



BERMELLO AJAMIL & PARTNERS • INC

Architecture • Engineering • Planning
Interior Design • Landscape Architecture
2601 South Bayshore Drive
Suite 1000
Miami, Florida 33133
(305) 859-2050
Fax (305) 860-3700

PREPARED FOR/OWNER:
CITY OF KEY WEST, FL
P. O. BOX 1409
3140 FLAGLER AVENUE
KEY WEST, FL 33041



PROJECT NAME:

**TRUMAN
WATERFRONT
PARK**

PROJECT LOCATION/ADDRESS:

TRUMAN WATERFRONT PARK
WEST OF FORT STREET AND THE
TRUMAN ANNEX DEVELOPMENT,
NORTH OF KEY WEST NAVAL BASE

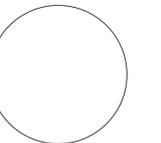
SUB-CONSULTANT INFORMATION:

**PEREZ ENGINEERING &
DEVELOPMENT, INC.**

Certificate of Authorization No. 8579

1010 Kennedy Drive
Suite 201
Key West, Florida 33040
(305) 293-9440
Fax (305) 296-0243

PROFESSIONAL SEAL:



ALLEN E. PEREZ, P.E.
FLORIDA REGISTERED ENGINEER
51468

SUBMITTAL DESCRIPTION / MILESTONE:

**DEVELOPMENT
APPLICATION
January 14, 2013**

REVISIONS:

DRAWING SHEET INFORMATION

BA PROJECT NO.: 12010
SCALE: 1" = 100'
DATE: January 14, 2013
DRAWN BY: AEP
CHECKED BY: AEP
CADD FILE: x-12026-ls-base.dwg

DRAWING TITLE:

**CONCEPTUAL
DRAINAGE
PLAN**

SHEET NO.

CC-00



100' 0 100'

SCALE 1"=100'
BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF
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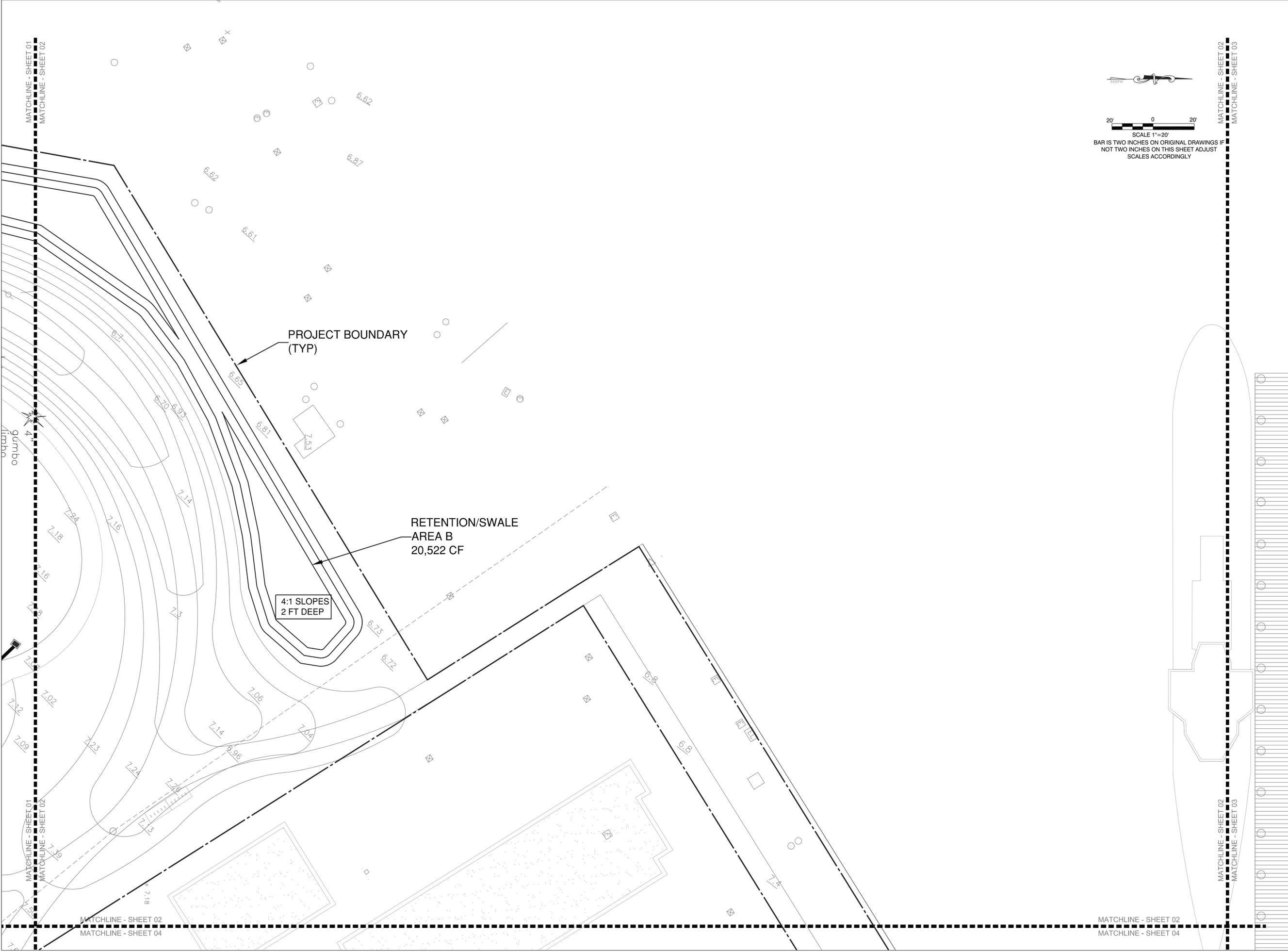
SHEET 01 SHEET 02

