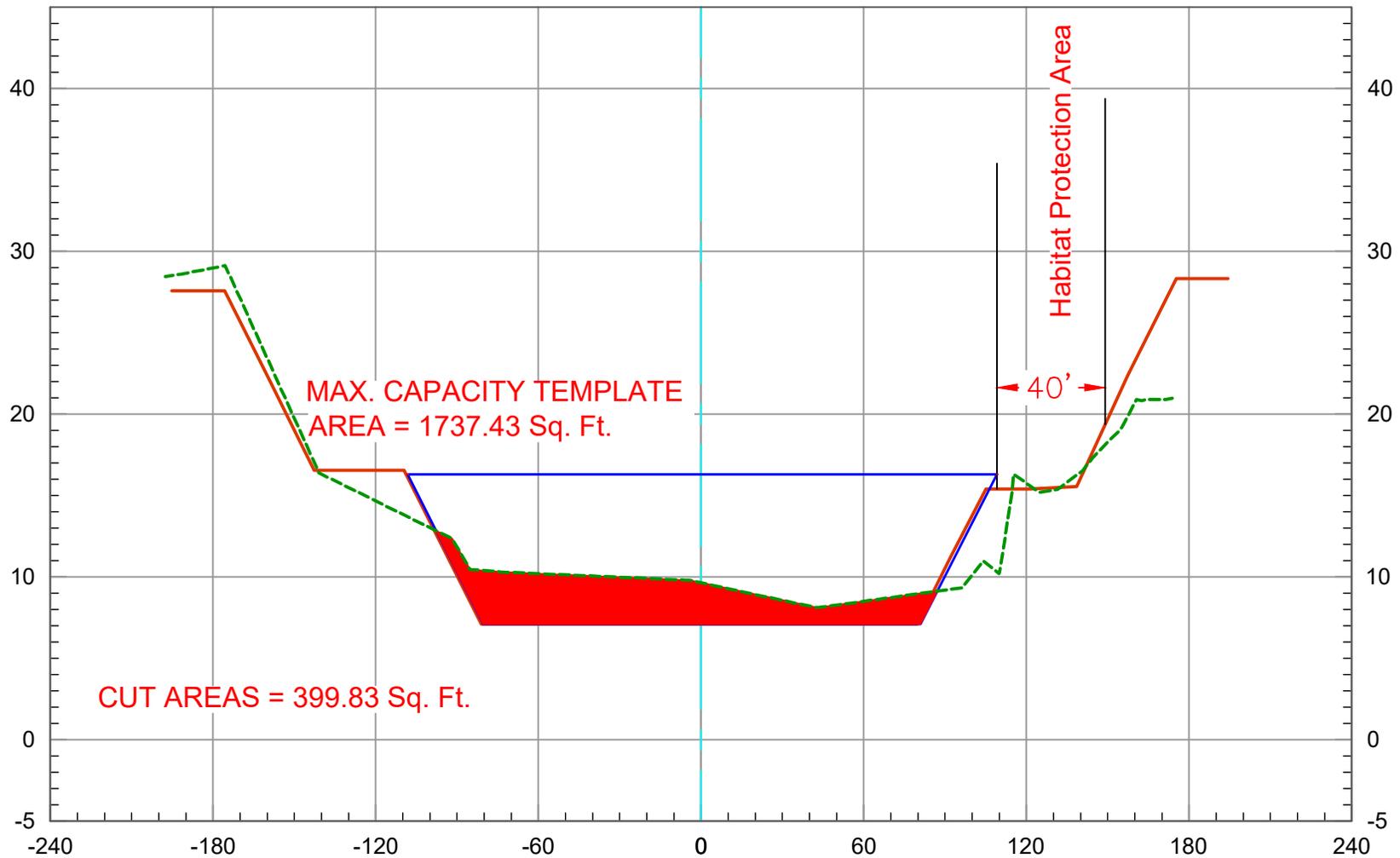
40'

