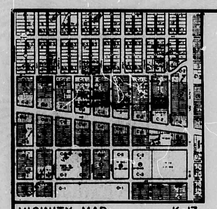
Hydrology File No. K-17/D054 1 of 1



VICINITY MAP K-17

SCALE: 1" = 500'

NOTE: THIS DRAWING TO BE USED FOR GRADING & DRAINAGE ONLY. FOR THE CONSTRUCTION OF SITE IMPROVEMENTS, SEE SITE PLAN.

LEGAL DESCRIPTION

LOTS NUMBERED 17, 18, 19, 20, 36, 37, 38 & 40 IN BL 12K NUMBERED 38 OF THE VALLEY VIEW ADDITION

T.B.M.

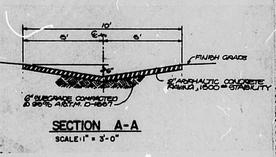
TOP OF CURB, LOCATED AT S.W. CORNER AS SHOWN HEREON. ELEVATION: 5282.64 FT. (M.S.L.D.)

PROJECT BENCHMARK

STATION IS A STAMPED ACS DISK SET IN CONCRETE BLOCK ON THE MEDIAN OF CENTRAL AVE STATION IS STAMPED "6-K18 ACS", LOCATED 26.7 ft. SOUTH FROM CENTERLINE OF WESTBOUND LANES OF CENTRAL AVE. AND 293.5 ft. EAST FROM THE CENTERLINE OF SAN MATEO BLVD. ELEVATION: 5259.779 (M.S.L.D.) (SURVEY PREPARED BY SOUTHWEST SURVEYING + PROVIDED BY OWNER)

LEGEND

+	EXIST. SPOT ELEVATION
5251	PROPOSED SPOT ELEVATION
51	EXIST. CONTOUR
	PROPOSED CONTOUR
	EXIST. CONCRETE WALL
T.C.	TOP OF CURB
F.L.	FLOW LINE
	PROPOSED CONCRETE
	PROPOSED ASPHALT
T.W.	TOP OF WALL



SECTION A-A

SCALE: 1" = 3'-0"

DRAINAGE PLAN

The following items concerning the Truman Properties Phase I Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located between Manzano Street N.E. and Truman Street N.E. approximately one-half block north of East Central Avenue. At present, the site is fully paved with asphalt paving and an old foundation slab from a previous development. Under the proposed scheme of development, the existing pavement will be removed and an office building with its associated parking will be constructed on the site. This site is to be developed as a phase development which will consist of the eastern portion of the site in the present development and a phase II or future construction, if and when it is feasible to develop that portion of the site. It is fully understood that a separate submittal will be required prior to the release of any building permits for the Phase II portion of the site. This plan is specifically intended to address the Phase I development only.

As shown by Plate 35 of the National Flood Insurance Program Flood Boundary and Floodway Maps for the City of Albuquerque, the site is located approximately 1 block south of the designated Zone A floodplain of the Tijeras Arroyo. The nearest improved flood hazard area within Central Avenue N.E. which lies to the north of the site. The development of the site will improve the runoff producing characteristics of the site by creating less impervious area. It is also believed that the flooding in the nearby Copper Avenue N.E. and Central Avenue N.E. is no longer anticipated based upon the revised Albuquerque Master Drainage Study which has been reviewed by the City, but not yet adopted. For these reasons, the free discharge of runoff from this site is appropriate.

The Grading Plan shown 1) existing grades indicated by spot elevations and contours at 1'0" intervals as determined from a survey prepared by Southwest Surveying and provided by the owner; 2) proposed grades indicated by spot elevations and contours at 1'0" intervals; 3) the limit and character of the existing improvements as determined by the survey provided by the owner; 4) the limit and character of the proposed improvements; and 5) continuity between the existing and proposed grades. As shown by this plan, the proposed improvements consist of the construction of an office building along wit i adjacent paving and landscaping. At present, the site drains from east to west onto Manzano Street N.E. Manzano S treet N.E. drains from south to north toward Copper Avenue N.E., as previously mentioned. In addition to the improve... ovements listed above, the project will also include the construction of a temporary asphalt runoff to convey U. developed runoff in Phase I across the undeveloped Phase II site to cause to discharge it to Manzano Street N.E. The runoff will be discharged via a 14" sidewalk culvert as shown on the plans.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Rational Method has been used to quantify the peak rate of discharge and the SCS Method has been used to quantify the volume of runoff. The Manzano Spot Peak model is inconsistent with the City of Albuquerque Development Process Manual, Volume II, and the Mayor's Emergency Rule adopted January 14, 1986. As shown by these calculations, the proposed improvements will result in a net decrease in runoff generated by this site. The calculations further demonstrate that the temporary asphalt runoff has sufficient capacity to convey the 100-year developed runoff from the site and that the 14" wide sidewalk culvert will have ample capacity to pass the 100-year developed runoff from the site also.

