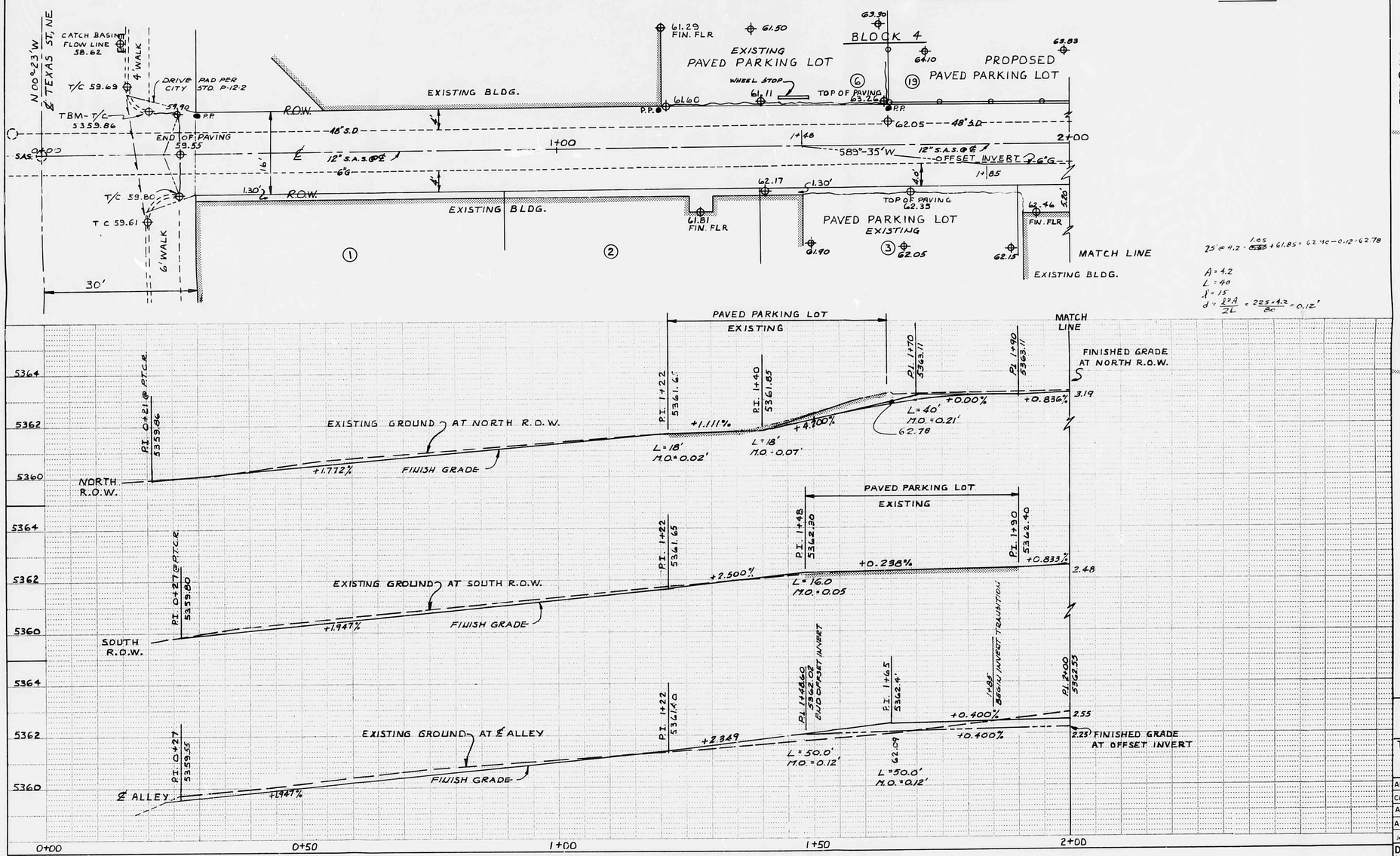
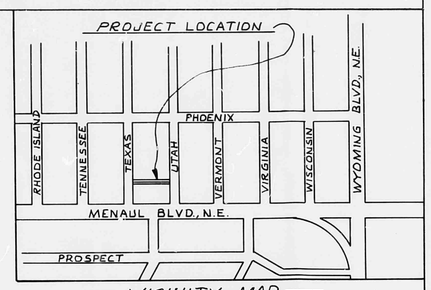
AF 22440B