94+00

2025 Ground        
As-Built Plan      
Maximum Capacity 

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

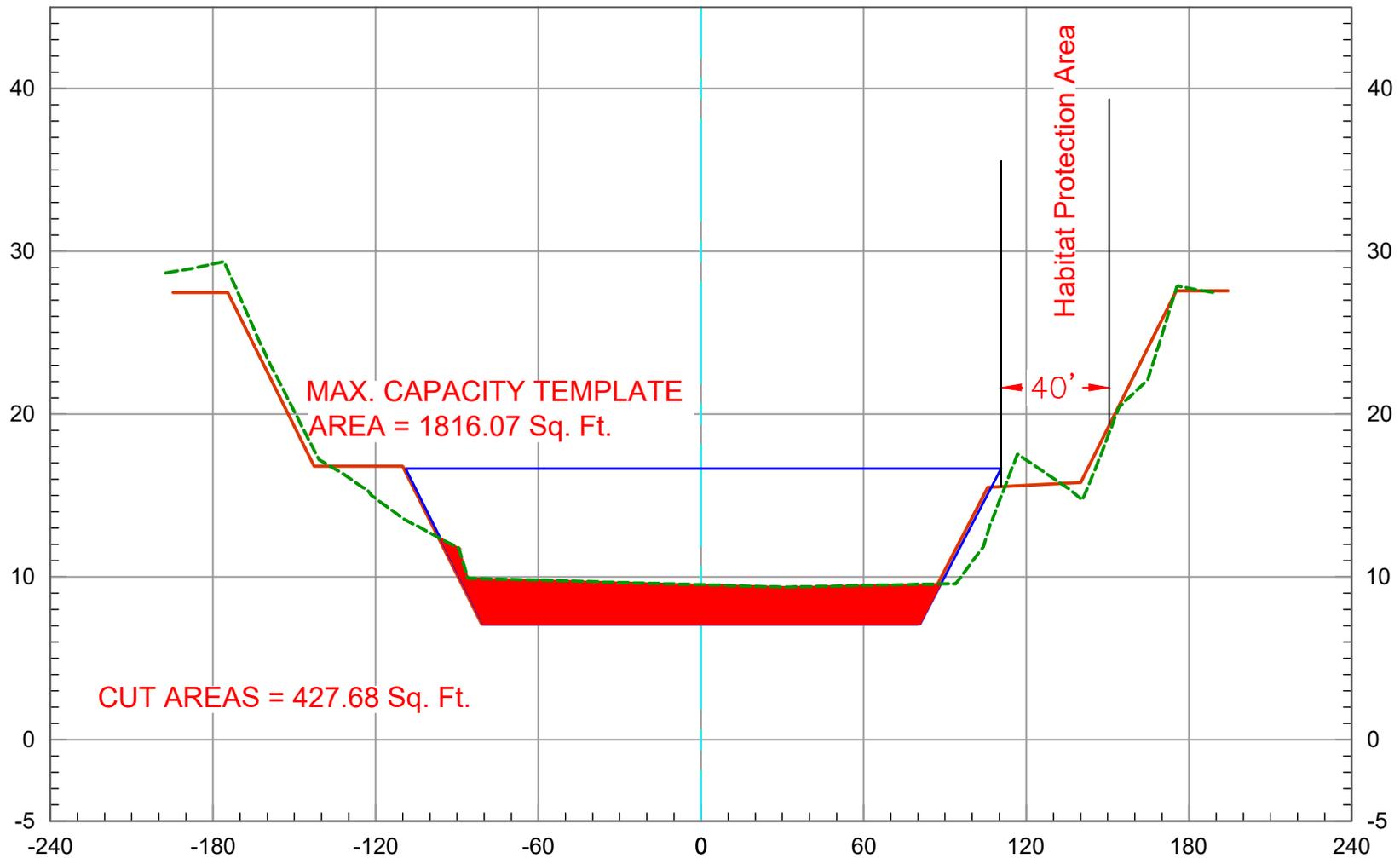


2025 Ground -----  
As-Built Plan —————  
Maximum Capacity —————

**95+00**

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