The offsite flows which affect this site are minimal. The runoff carried by the adjacent streets, Truman Street N.E. and Manzano Street N.E., are maintained within the improved streets. The property on the south has an existing retaining wall along its northerly limits and hence does not contribute any runoff. The site on the north discharges a portion of its roof runoff to the south. Because this is only roof runoff, it is difficult to quantify the discharge of runoff from the roof. At present, this runoff may enter the project site, but it is believed that the construction of this building will not create an adverse situation with these flows because the roof runoff will be allowed to flow within that 5' strip between the buildings. From that point, the runoff will continue to flow in a westerly direction into Manzano Street N.E. in accordance with the present pattern.

CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey,
Plate 31: TrB - Tijeras gravelly fine sandy loam
Hydrologic Soil Group: B
Existing CN = 86 (DPM Plate 22.2 C-3)
Developed Pervious CN = 79 (DPM Plate 22.2 C-3)
Pasture or Range land: (fair condition)

Time of Concentration/Time to Peak

$T_c = 0.0078\ LS^{-77}/S^{0.385}$ (Kirpich Equation)

$T_p = T_c + 10$ min.

Point Rainfall

$P_6 = 2.3$ in. (DPM Plate 22.2 D-1)

Rational Method

Discharge: $Q = CIA$

where C varies
$i = P_6\ (6.84)\ T_c^{-0.71} = 4.84$ in/hr
$P_6 = 2.3$ in (DPM Plate 22.2D-1)
$T_c = 10$ min (minimum)
A = area, acres

SCS Method

Volume: $V = 3630(RRO)\ A$

Where RRO = Direct runoff in inches
A = area, acres

Existing Condition

$A_{total} = 31,250$ sf = 0.72 Ac
Paved area = 31,250 sf (1.0)
C = 0.95
(weighted average per Emergency Rule, 1/14/86)
$Q_{100} = CIA = 0.95(4.84)(0.72) = 3.3$ cfs
Composite CN = 95 (DPM Plate 22.2 C-3)
RRO = 1.5 in (DPM Plate 22.2 C-4)
$V_{100} = 3630\ (RRO)\ A = 4,700$ cf

Developed Condition

$A_{total} = 31,250$ sf = 0.72 Ac
Roof area = 9,240 sf (0.17)
Paved area = 8,540 sf (0.17)
Impervious area = 17,780 sf (0.41)
Impervious area = 13,470 sf (0.29)
C = 0.62
(weighted average per Emergency Rule, 1/14/86)
$Q_{100} = CIA = 0.62(4.84)(0.72) = 3.3$ cfs
% Impervious = 44 %
Composite CN = 86 (DPM Plate 22.2 C-3)
RRO = 1.5 in (DPM Plate 22.2 C-4)
$V_{100} = 3630\ (RRO)\ A = 2,350$ cf

Comparison

$\Delta Q_{100} = 3.3 - 3.3 = 1.1$ cfs (decrease)
$\Delta V_{100} = 4700 - 2350 = 2350$ cf (decrease)

Manning Equation:

$Q = (1.49/n)AR^{2/3}S^{1/2}$

Where Q = 3.3 cfs
n = 0.017
A, R = f (geometry)
S = 0.0079

Office Equation:

$Q = CA\sqrt{2gh} = 5$ cfs > Q_{100}

Where C = 0.6
A = 210.67
g = 32.2 ft/sec²
h = 3/12(0.67)

By programmable calculator,
Capacity = 7.8 cfs
$d_{100} = 0(3')$ $V_{100} = 2.2$ fps