PROPOSED ALLEY GRADES

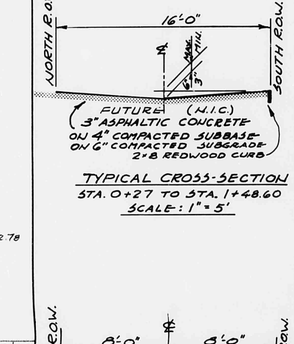
FOR BLOCK 4 - SOMBRA DEL MONTE SUBDIVISION 7-28-48
FROM TEXAS ST. TO UTAH ST., N.E. ZONE MAP H-19
CITY BENCH MARK B-H19 5341.93 ELEVATION AT S.E. CORNER MENAUL & PENNSYLVANIA

1"= 10' HORIZONTAL
1"= 2' VERTICAL





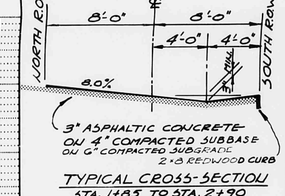
VICINITY MAP
1"= 500'



TYPICAL CROSS-SECTION
STA. 0+27 TO STA. 1+48.60
SCALE: 1"= 5'

$25' @ 4.2 = \frac{1.85}{0.85} + 61.85 = 62.70 - 0.12 = 62.78$

$A = 4.2$
$L = 40$
$\frac{A}{2} = 15$
$d = \frac{\frac{1}{2}AA}{2L} = \frac{225 \times 4.2}{80} = 0.12'$



TYPICAL CROSS-SECTION
STA. 1+85 TO STA. 2+90
SCALE: 1"= 5'

AS BUILT INFORMATION
CONTRACTOR
WORK STARTED ON DATE
FINAL ACCEPTANCE BY DATE
FIELD VERIFICATION BY DATE
DRAWINGS CORRECTED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
B-H19 (5341.93) S.E. CORNER MENAUL & PENNSYLVANIA
TEMP B.M. 5359.86 EAST END N.E.C.R. AT TEXAS ST.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
101	D.L.L.-J.A.M.	12-22-82

ENGINEER'S SEAL
JOHN LEE LOGAN
N. M. 2300
REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	DATE 12-29-82
		DESIGNED BY D.L.L.	DATE 1-20-83
		DRAWN BY A.S.	DATE 1-21-83
		CHECKED BY J.A.M.	

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: ALLEY GRADES FOR ALLEY NORTH OF MENAUL BETWEEN TEXAS AND UTAH, N.E.

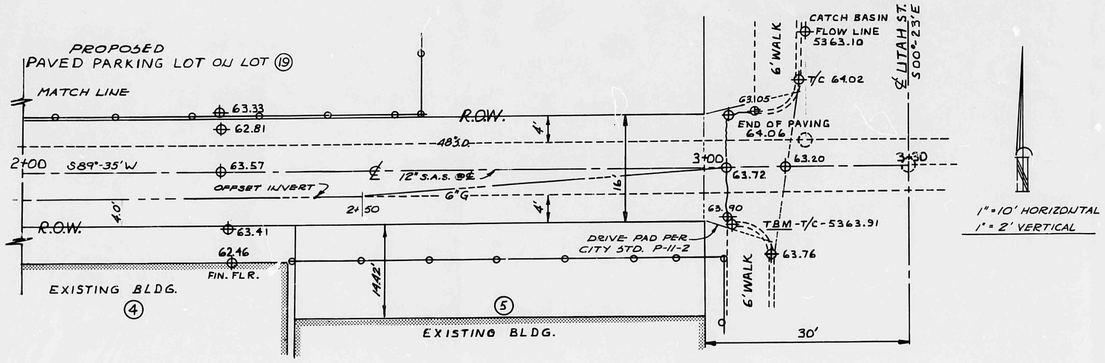
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E.-Design	[illegible]	2/2/83	Traffic		
A.C.E.-Hydrology	[illegible]	2/4/83	Water	[illegible]	3/14/83
MDD/ENG-QA.	[illegible]	2-22-83			

