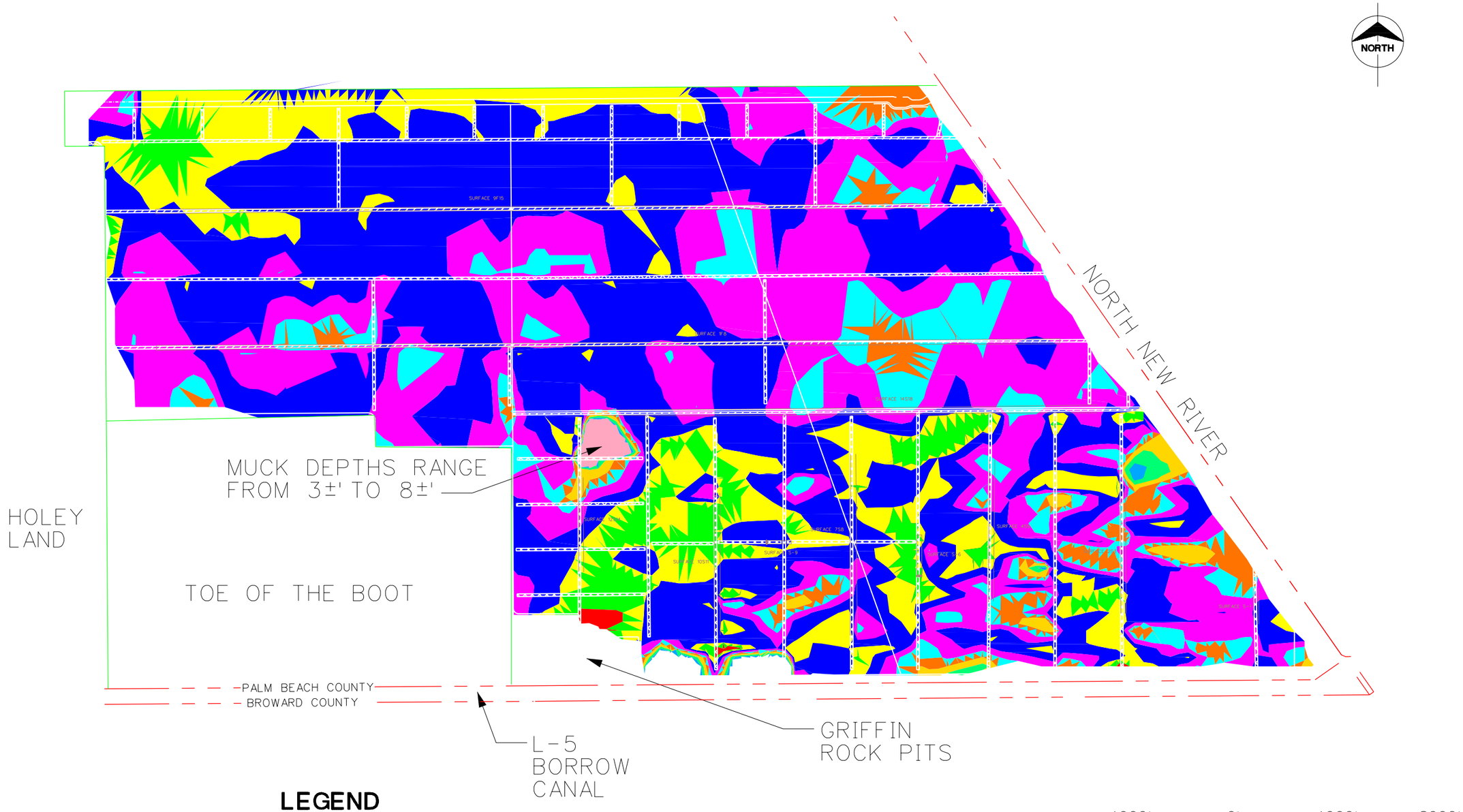


## LEGEND

| | |
|---|---|
| 0.33 - 0.58 | 1.58 - 1.83 |
| 0.58 - 0.83 | 1.83 - 2.08 |
| 0.83 - 1.08 | 2.08 - 2.33 |
| 1.08 - 1.33 | 2.33 - 2.58 |
| 1.33 - 1.58 | 2.58 - 2.83 |

4000' 0' 4000' 8000'
SCALE IN FEET

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**STA 3/4**
**PLAN FORMULATION**

MUCK DEPTH MAP

Figure 3.1

MUCKCONT.DGN/ 6-19-2000 13:11/SAG

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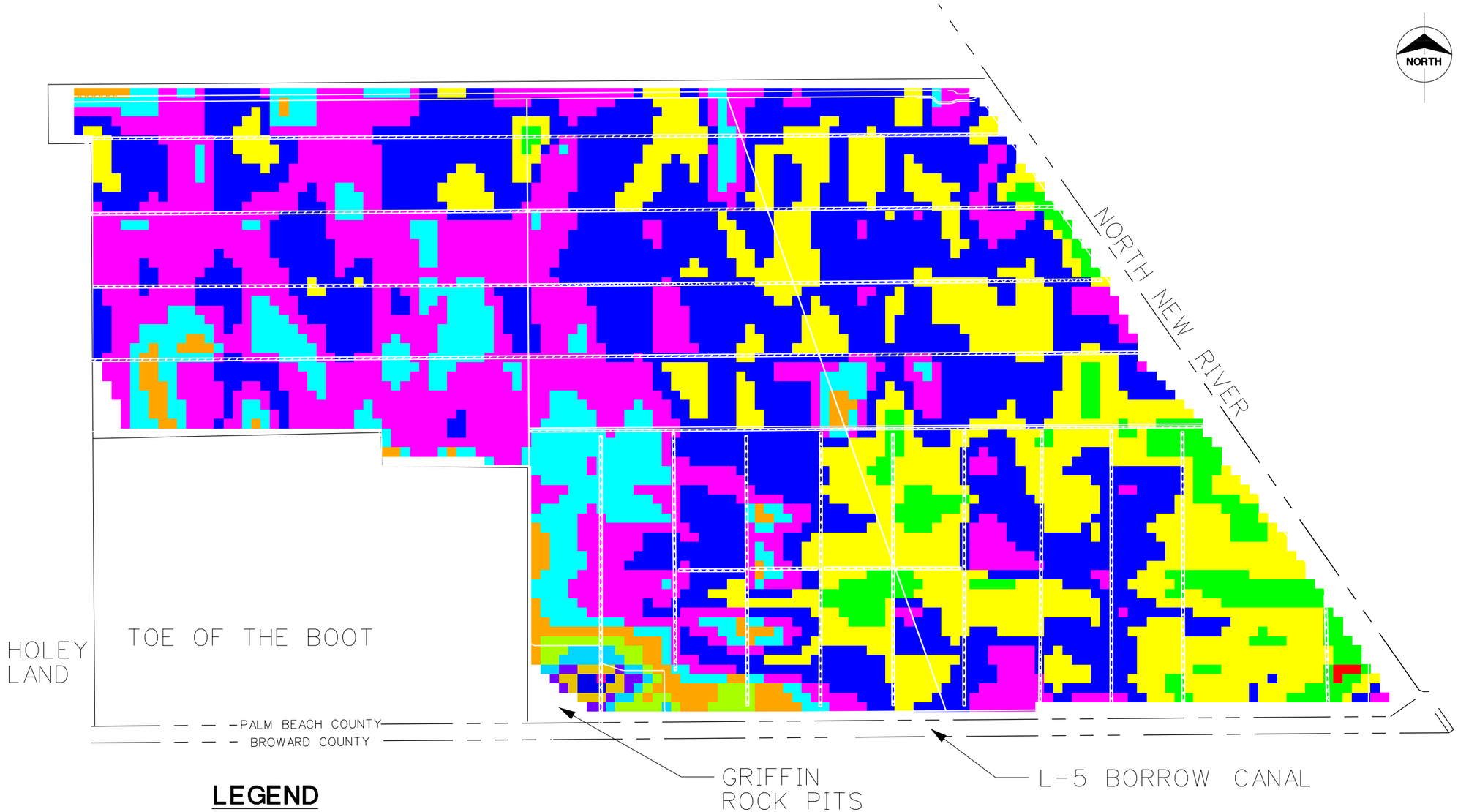