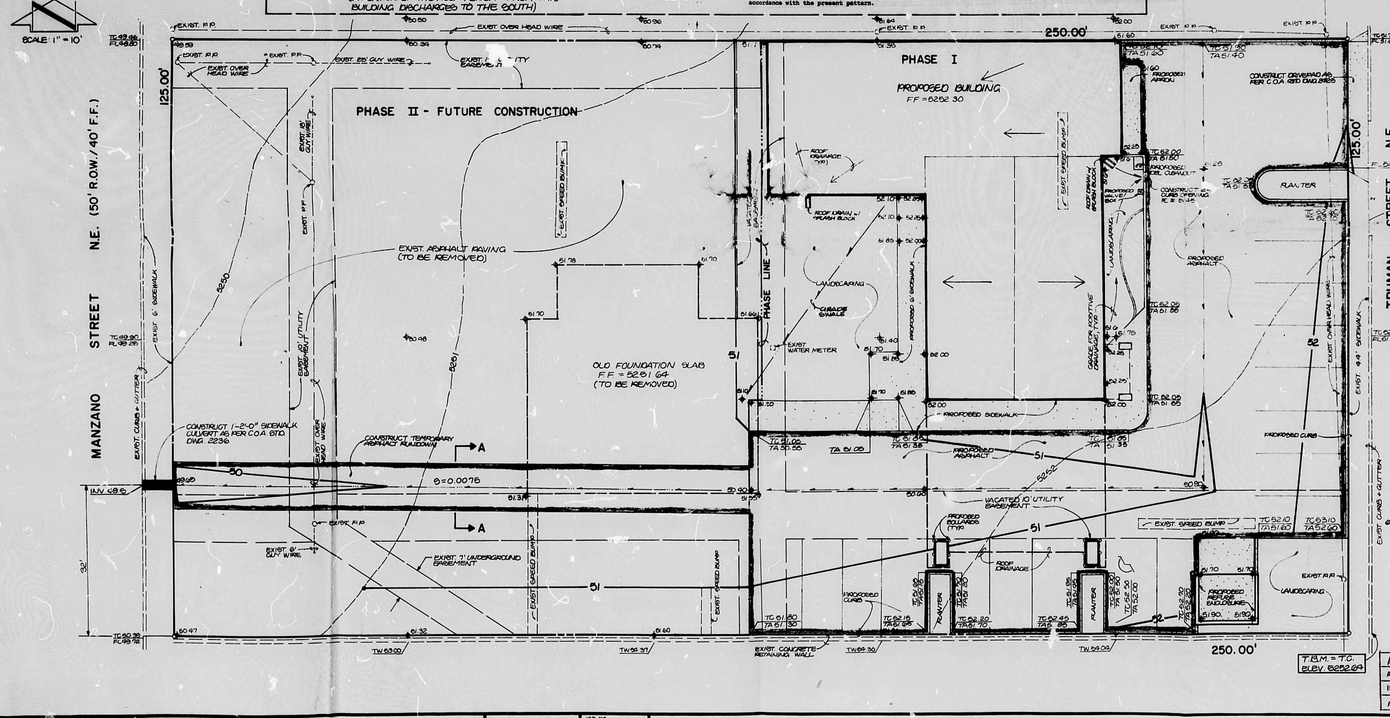
RECEIVED JUL 23 1987 HYDROLOGY SECTION

GRADING AND DRAINAGE PLAN PREPARED UNDER THE SUPERVISION OF

JULIUS C. MORTIMER NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 8547

7-17-87

TOPOGRAPHIC SURVEY PREPARED BY OTHERS AND PROVIDED BY OWNER. ITS ADEQUACY IS HEREBY DISCLAIMED AS IT RELATES TO THIS DRAWING.



APPROVALS	NAME	DATE
A.C.E./DESIGN		7-20-87
INSPECTOR		3-10-88
A.C.E./FIELD		3-14-88

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICES-1234, FOR LOCATION OF UNDERGROUND UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE ENGINEER HAS RELIED UPON INFORMATION PROVIDED BY THE OWNER OR SAID UTILITY AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MADE NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE PROJECT PRIOR TO THE TIME ANY EXCAVATION WORK THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
6. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
7. BACKFILL COMPACTION SHALL BE ACCORDING TO NATURAL STREET USE.
8. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

EROSION CONTROL MEASURES

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS MAY BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY AND ENSURE THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.

NO.	DATE	BY	REVISIONS

BI DALLAS, N.E. • ALBUQUERQUE • NEW MEXICO • 87112
ENGINEERS

DESIGNED BY J.C.M.
DRAWN BY R.A.R.
APPROVED J.C.M.

