HYDROLOGY

F19/D1
FIVE PLANS

F19/D1

5 Plans

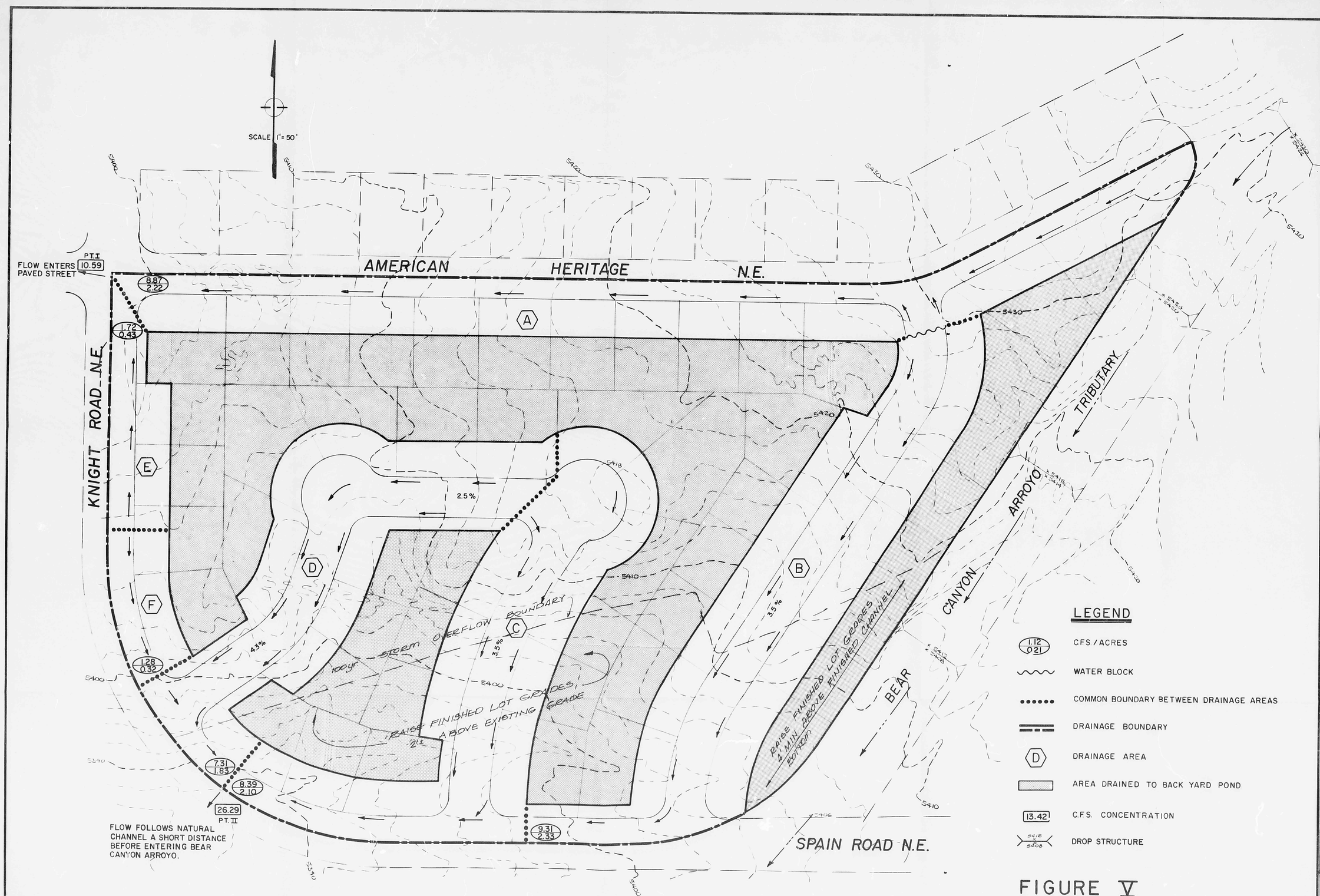


FIGURE V

TOPO MAP AND DRAINAGE IN DEVELOPED STATE

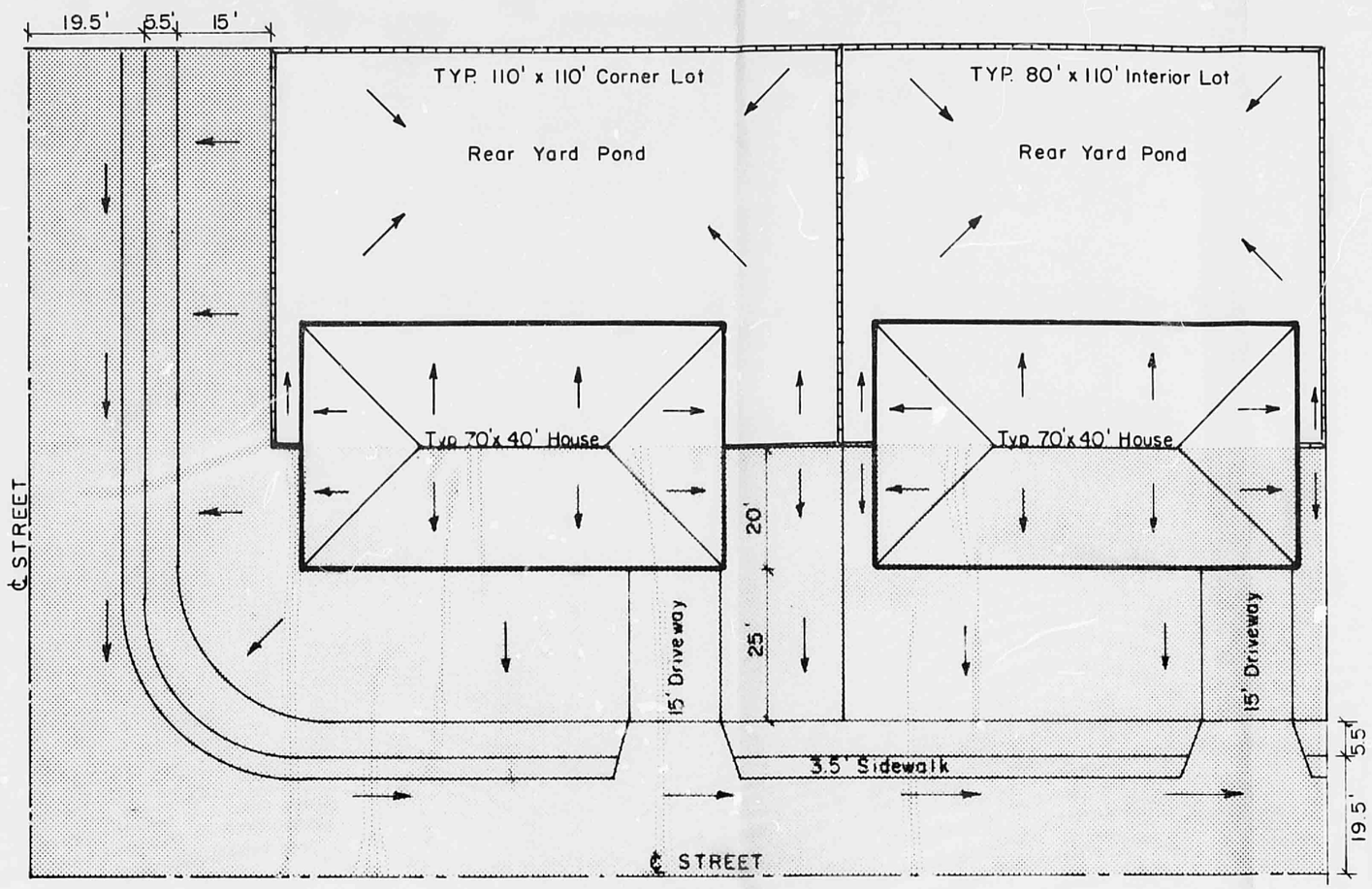
CHAMBERS — CAMPBELL
ISAACSON — CHAPLIN INC.
ARCHITECTS ENGINEERS PLANNERS
& SURVEYORS STORMWATER CONSULTANTS

JOB NO	
DATE	
DRAWN	
CHECKED	

FIGURE V

sheet of

FIGURE VI



TYPICAL LOT DRAINAGE PLAT

REFER TO THE CALCULATION SHEET FOR THE COMPOSITE "R" FACTOR BREAKDOWN OF THE ABOVE LOTS.

AREA DRAINED

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DATE
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FIGURE VI