DRAWING NO. 1623 | MAP NO. H-19 | SHEET 1 OF 2

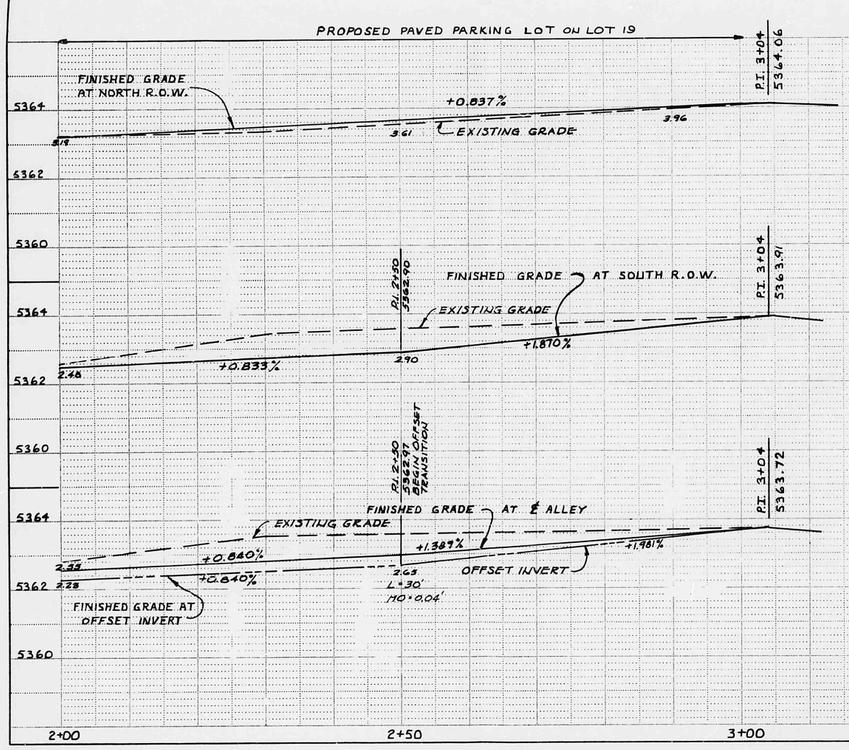
1623

2511 Utah

AF 22440B



1" = 10' HORIZONTAL
1" = 2' VERTICAL



SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
101	DLL-JAM	12-7-82

BENCH MARKS

8:#9 (5341.93) S.E. CORNER MENAUL & PENNSYLVANIA
TE-19 B.M. 5363.91 WEST BND S.W.C.R. AT UTAH ST.

AS BUILT INFORMATION

CONTRACTOR

WORK STARTED BY — DATE
FINAL INSPECTIONS
ACCEPTANCE BY — DATE
VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO

ENGINEER'S SEAL

DUANE LEE LOGAN — REGISTERED PROFESSIONAL ENGINEER — N. M. 2300

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
		DESIGNED BY D.L.L.	DATE 12-27-82
		DRAWN BY A.S.	DATE 1-20-83
		CHECKED BY J.M.	DATE 1-21-83