**LEGEND**

| | |
|---|---|
| 8.61 - 8.86 | 10.36 - 10.61 |
| 8.86 - 9.11 | 10.61 - 10.86 |
| 9.11 - 9.36 | 10.86 - 11.11 |
| 9.36 - 9.61 | 11.11 - 11.36 |
| 9.61 - 9.86 | 11.36 - 11.61 |
| 9.86 - 10.11 | 11.61 - 11.86 |
| 10.11 - 10.36 | 11.86 - 11.97 |

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**STA 3/4**
**PLAN FORMULATION**
SURFACE ELEVATION CONTOUR MAP
Figure 3.2

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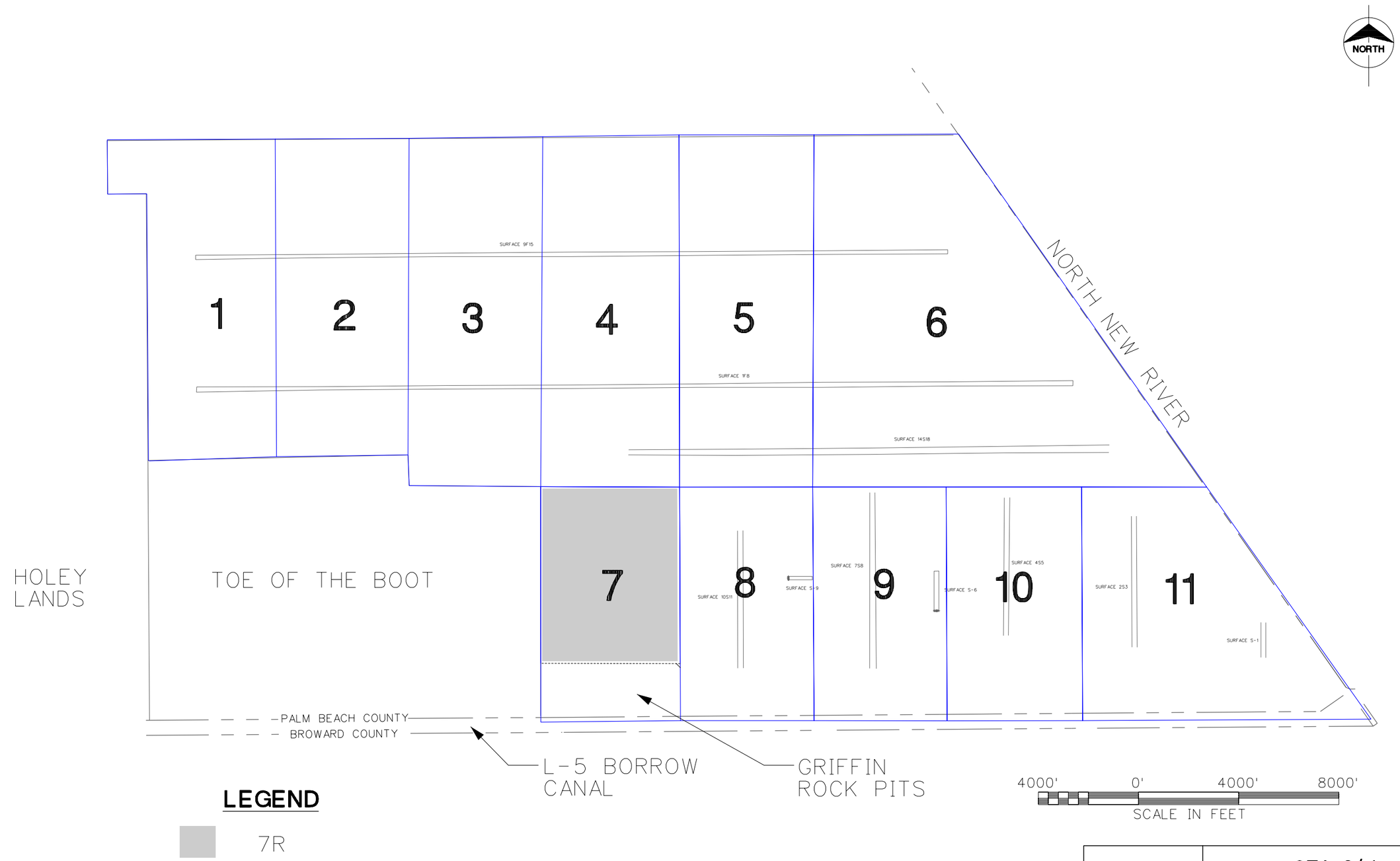
SURFCONT.DGN/ 6-19-2000 13:03/SAG

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**STA 3/4**
**PLAN FORMULATION**
BLOCK LOCATION MAP
FOR ELEVATION-AREA DATA