SHEET 03 SHEET 04 SHEET 05 SHEET 06 SHEET 07

SHEET 08 SHEET 09 SHEET 10

Drainage Calculations			
<i>Water Quantity - Predevelopment</i>			
Total Project Area	28.21	ac	1,228,828
Upland Project Area	28.21	ac	1,228,828
Pervious Area	17.04	ac	742,262
Impervious Area	11.89	ac	509,216
% Impervious	0.41		
Rainfall for 25yr/24hr event (P)	9.00	in	
Rainfall for 25yr/3day event (P)	12.23	in	
Depth to Water Table	4.00	ft	
Predeveloped Available Storage	8.18	in	
Soil Storage (S)	4.79	in	
$Q_{pre} = (P - 0.2S)^2$ (P + 0.8S)	7.91	in	
<i>Water Quantity - Postdevelopment</i>			
Project Area	28.21	ac	1,228,828
Pervious Area	18.30	ac	797,148
Impervious Area	9.91	ac	431,680
% Impervious	35.13%		
Rainfall for 25yr/24hr event (P)	9	in	
Rainfall for 25yr/3day event (P)	12.23	in	
Depth to Water Table	4.00	ft	
Developed Available Storage	8.18	in	
Soil Storage (S)	5.31	in	
$Q_{post} = (P - 0.2S)^2$ (P + 0.8S)	7.57	in	
Runoff Volume from 25 year 3 day storm	213.62	ac-in	
<i>Postdevelopment - Predevelopment</i>			
$Q_{post} - Q_{pre}$	-0.34	in	
Volume = QA	-9.58	ac-in	

Water Quality			
Project Area	28.21	ac	1,228,828
Surface Water	0.00	ac	0
Roof Area	0.94	ac	40,948
Pavement/Walkways	9.48	ac	412,949
Penious area	18.30	ac	797,148
Site area for Water Quality (Total area - (water surface + roof area))	27.27	ac	1,187,881
Impervious area for water Quality (Site area for Water Quality - Pervious area)	8.97	ac	390,733
% Impervious	33%		
A) One and a half inches of runoff from project area	42.32	ac-in	
B) 3.75 inches times percent impervious (3.75 x percent impervious x (site area - surface water))	34.80	ac-in	
<i>Comparison of Water Quality Methods</i>			
	42.32	>	34.80
50 % reduction due to retention	21.16	ac-in	78,802
Pond A			29,137
Pond B			20,522
Pond C			16,672
Pond D			10,317
Pond E			2,206
Pond F			3,107
Total Volume Provided			81,964



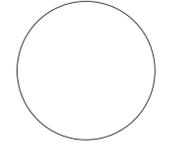
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 DRAINAGE
 PLAN**
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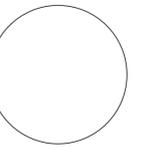
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CONCEPTUAL DRAINAGE PLAN
SHEET NO.

