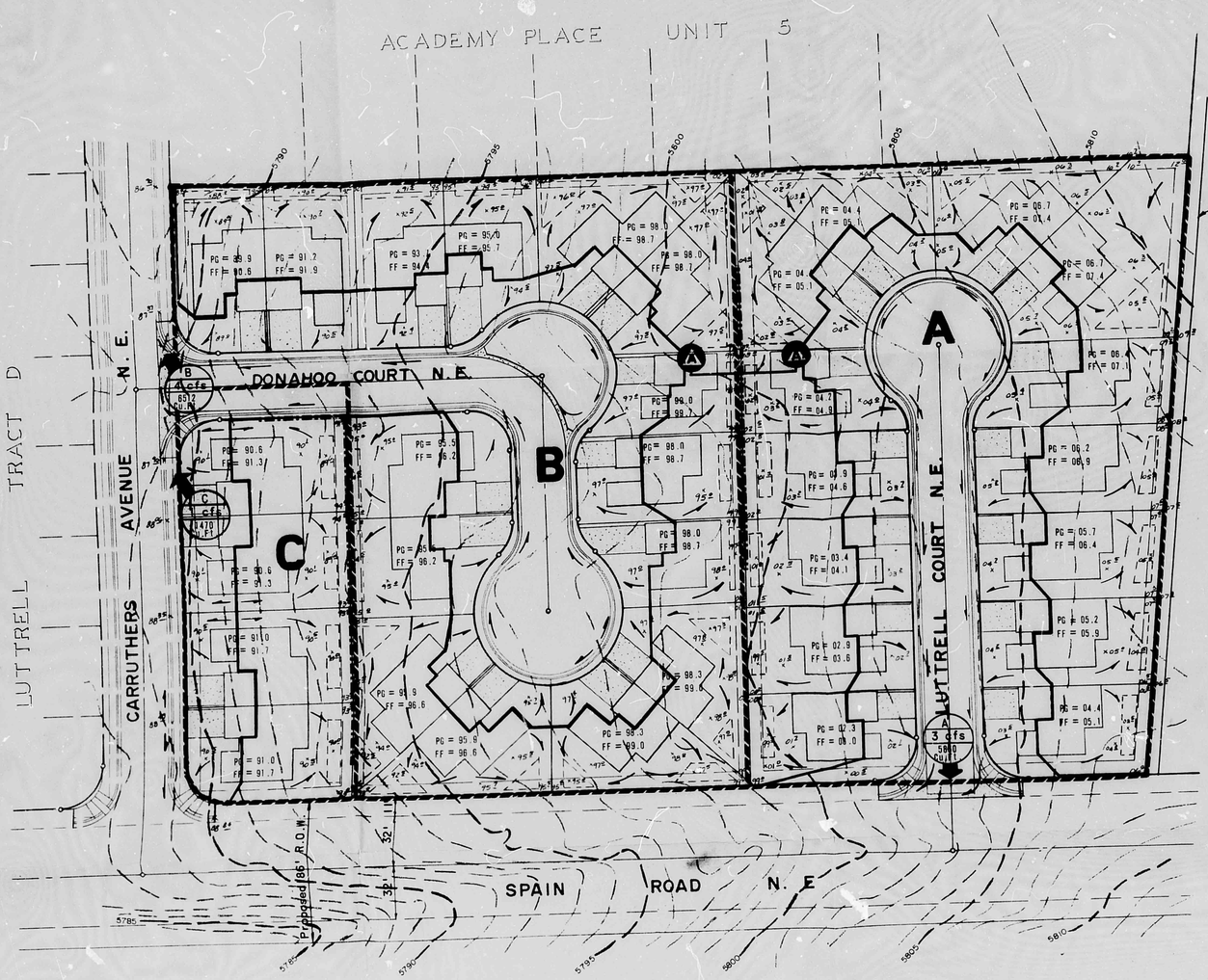
HYDROLOGY

F22/D8

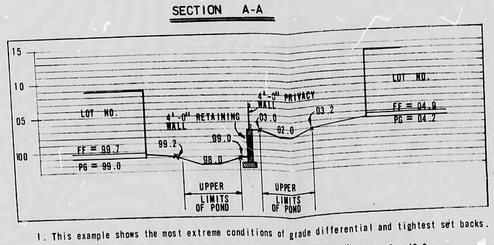
ONE PLAN



LEGEND

- RETAINING WALL
- DRAINAGE AREA BOUNDARY
- LIMITS OF AREA TO BE 100% PONDED
- B, 4 cfs, 6512 cu.ft. — DENOTATION OF AREA, DEVELOPED RUNOFF RATES, AND VOLUMES
- FLOW DIRECTION ARROWS
- x 89.5 — LIMITS OF BACK YARD POND WITH BOTTOM ELEVATION