Figure 3.3

BLLOC.DGN/ 6-30-2000 9:01/MDH

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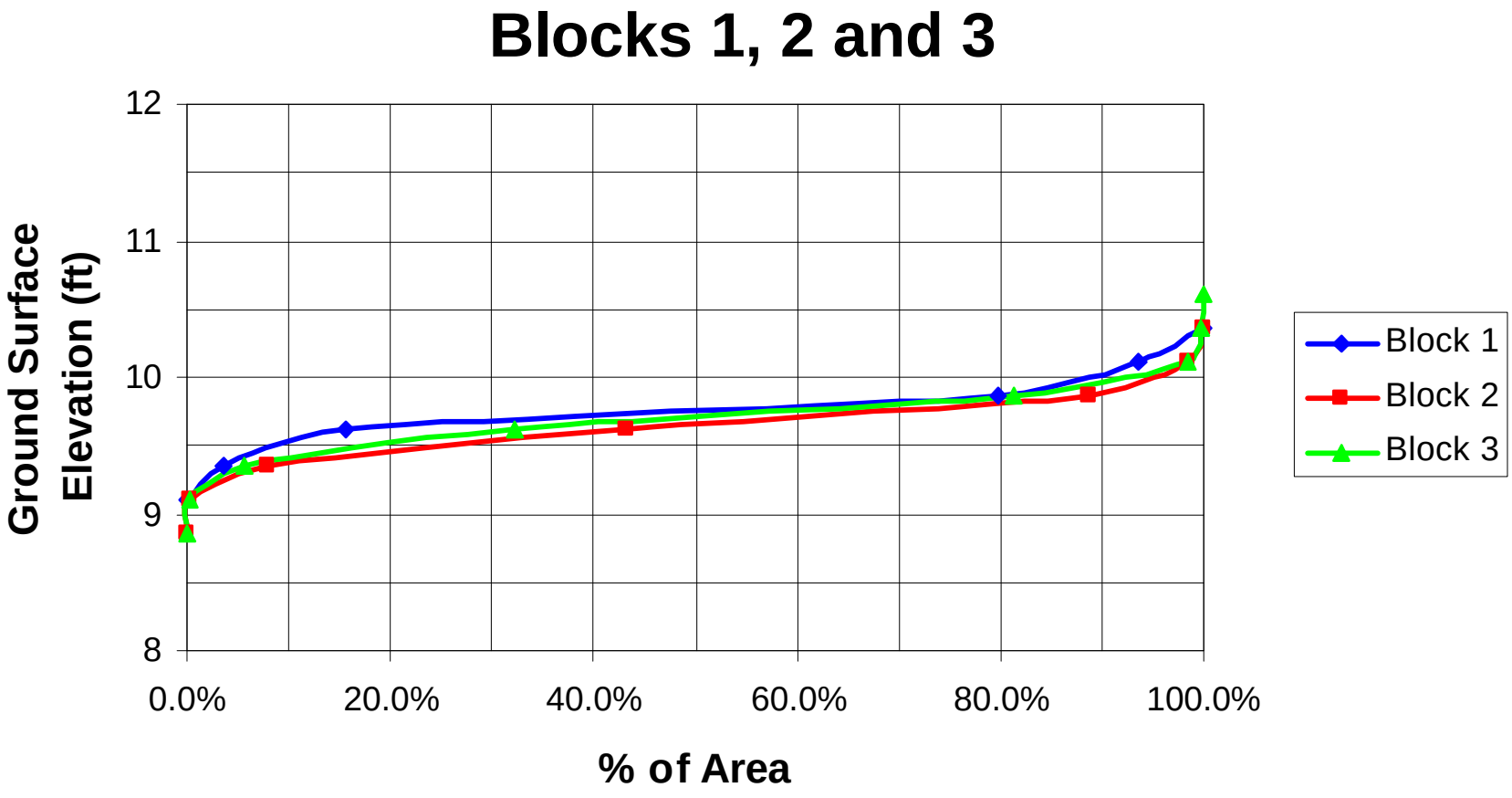


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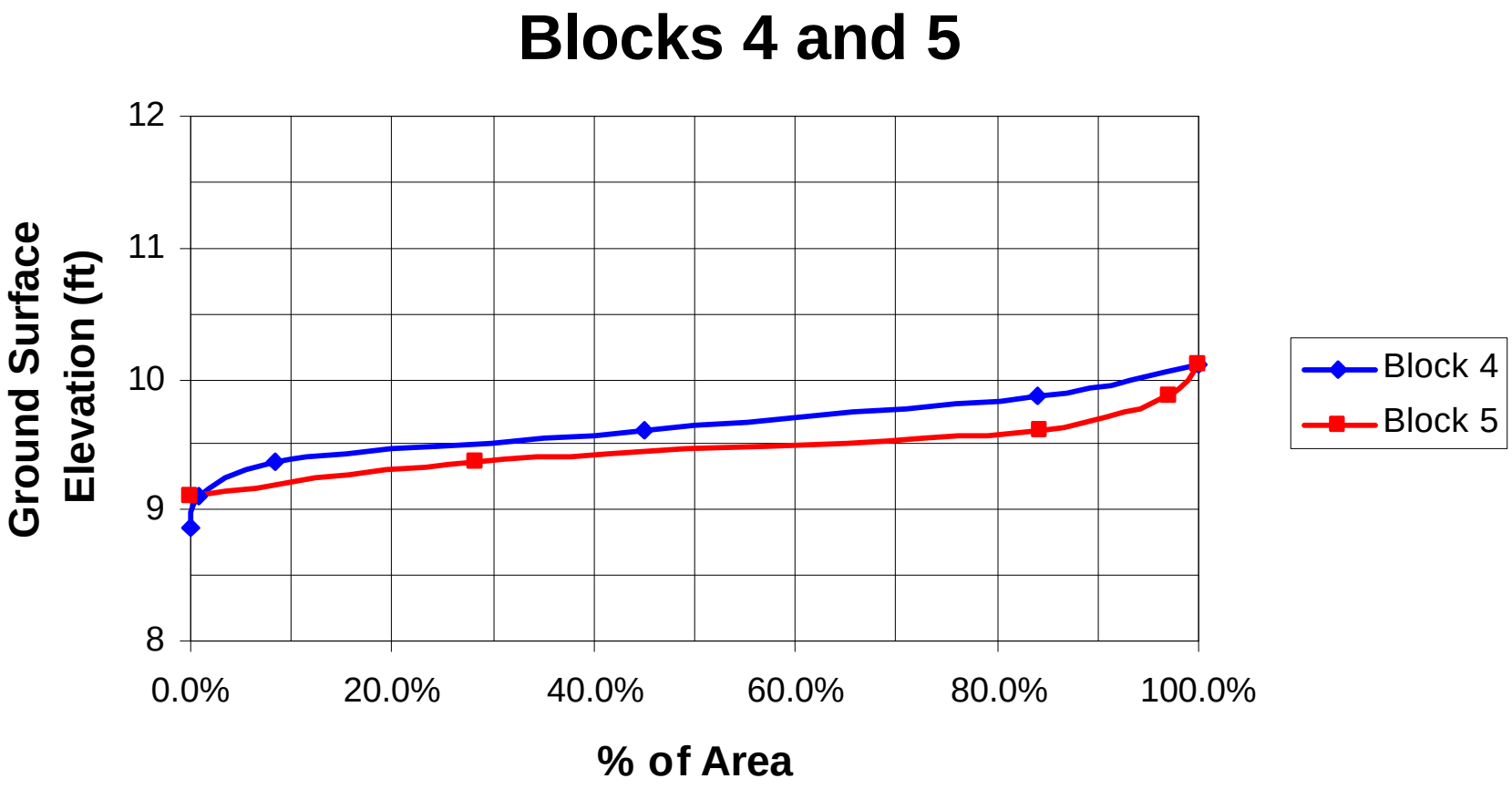
Elevation – Area Data
Blocks 1 - 3