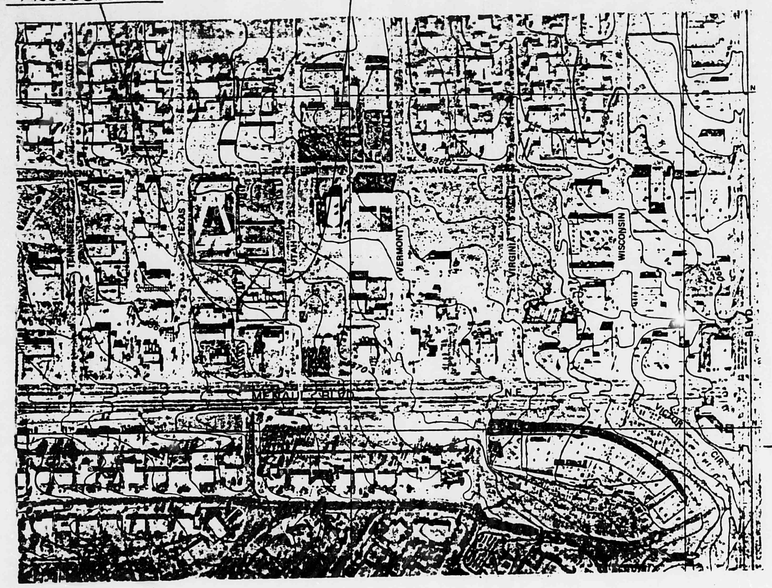
CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: ALLEY GRADES FOR ALLEY NORTH OF MENAUL BETWEEN TEXAS AND UTAH, N.E.

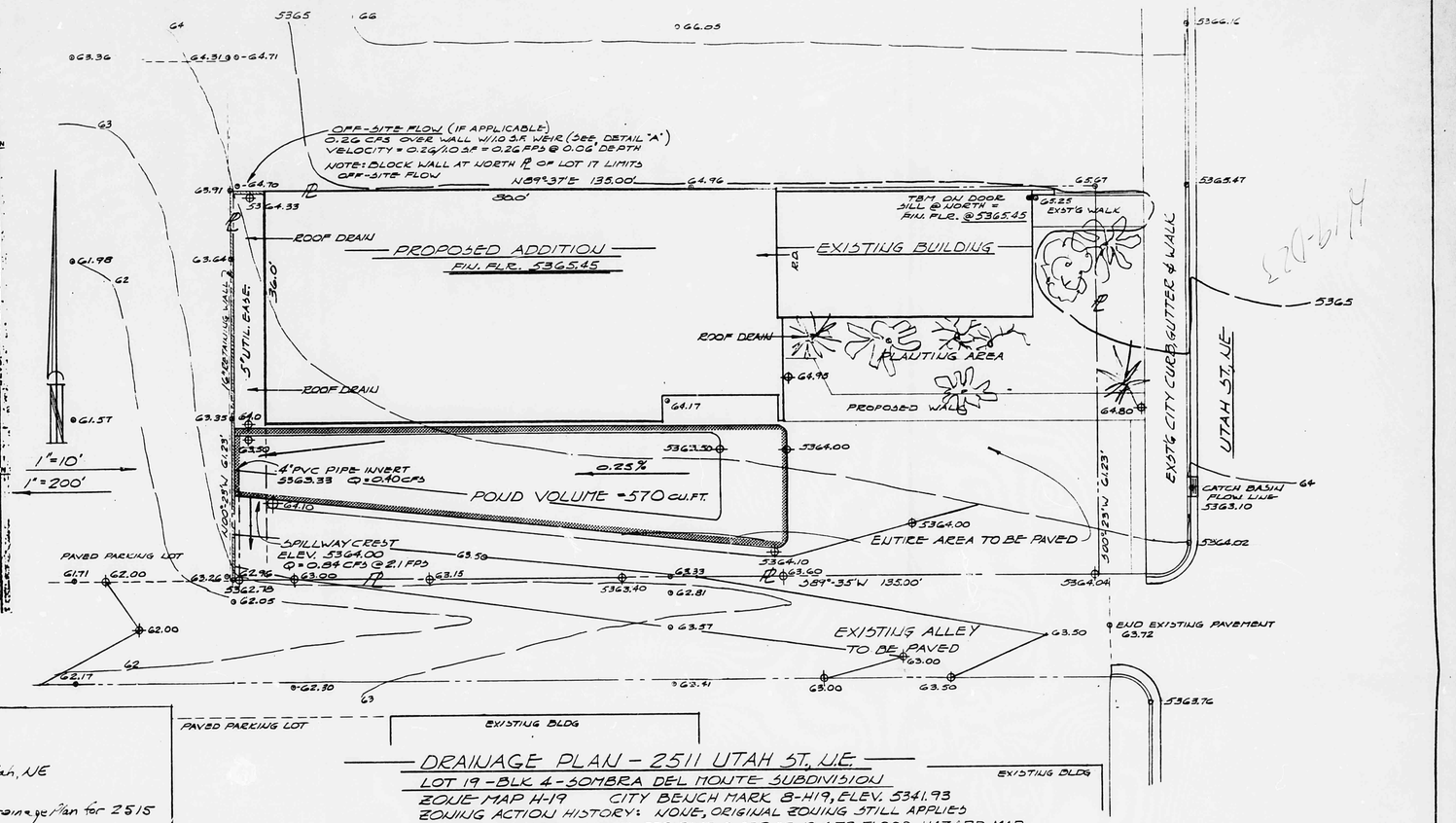
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E.-Design	[illegible]	27 Feb 83	Traffic		3/14/83
A.C.E.-Hydrology			Water		
MDD/ENG-QA	M.R. Olson	2-22-83			