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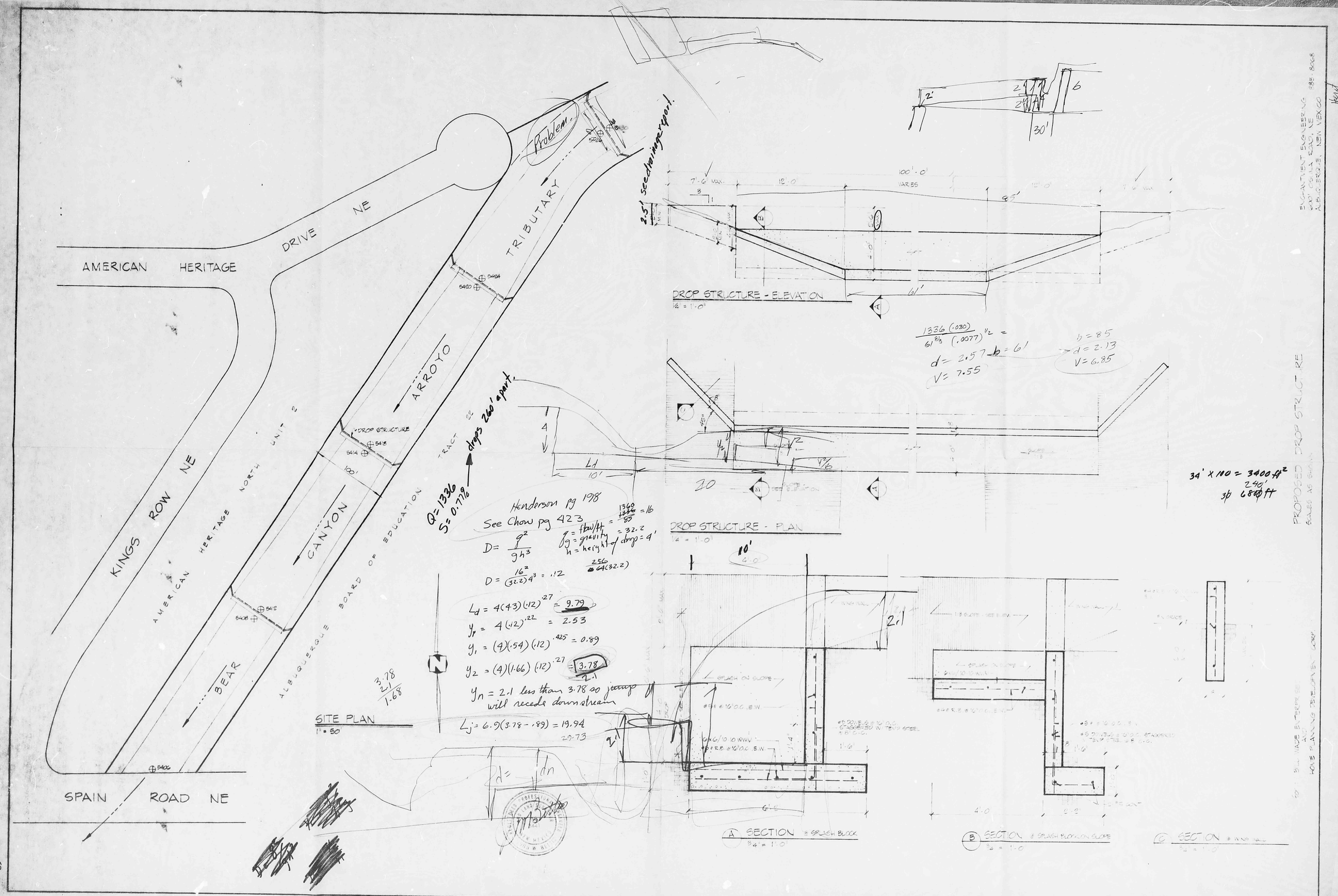
of


AMERICAN HERITAGE DRIVE NE
KINGS ROW NE
SPAIN ROAD NE
AMERICAN HERITAGE NORTH UNIT 2
ALBUQUERQUE BOARD OF EDUCATION TRACT
BEAR CANYON ARROYO
TRIBUTARY
Problem
2.5' see drainage report.
drops 260' apart.
Q=1336
S=0.776
DROP STRUCTURE
SITE PLAN
1" = 50'
Henderson pg 198
See Chow pg 423
D = g²/gh³
g = flow/ft = 1336/55 = 16
g = gravity = 32.2
h = height of drop = 4'
D = 16²/(32.2)4³ = .12
Ld = 4(4.3)(.12)^.27 = 9.79
yp = 4(.12)^.22 = 2.53
y1 = (4)(.54)(.12)^.425 = 0.89
y2 = (4)(1.66)(.12)^.27 = 3.78
yn = 2.1 less than 3.78 so jump will recede downstream
Lj = 6.9(3.78 - .89) = 19.94
DROP STRUCTURE - ELEVATION
1/4" = 1'-0"
100'-0" VARIES
61'
DROP STRUCTURE - PLAN
1/4" = 1'-0"
1336 (.030) / 61^8/3 (.0077)^1/2 =
d = 2.57 b = 61'
V = 7.55
b = 8.5
d = 2.13
V = 6.85
34' x 110 = 3400 ft²
240'
3p 680 ft
SECTION @ SPLASH BLOCK
1/4" = 1'-0"
SECTION @ SPLASH PLATE ON GLACIS
1/4" = 1'-0"
SECTION @ WING WALL
1/4" = 1'-0"
PROPOSED DROP STRUCTURE
SCALE AS SHOWN
ENGINEERING
ALBUQUERQUE, NEW MEXICO

1-3-69

Bill

John Bettis left these 3 points for your preliminary investigation of water & sewer to this area. He will contact you in a few days for further discussion.