Figure 3.4

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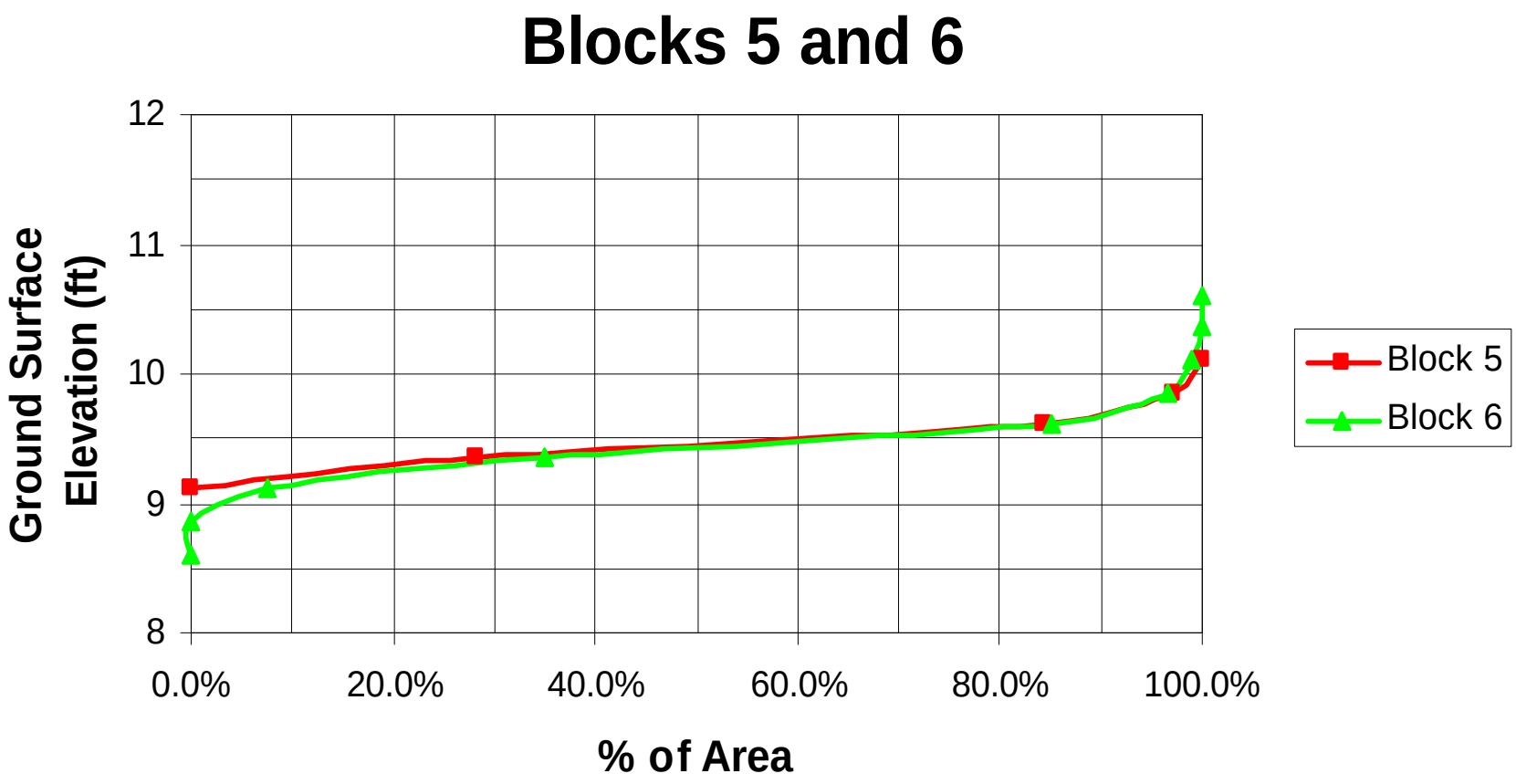
Elevation – Area Data
Blocks 4 & 5