DRAWING NO. 1623 | MAP NO. H-19 | SHEET 2 OF 2

E-19



VICINITY MAP



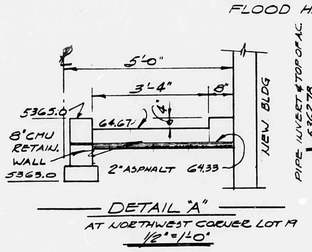
DRAINAGE PLAN – 2511 UTAH ST. N.E.

LOT 19 - BLK 4 - SOMBRA DEL MONTE SUBDIVISION

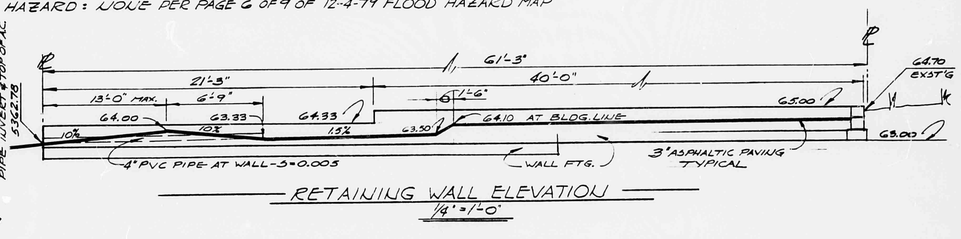
ZONE MAP H-19 CITY BENCH MARK B-H19, ELEV. 5341.93

ZONING ACTION HISTORY: NONE, ORIGINAL ZONING STILL APPLIES

FLOOD HAZARD: NONE PER PAGE 6 OF 9 OF 12-4-79 FLOOD HAZARD MAP



DETAIL "A"
AT NORTHWEST CORNER LOT 19
1/2"=1'-0"



RETAINING WALL ELEVATION
1/4"=1'-0"

LEGEND

PROPERTY LINE
EASEMENT LINE
EXISTING CONTOUR
PROPOSED CONTOUR
EXISTING PAVEMENT EDGE
DETENTION AREA
FLOW DIRECTION
EXISTING SPOT ELEVATIONS ⊙63.12
PROPOSED SPOT ELEVATIONS ⊕63.12

GENERAL NOTES

The existing D.A.V. building was constructed circa 1965.

The alley will be paved contiguous to Lot 19 by the Owner, per City approved grades. The remainder of the alley will be brought to grade, minus future paving.