Rp

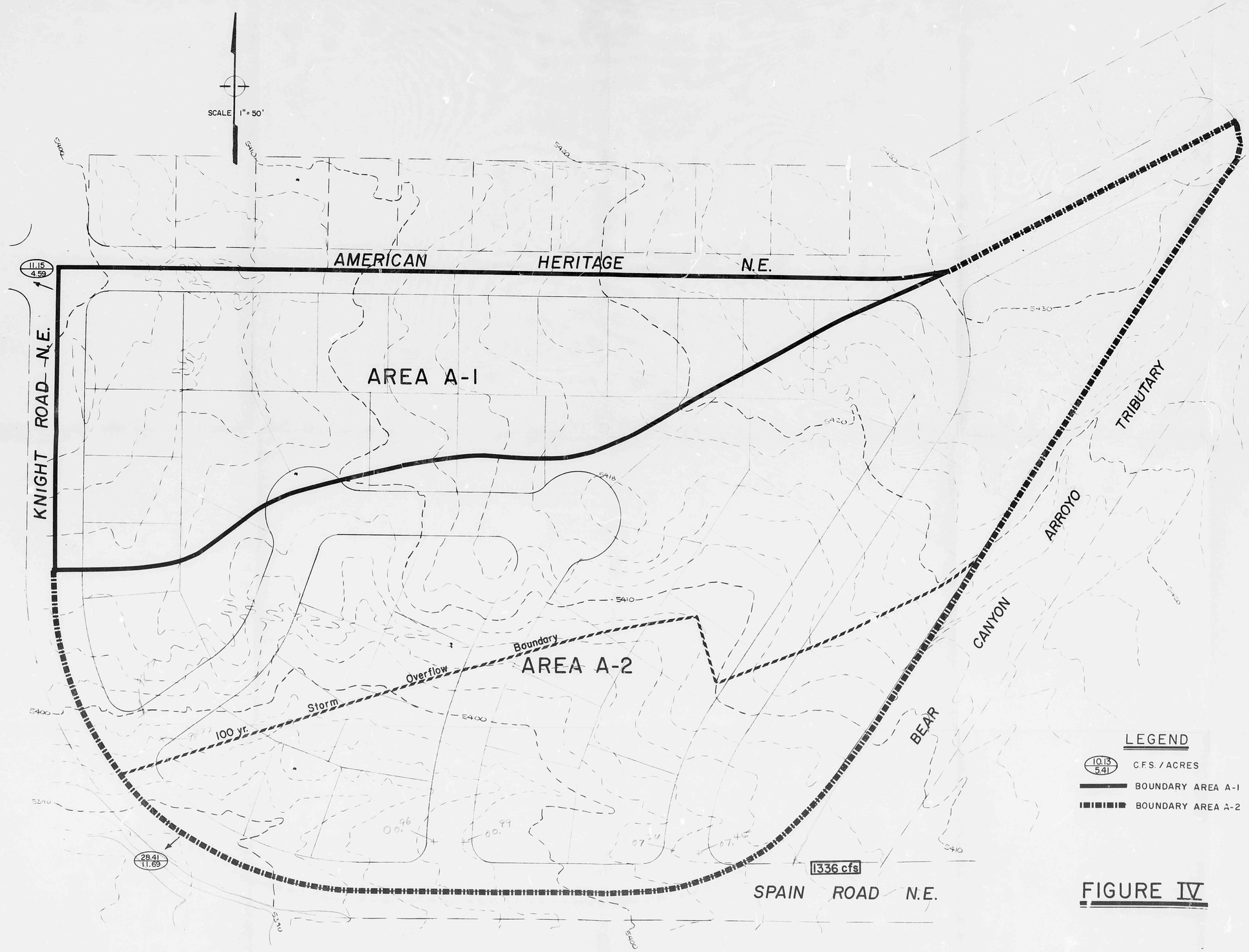


FIGURE IV

TOPO MAP AND DRAINAGE IN UNDEVELOPED STATE

CHAMBERS — CAMPBELL
ISAACSON — CHAPLIN, INC.
ARCHITECTS · ENGINEERS · PLANNERS
A SUBSIDIARY OF SOUTHWEST FIRST INDUSTRIES
3500 MONTE ESCUELA NE ALBUQUERQUE, N.M. 87108

JOB NO
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FIGURE IV

sheet
of