Figure 3.5

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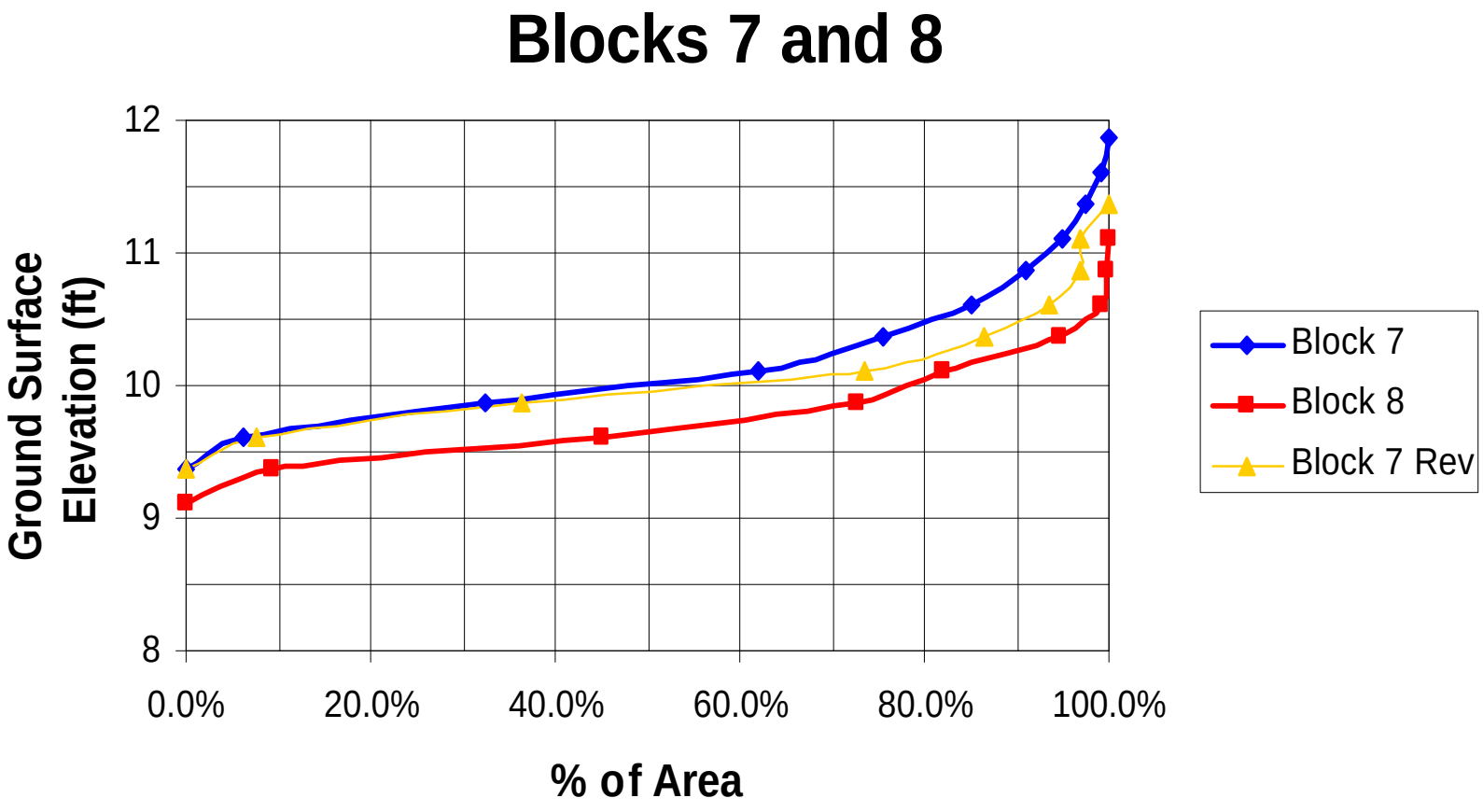
Elevation – Area Data
Blocks 5 & 6

Figure 3.6

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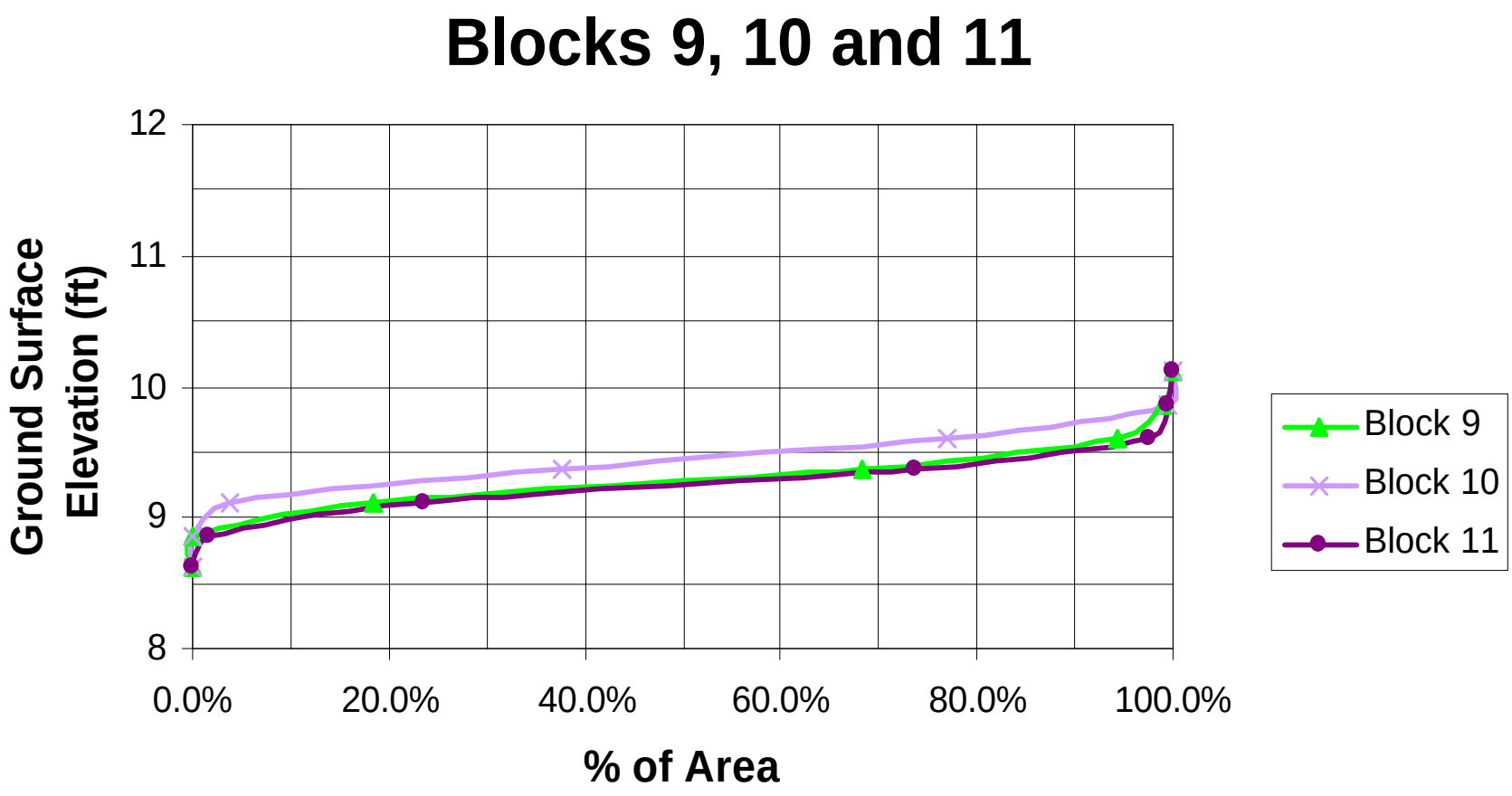
Elevation – Area Data
Blocks 7 & 8