SECTION A-A



1. This example shows the most extreme conditions of grade differential and tightest set backs.
2. A 4'-0" retaining wall with a 4'-0" privacy wall (total = 8'-0") meets Sec.40-C.
3. All other lots shall be assumed workable based on this example.

DRAINAGE AREA A:

Undeveloped Characteristics:

A = 94,165 Sq.Ft. = 2.16 Acres
Tc= 14 minutes
I = 4.85
C = 0.30

So, Q = CIA
= (0.30)(4.85)(2.16)
= 3.14 Use 3 cfs

$V = CDA(\frac{I}{12})$

$= (0.30)(2.6)(94,165)(\frac{I}{12})$

= 6121 cu.ft.

Developed Characteristics:

Composite "C" Value = 0.65
I = 5.40
A = 41,600 Sq.Ft. = 0.95 Acres

Q = CIA
= (0.65)(5.40)(0.95)
= 3.33 Use 3 cfs (good)

$V = CDA(\frac{I}{12})$

$= (0.65)(2.6)(41,600)(\frac{I}{12})$

= 5859 cu.ft. (a decrease)

DRAINAGE AREA B:

Undeveloped Characteristics:

A = 100,800 Sq.Ft. = 2.3 Acres
Tc= 12 minutes
I = 5.11
C = 0.30

So, Q = CIA
= (0.30)(5.11)(2.3)
= 3.55 Use 4 cfs

$V = CDA(\frac{I}{12})$

$= (0.30)(2.6)(100,800)(\frac{I}{12})$

= 6552 cu.ft.

Developed Characteristics:

Composite "C" Value = 0.65
I = 5.4
A = 46,240 Sq.Ft. = 1.06 Acres

Q = CIA
= (0.65)(5.4)(1.06)
= 3.72 Use 4 cfs (good)

$V = CDA(\frac{I}{12})$

$= (0.65)(2.6)(46,240)(\frac{I}{12})$

= 6512 cu.ft. (a decrease)

DRAINAGE AREA C:

Undeveloped Flows:

A = 25,000 Sq.Ft. = 0.574 Acres C = 0.30

Q = CIA, where I = 5.4
= (0.30)(5.4)(0.574)
= 0.93 Use 1 cfs

$V = CDA(\frac{I}{12})$

$= (0.30)(2.6)(25,000)(\frac{I}{12})$

= 1625 cu.ft.

Developed Flows:

A = 9,008 Sq.Ft. = 0.207 Acres C = 0.75 I = 5.4

Q = CIA
= (0.75)(5.4)(0.207)
= 0.83 Use 1 cfs (good)

$V = CDA(\frac{I}{12})$

$= (0.75)(2.6)(9,008)(\frac{I}{12})$

= 1470 cu.ft. (a decrease)

AS BUILT INFORMATION
CONTRACTOR — DATE
BENCH MARKS
SURVEY INFORMATION
FIELD NOTES — BY — DATE
NO.
REFERENCES
MAP NO.
EST. NO.
W.O. NO.
REMARKS
REVISIONS
NO. — DATE — BY
DESIGNED BY R. BERMAN — DATE 4-24-77
DRAWN BY S. PADGETT — DATE 4-24-77
CHECKED BY — DATE
STORED BY — DATE
INSPECTORS — DATE
FIELD — DATE
VERIFICATION BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

CHAMBERS CAMPBELL ISAACSON CHAPLIN INC. CCIC

LUTTRELL SUBDIVISION
TRACT C

PLANS PREPARED UNDER THE DIRECTION OF

APPROVED FOR CONSTRUCTION
CITY ENGINEER — DATE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TITLE: DRAINAGE PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E.-Design			Traffic		
A.C.E.-Hydrology			Water		

DRAWING NO.
SHEET 8 OF 8

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