JOB NO. 870691
DATE 6/87

GRADING & DRAINAGE PLAN
TRUMAN PROPERTIES
PHASE I

K17/D54

FILE NO C-2
SHEET 1 OF 1

REF. 21 DATE 2-24-88 BY LSP
CITY OF ALBUQUERQUE
This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (AIIM15-1977).
CITY CLERK RECORDER
OFFICIAL SEAL NORBERTA SANCHEZ NOTARY PUBLIC STATE OF NEW MEXICO
My Commission Expires: May 8, 1988
THIS PLAN SHOT TWICE ONCE ON LIGHT AND ONCE ON DARK.
CITY OF ALBUQUERQUE THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.
PLANS/PLATS ON FILE
FILE DESC: K-17/D054
PLANS/PLATS 1

VICINITY MAP K-17

SCALE 1" = 500'

NOTE: THIS DRAWING TO BE USED FOR GRADING & DRAINAGE ONLY. FOR THE CONSTRUCTION OF SITE IMPROVEMENTS, SEE SITE PLAN

LEGAL DESCRIPTION

LOTS NUMBERED 17, 18, 19, 20, 36, 37, 38, 39 + 40 IN BLOCK NUMBERED 38 OF THE VALLEY VIEW ADDITION

T.B.M.

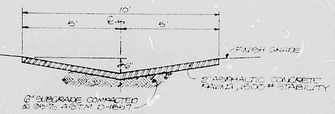
TOP OF C. W.B. LOCATED AT S.W. CORNER AS SHOWN HEREON. ELEVATION 5262.64 FT (M.S.L.D.)

PROJECT BENCHMARK

STATION 16-A-G17 MMCD ACS DISK SET IN CONCRETE BLOCK ON THE MEDIAN OF CENTRAL AVE. STATION 16 STAMPED "G-K18 ACS" LOCATED 25.7 FT. SOUTH FROM CENTERLINE OF WESTBOUND LANES OF CENTRAL AVE. AND 1936.6 FT. EAST FROM THE CENTERLINE OF SAN MATEO BLVD. ELEVATION 5259.779 (M.S.L.D.) (SURVEY PREPARED BY SOUTHWEST SURVEYING + PROVIDED BY OWNER)

LEGEND

+ 5262	EXIST SPOT ELEVATION
+ 5263	PROPOSED SPOT ELEVATION
51	EXIST CONTOUR
	PROPOSED CONTOUR
	EXIST CONCRETE WALL
TC	TOP OF CURB
FL	FLOW LINE
	PROPOSED CONCRETE
	PROPOSED ASPHALT
TW	TOP OF WALL



SECTION A-A

SCALE 1" = 3'-0"

DRAINAGE PLAN

The following items concerning the Truman Properties Phase I Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located between Manzano Street N.E. and Truman Street N.E. approximately one-half Block north of East Central Avenue. At present, the site is fully paved with asphalt paving and an old foundation left from a previous development. Under the proposed scheme of development, the existing pavement will be removed and an office building will be constructed along with asphalt paving and landscaping. This project is considered as a Phase I development which will occupy the easterly portion of the site. The remainder of the site has been designated as Phase II for future construction. If and when it is feasible to develop that portion of the site, it is fully understood that a separate submittal will be required prior to the release of any building permits for the Phase II portion of the site. This plan is specifically intended to address the Phase I development only.

As shown by Plate 29 of the National Flood Insurance Program Flood Boundary and Floodway Maps for the City of Albuquerque, New Mexico, this site does not lie within a designated Flood Hazard Zone. This site does contribute runoff to a designated flood hazard area within Copper Avenue N.E., which lies to the north of the site. The development of the site will improve the runoff producing characteristics of the site by creating less impervious area. It is also believed that the flooding in the nearby Copper Avenue N.E. and Central Avenue N.E. is no longer anticipated based upon the revised Albuquerque Master Drainage Study which has been reviewed by the city, but not yet adopted. For these reasons, the free discharge of runoff from this site is appropriate.