Figure 3.7

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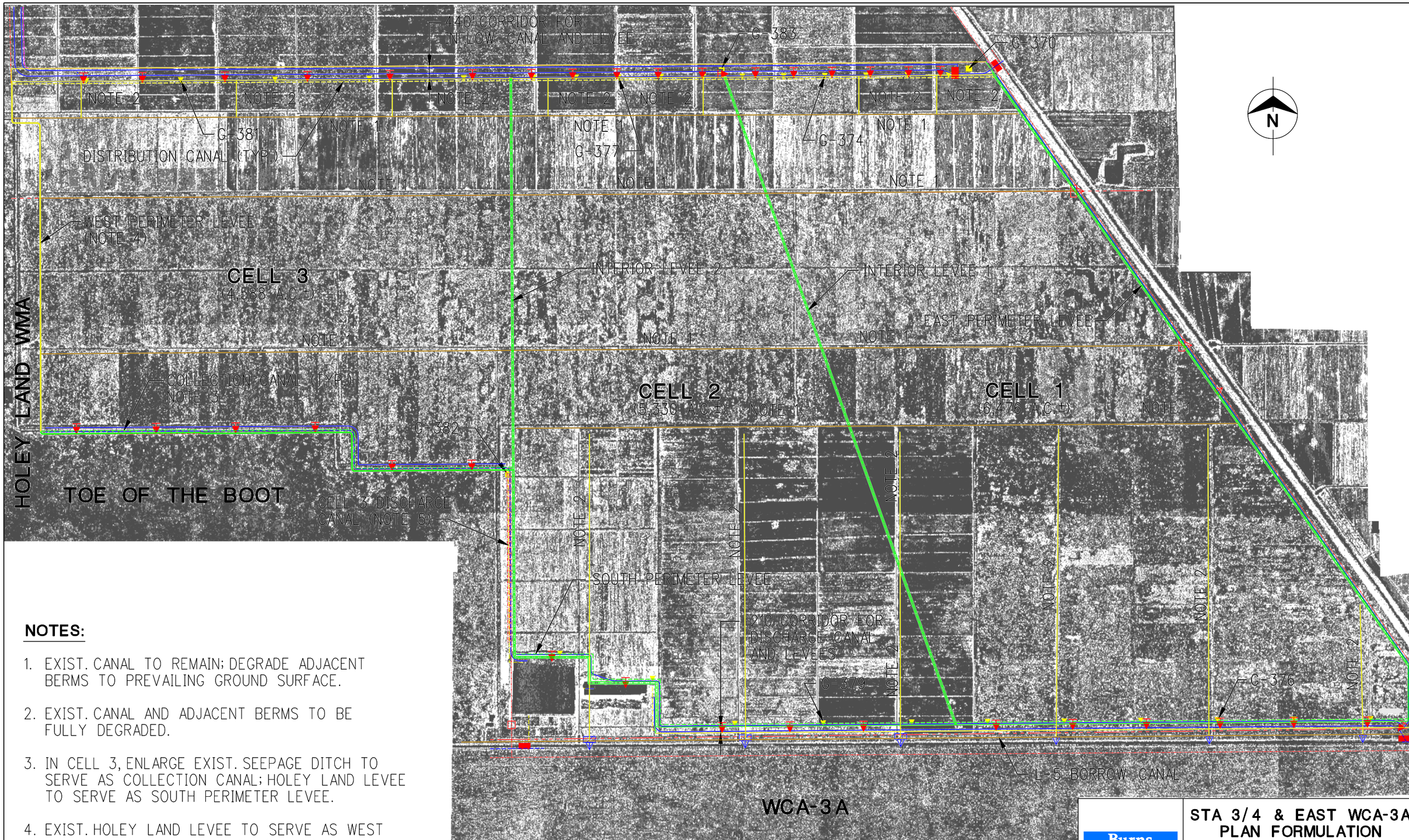
Elevation – Area Data
Blocks 9 - 11

Figure 3.8




**NOTES:**

1. EXIST. CANAL TO REMAIN; DEGRADE ADJACENT BERMS TO PREVAILING GROUND SURFACE.
2. EXIST. CANAL AND ADJACENT BERMS TO BE FULLY DEGRADED.
3. IN CELL 3, ENLARGE EXIST. SEEPAGE DITCH TO SERVE AS COLLECTION CANAL; HOLEY LAND LEVEE TO SERVE AS SOUTH PERIMETER LEVEE.
4. EXIST. HOLEY LAND LEVEE TO SERVE AS WEST PERIMETER LEVEE; FILL EXIST. SEEPAGE DITCH.
5. ENLARGE EXIST. SEEPAGE DITCH.

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**STA 3/4 & EAST WCA-3A PLAN FORMULATION**

PRELIMINARY LAYOUT
BASE CASE DESIGN

Figure 3.9

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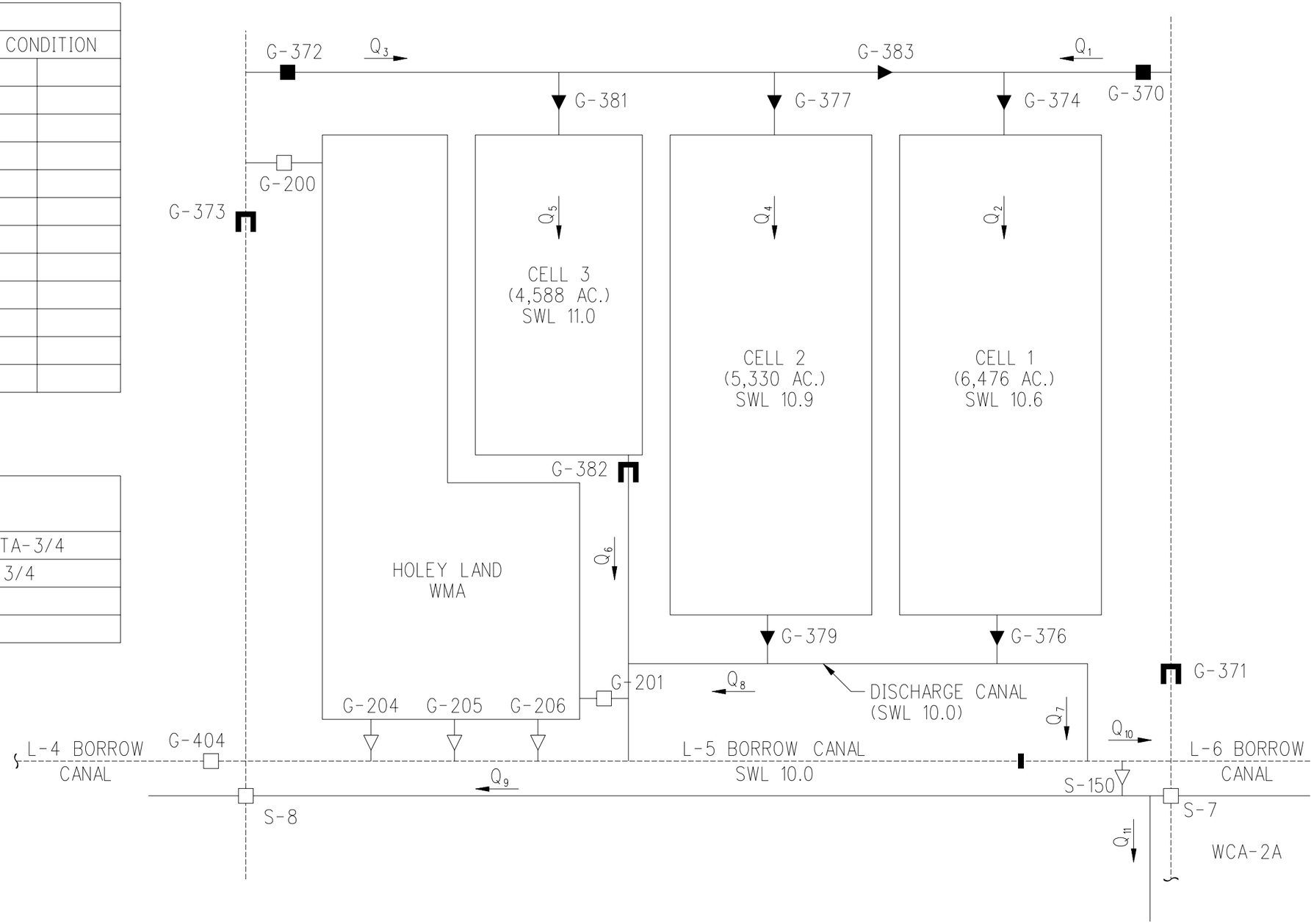
## FLOW DISTRIBUTION