The existing storm sewer in the alley is considered inadequate to receive additional flow, assuming equal concentration times. Actual concentration time for this property would allow peak flow to discharge before upstream flow reaches this site, if direct discharge to the storm drain was made.

Downstream conditions in the alley are adequate to contain the increased flow within the 3" deep valley section per City Standard P-5-3.

GEOTECHNICAL RESEARCH & SERVICES, LTD.
601 KINLEY, NE - ALBUQUERQUE, NEW MEXICO 87108
(505) 247-8105

FILE # H1 PROJECT DAV Drainage Plan - 2511 Utah, NE
DATE 1/17/83 DRAWN DLL SHEET 1 of 1

Offsite Drainage: Not Applicable, see Drainage Plan for 2515 Utah, NE, approved 1981.

On-Site Drainage: Area = 61.43' × 135' = 8279 sq. ft. = 0.190 acres
2.4" Total 6-hour, 100 yr storm = I of 2.4" × 2.3 = 5.52", per PDM 22.2 D2

Per PDM 22.2 C2,3,#4: Q = CIA = 0.475 × 5.52 × 0.190 = 1.023 cfs

Total Runoff Volume, 92% impervious = 0.92 × 2.4"/12 × 8279 sq.ft. = 1526 c.f.

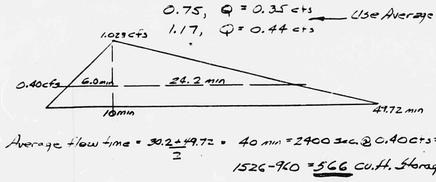
Per PDM 22.2 EL: $t_c = t_p$ = 10 min (actual = 36 seconds per Kirpich)

Total time for 1526 c.f. runoff with 1.023 cfs max. = 49.72 minutes
(1526/1.023) × 2/60 sec = 49.72 min.

Pond to be drained by 4"ø PVC pipe, 20' long at S = 0.0005, n = 0.009
Head-Discharge relation, with Entrance coefficient = 0.5 (projecting)

$$H = \left[\frac{2.520(1+Ce)}{D^2} + \frac{466.18\,n^2 L}{D^{16/3}}\right]\left(\frac{Q}{100}\right)^2 = \left[\frac{2.52+.5}{0.0112} + \frac{0.7552}{0.0027}\right]\frac{Q^2}{100} = 5.98\,Q^2$$

$\therefore Q = \sqrt{H/5.98}$ @ H = 0.08', Q = 0.12 cfs
0.42, Q = 0.27 cfs
0.75, Q = 0.35 cfs
1.17, Q = 0.44 cfs — Use Average 0.40 cfs



Average flow time = (30.2 + 49.72)/2 = 40 min = 2400 sec @ 0.40 cfs = 960 c.f.

1526 - 960 = 566 cu.ft. Storage req'd.

Pond Volume = 15.5 × 37' = 1350 s.f. @ Elev. 64.0 & 10.5' × 77' = 810 s.f. @ Elev. 63.92
= 2160/2 = 1080 s.f. avg × 0.5' = 540 c.f. + 810'/2 × 0.08' = 32 c.f. to 63.33 ∴ Total Volume = 540 + 32 = say 572 cu.ft. — OK

DUANE L. LOGAN NEW MEXICO 2300 REGISTERED PROFESSIONAL LAND SURVEYOR

DUANE LEE LOGAN N. M. 2300 REGISTERED PROFESSIONAL ENGINEER

Duane Logan 2-22-83

GEOTECHNICAL RESEARCH & SERVICES, LTD.
601 KINLEY, NE - ALBUQUERQUE, NEW MEXICO 87108

DRAINAGE PLAN	File # H83-1
For: DISABLED AMERICAN VETS	Date 1-20-83
At: 2511 UTAH ST. NE.	Drawn DLL
ALBUQUERQUE, NEW MEXICO	Sheet 1 of 1