CC-03

MATCHLINE - SHEET 01
MATCHLINE - SHEET 03

MATCHLINE - SHEET 01
MATCHLINE - SHEET 03

MATCHLINE - SHEET 03
MATCHLINE - SHEET 04

MATCHLINE - SHEET 03
MATCHLINE - SHEET 08

MATCHLINE - SHEET 03
MATCHLINE - SHEET 08



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PROJECT BOUNDARY (TYP)

TRIPLE CHAMBER
BAFFLE BOX
WITH WELL

RETENTION/SWALE
AREA A
29,137 CF

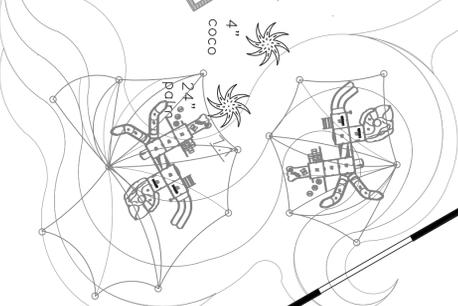
4:1 SLOPES
2 FT DEEP

STORM PIPE (TYP)

MIN. FFE = 7.1

DITCH BOTTOM
INLET (TYP)

10' cluster
24" Aus. pipe
Palms





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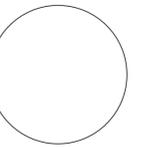
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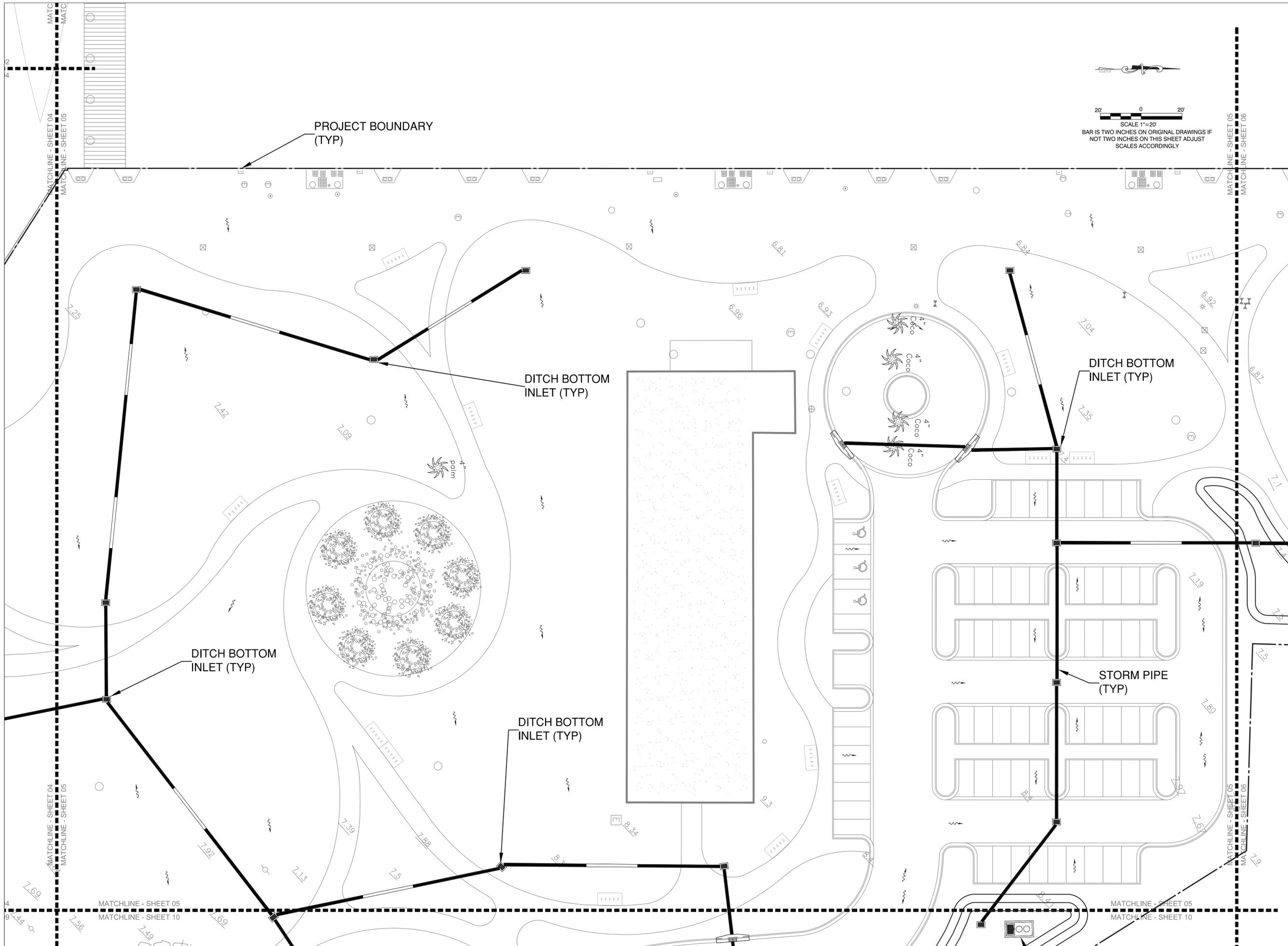
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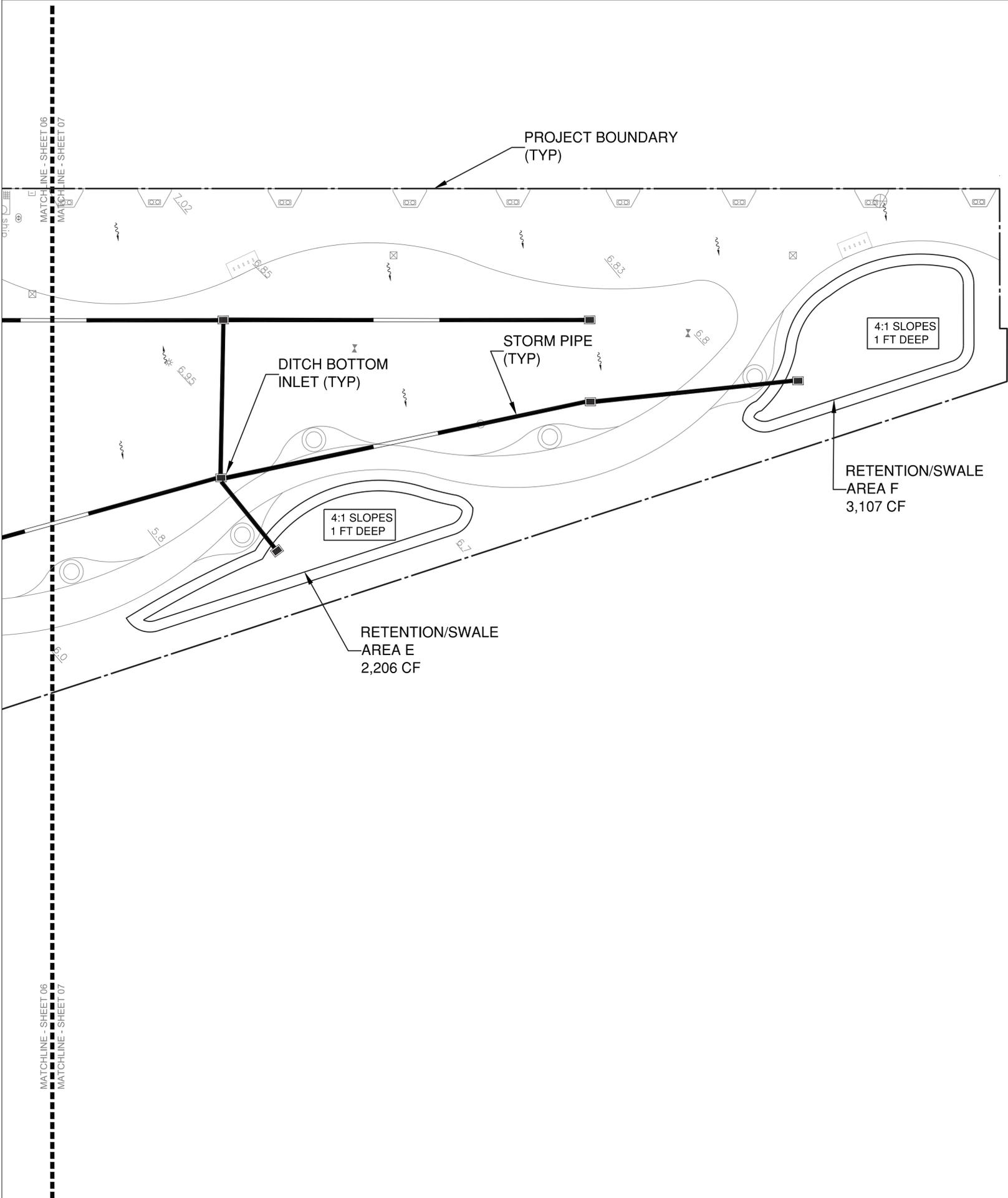
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CONCEPTUAL DRAINAGE PLAN
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CC-05





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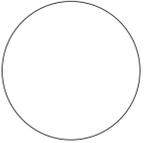
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 PLAN**

SHEET NO.