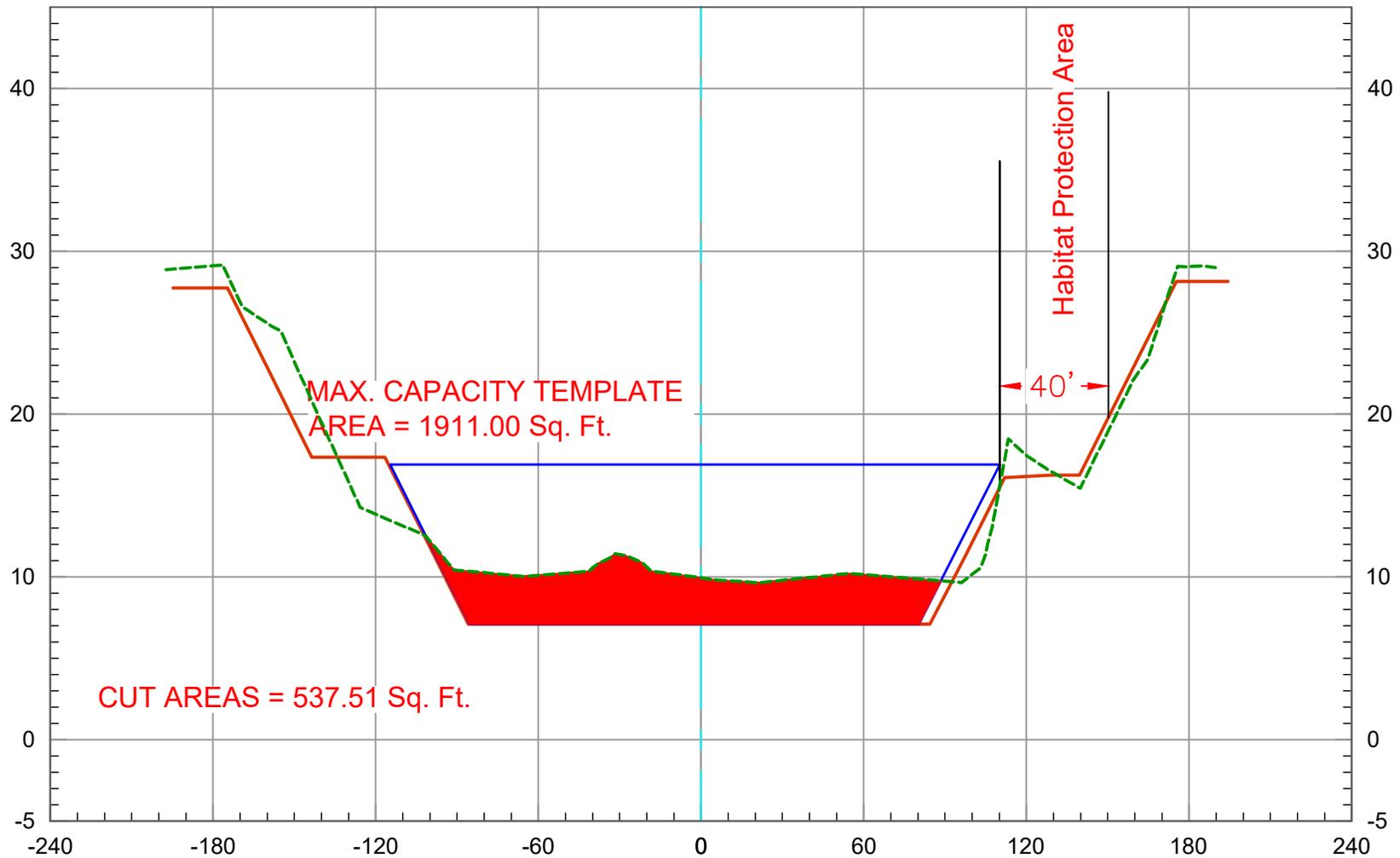


2025 Ground              
As-Built Plan           
Maximum Capacity   

**96+00**

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL

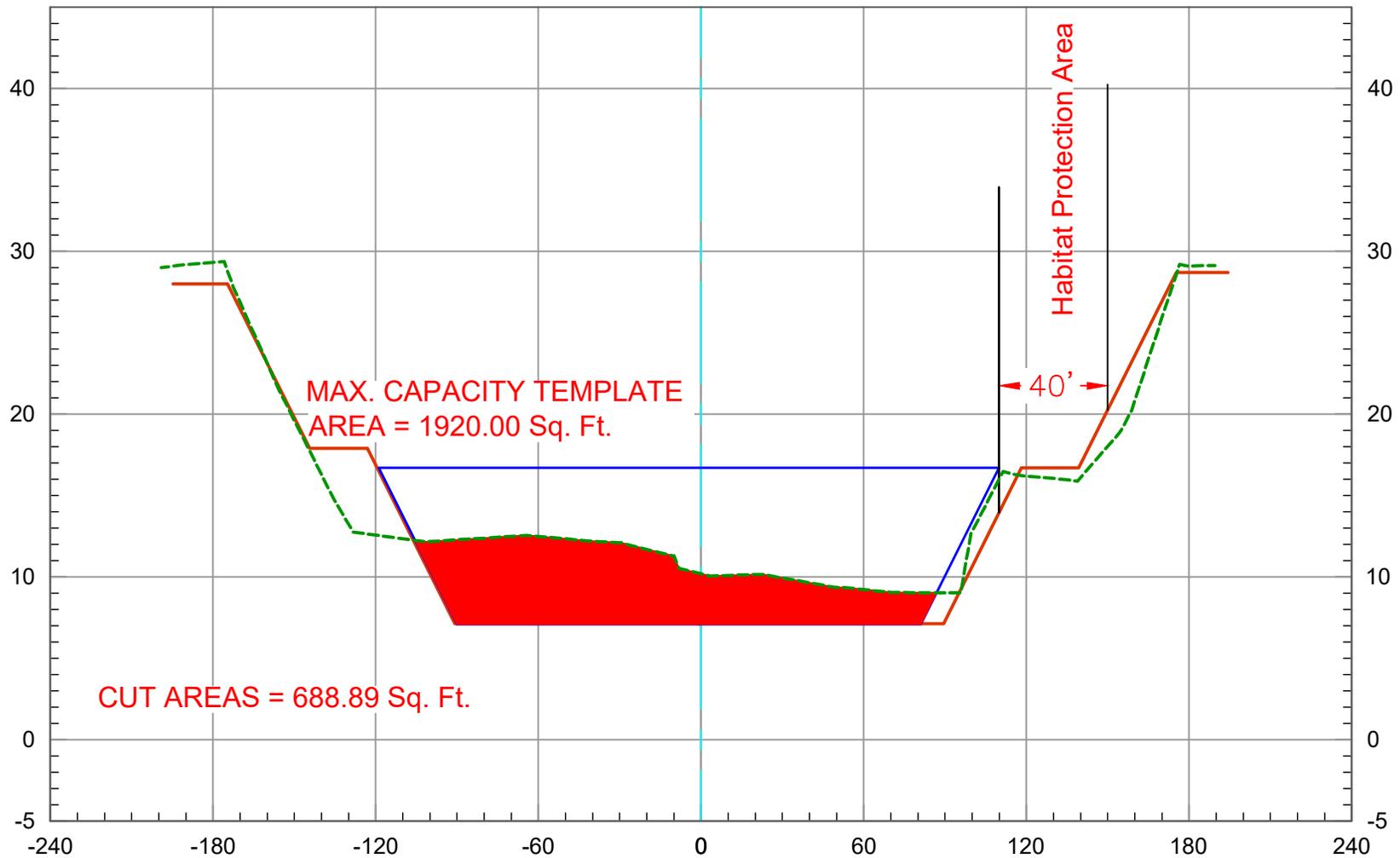


2025 Ground              
As-Built Plan           
Maximum Capacity   

97+00

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

# SAN DIEGO CREEK (F05) BASIN 2 - 2025 SCOURS CL



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

**98+00**

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