| ELEMENT | DESIGN DISCHARGE (CFS) FOR CONDITION | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | | | |
| $Q_1$ | 2,170 | 398 | | | |
| $Q_2$ | 2,170 | 398 | | | |
| $Q_3$ | 3,670 | 487 | | | |
| $Q_4$ | 1,980 | 263 | | | |
| $Q_5$ | 1,690 | 224 | | | |
| $Q_6$ | 1,690 | 224 | | | |
| $Q_7$ | 2,840 | 0 | | | |
| $Q_8$ | 1,310 | 661 | | | |
| $Q_9$ | 3,000 | 885 | | | |
| $Q_{10}$ | 2,490 | 0 | | | |
| $Q_{11}$ | 350 | 0 | | | |

| FLOW CONDITION | DESCRIPTION |
|---|---|
| 1 | MAXIMUM DESIGN INFLOW TO STA-3/4 |
| 2 | MEAN ANNUAL INFLOW TO STA-3/4 |
| | |
| | |




**LEGEND**

| EXIST. | | NEW |
|---|---|---|
| □ | PUMPING STATION | ■ |
| | GATED SPILLWAY | ⊓ |
| ▽ | GATED CULVERT | ▼ |
| | CANAL PLUG | ▮ |

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**STA 3/4 & EAST WCA-3A PLAN FORMULATION**

FLOW SCHEMATIC
BASE DESIGN

Figure 3.10

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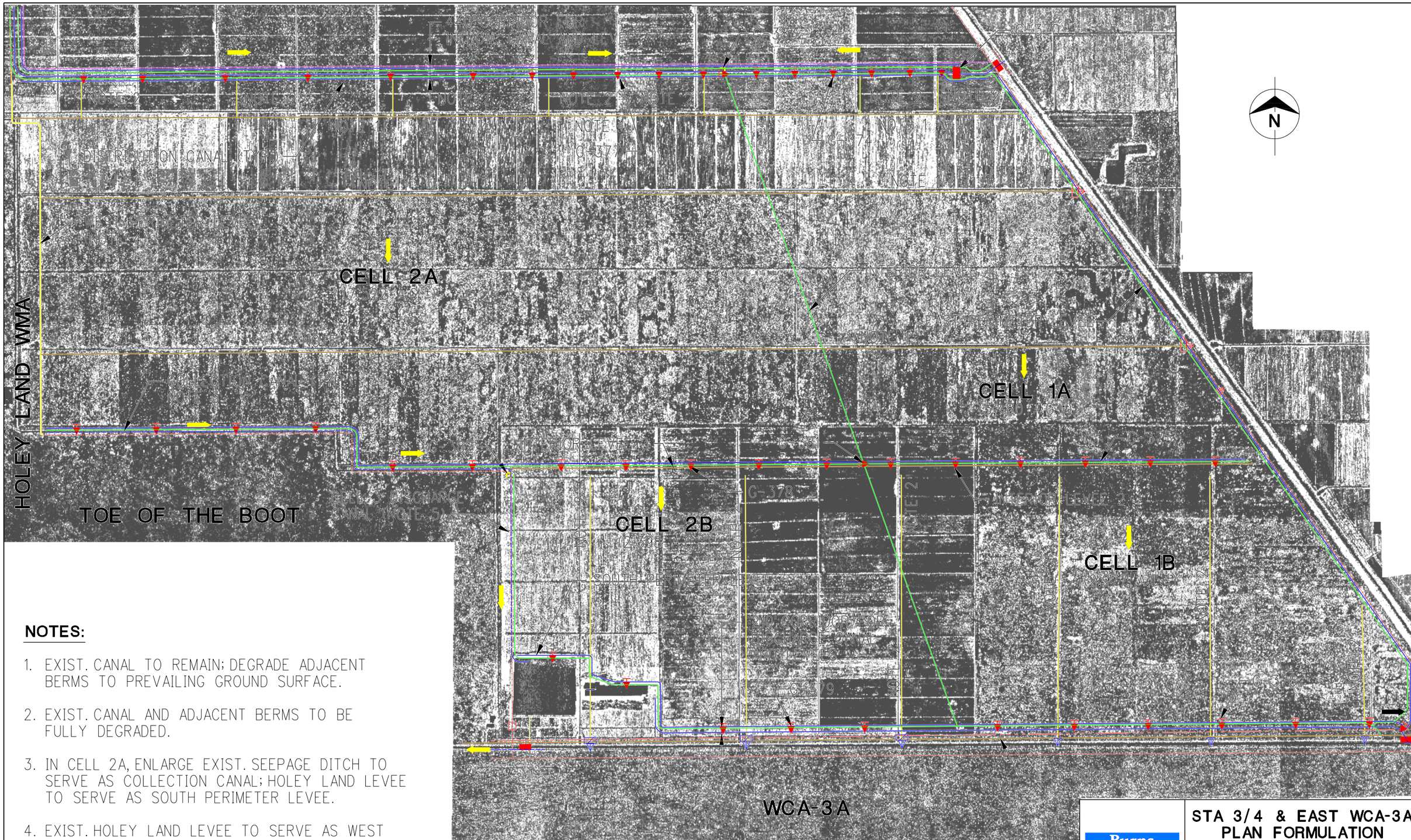