CC-07

MATCHLINE - SHEET 03
MATCHLINE - SHEET 08

MATCHLINE - SHEET 03
MATCHLINE - SHEET 08



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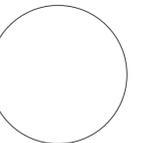
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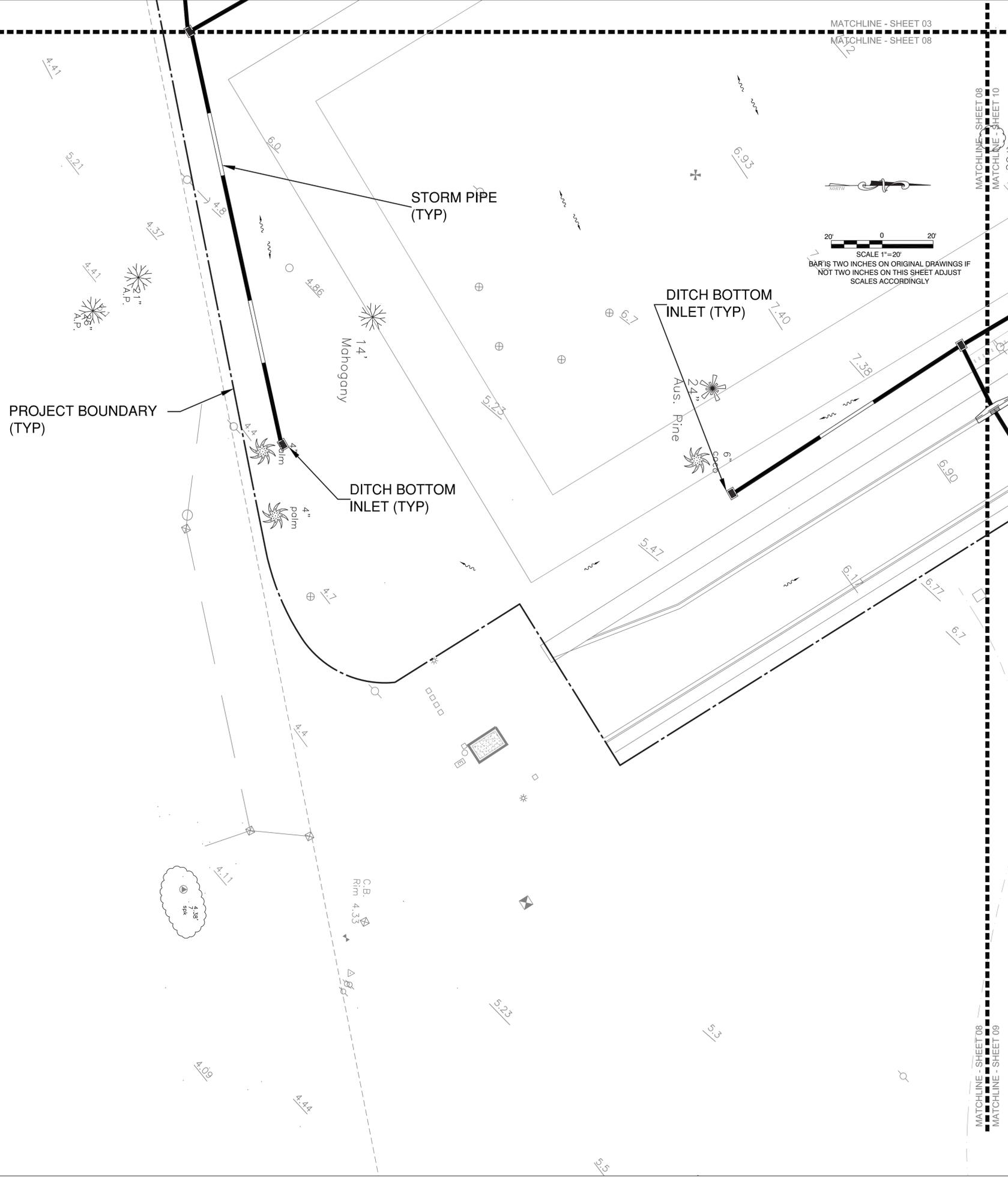
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CC-08



STORM PIPE
(TYP)

DITCH BOTTOM
INLET (TYP)

DITCH BOTTOM
INLET (TYP)

PROJECT BOUNDARY
(TYP)

Mahogany
14'

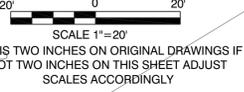
Aus. Pine
24'

4" palm

4" palm

C.B.
Rim 4.33

4.38
SPK



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MATCHLINE - SHEET 08
MATCHLINE - SHEET 10
MATCHLINE - SHEET 09
MATCHLINE - SHEET 08



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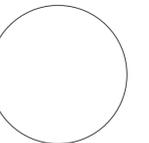
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CONCEPTUAL DRAINAGE PLAN

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CC-09