**NOTES:**

1. EXIST. CANAL TO REMAIN; DEGRADE ADJACENT BERMS TO PREVAILING GROUND SURFACE.
2. EXIST. CANAL AND ADJACENT BERMS TO BE FULLY DEGRADED.
3. IN CELL 2A, ENLARGE EXIST. SEEPAGE DITCH TO SERVE AS COLLECTION CANAL; HOLEY LAND LEVEE TO SERVE AS SOUTH PERIMETER LEVEE.
4. EXIST. HOLEY LAND LEVEE TO SERVE AS WEST PERIMETER LEVEE; FILL EXIST. SEEPAGE DITCH.
5. ENLARGE EXIST. SEEPAGE DITCH.

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**STA 3/4 & EAST WCA-3A PLAN FORMULATION**

PRELIMINARY LAYOUT
ALTERNATIVE DESIGN

Figure 3.11

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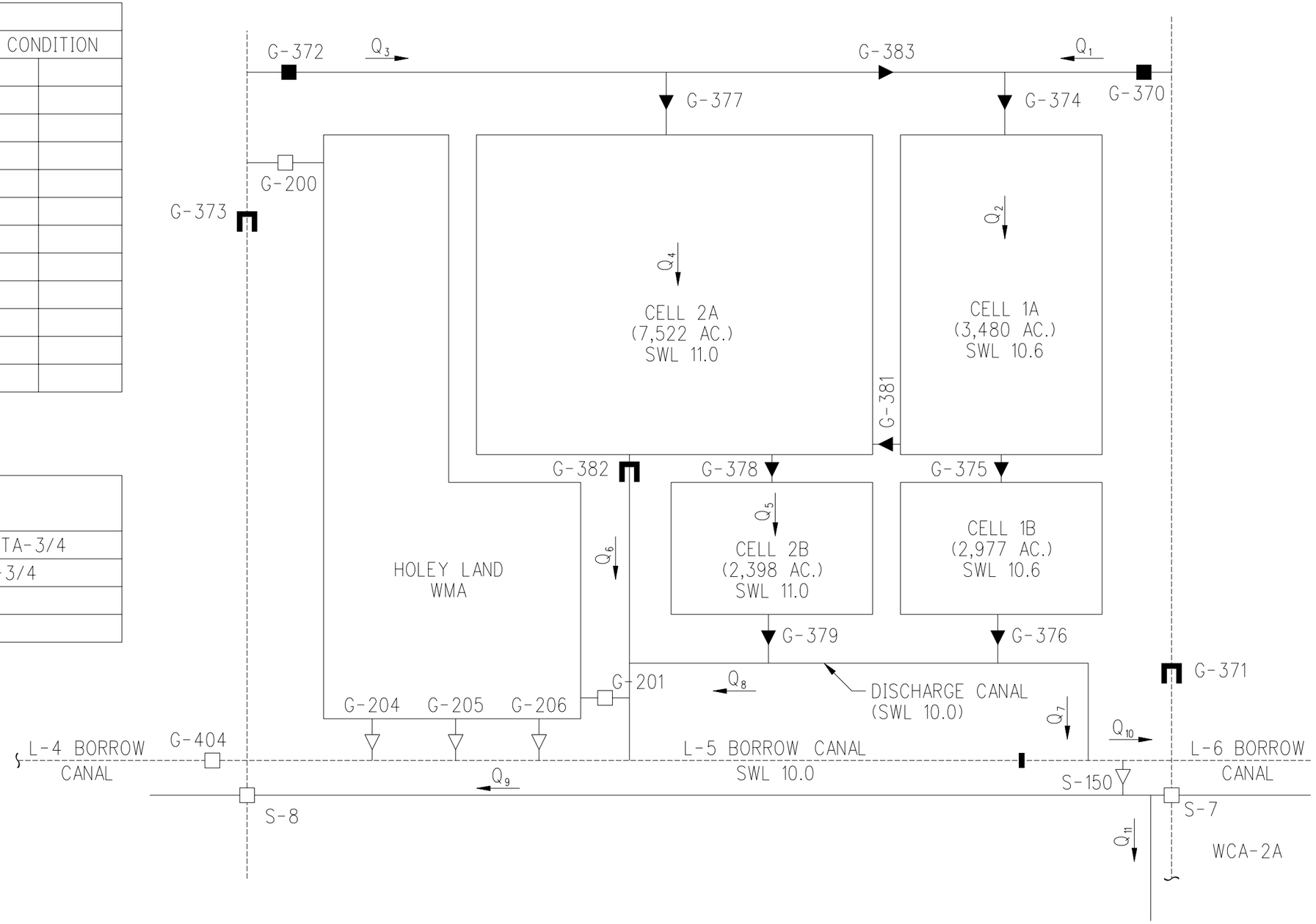
## FLOW DISTRIBUTION

| ELEMENT | DESIGN DISCHARGE (CFS) FOR CONDITION | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | | | |
| $Q_1$ | 2,170 | 398 | | | |
| $Q_2$ | 2,170 | 398 | | | |
| $Q_3$ | 3,670 | 487 | | | |
| $Q_4$ | 3,670 | 263 | | | |
| $Q_5$ | 1,980 | 487 | | | |
| $Q_6$ | 1,690 | 487 | | | |
| $Q_7$ | 2,840 | 0 | | | |
| $Q_8$ | 1,310 | 885 | | | |
| $Q_9$ | 3,000 | 885 | | | |
| $Q_{10}$ | 2,490 | 0 | | | |
| $Q_{11}$ | 350 | 0 | | | |

| FLOW CONDITION | DESCRIPTION |
|---|---|
| 1 | MAXIMUM DESIGN INFLOW TO STA-3/4 |
| 2 | MEAN ANNUAL INFLOW TO STA-3/4 |
| | |
| | |




**LEGEND**

| EXIST. | | NEW |
|---|---|---|
| □ | PUMPING STATION | ■ |
| | GATED SPILLWAY | ⊓ |
| ▽ | GATED CULVERT | ▼ |
| | CANAL PLUG | ▮ |

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**STA 3/4 & EAST WCA-3A PLAN FORMULATION**

FLOW SCHEMATIC
ALTERNATIVE DESIGN

Figure 3.12

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