The Grading Plan shows 1) existing grades indicated by spot elevations and contours at 1'0" intervals as determined from a survey prepared by Southwest Surveying and provided by the owner, 2) proposed grades indicated by spot elevations and contours at 1'0" intervals, 3) the limit and character of the existing improvements as determined by the survey provided by the owner, 4) the limit and character of the proposed improvements, and 5) continuity between the existing and proposed grades. As shown by this plan, the proposed improvements consist of the construction of an office building along with adjacent paving and landscaping. At present, the site drains from east to west onto Manzano Street N.E. Manzano Street N.E. drains from south to north toward Copper Avenue N.E., as previously mentioned. In addition to the permanent improvements listed above, the project will also include the construction of a temporary asphalt rundown to convey the developed runoff in Phase I across the undeveloped Phase II land in order to discharge it to Manzano Street N.E. The runoff will be discharged via a 2'0" sidewalk culvert as shown on the plans.

The calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Rational Method has been used to quantify the peak rate of discharge and the SCS Method has been used to quantify the volume of runoff. Both Methods have been used in accordance with the City of Albuquerque Development Process Manual, Volume II, and the Mayor's Emergency Rule adopted January 24, 1986. As shown by these calculations, the proposed improvements will result in a net decrease in runoff generated by this site. The calculations further demonstrate that the temporary asphalt rundown has sufficient capacity to convey the 100-year developed runoff from the site and that the 2'0" wide sidewalk culvert will have ample capacity to pass the 100-year developed runoff from the site along.

The offsite flows which affect this site are minimal. The runoff carried by the adjacent streets, Truman Street N.E. and Manzano Street N.E., are maintained within the improved streets. The property on the south has an existing retaining wall along its northerly limits and hence does not contribute any runoff. The site on the north discharges a portion of its roof runoff to the south. Because this is only roof runoff, it is difficult to quantify the discharge of runoff from the site. At present, this runoff may enter the project site, but also may be contained within the 6" wide gap between the existing building to the north and the property line. The construction of this building will not create an adverse situation with those flows because the roof runoff will be allowed to flow within that gap between the buildings. From that point, the runoff will continue to flow in a westerly direction into Manzano Street N.E. in accordance with the present pattern.

CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey, Plate 11: Tab - Tijeras gravelly fine sandy loam
Hydrologic Soil Group: B
Existing CN = 95 (DPM Plate 22.2 C-2)
Developed Pervious CN = 70 (DPM Plate 22.2 C-2)
Pasture or Range land: fair condition)

Time of Concentration/Time to Peak

$T_C = 0.0078\,(0.77/S)^{0.385}$ (Kirpich Equation)

$T_p = T_C + 10$ min.

Point Rainfall

$P_6 = 2.3$ in. (DPM Plate 22.2 D-1)

Rational Method

Discharge: Q = CIA

Where C varies
$I = P_6\,(6.84)\,T_C^{-0.51} - 4.80$ in/hr
$P_6 = 2.3$ in (DPM Plate 22.2D-1)
T_C = 10 min (minimum)
A = area, acres

SCS Method

Volume: V = 3630(DRO) A

Where DRO = Direct runoff in inches
A = area, acres

Existing Condition

Area = 31,250 sf = 0.72 Ac
Paved area = 31,250 sf (1.0)
C = 0.95
Weighted average per Emergency Rule, 1/24/86
Q100 = CIA = 0.95(4.86)(0.72) = 3.3 cfs
% impervious = 100 %
Composite CN = 95 (DPM Plate 22.2 C-2)
DRO = 1.8 in (DPM Plate 22.2 C-4)
V100 = 3630 (DRO) A = 4,703 cf

Developed Condition

Area = 31,250 sf = 0.72 Ac
Roof Area = 5,340 sf (0.12)
Paved area = 8,540 sf (0.27)
Landscaped area = 2,070 sf (0.07)
Unpaved Area = 15,280 sf (0.49)
C = 0.62
(Weighted average per Emergency Rule, 1/24/86)
Q100 = CIA = 0.62(4.86)(0.72) = 2.2 cfs
% impervious = 44 %
Composite CN = 81 (DPM Plate 22.2 C-2)
DRO = 0.9 in (DPM Plate 22.2 C-4)
V100 = 3630 (DRO) A = 2,350 cf

Comparison

ΔQ_{100} = 3.3 - 2.2 = 1.1 cfs (Decrease)
ΔV_{100} = 4700 - 2350 = 2,350 cf (Decrease)

Manning Equation:

$Q = (1.49/n)AR^{2/3}S^{1/2}$

Where Q = 2.2 cfs
n = 0.017
A, R = f (geometry)
S = 0.0075

Orifice Equation

$Q = CA\sqrt{2gh} = 5\ cfs - Q_{100}$

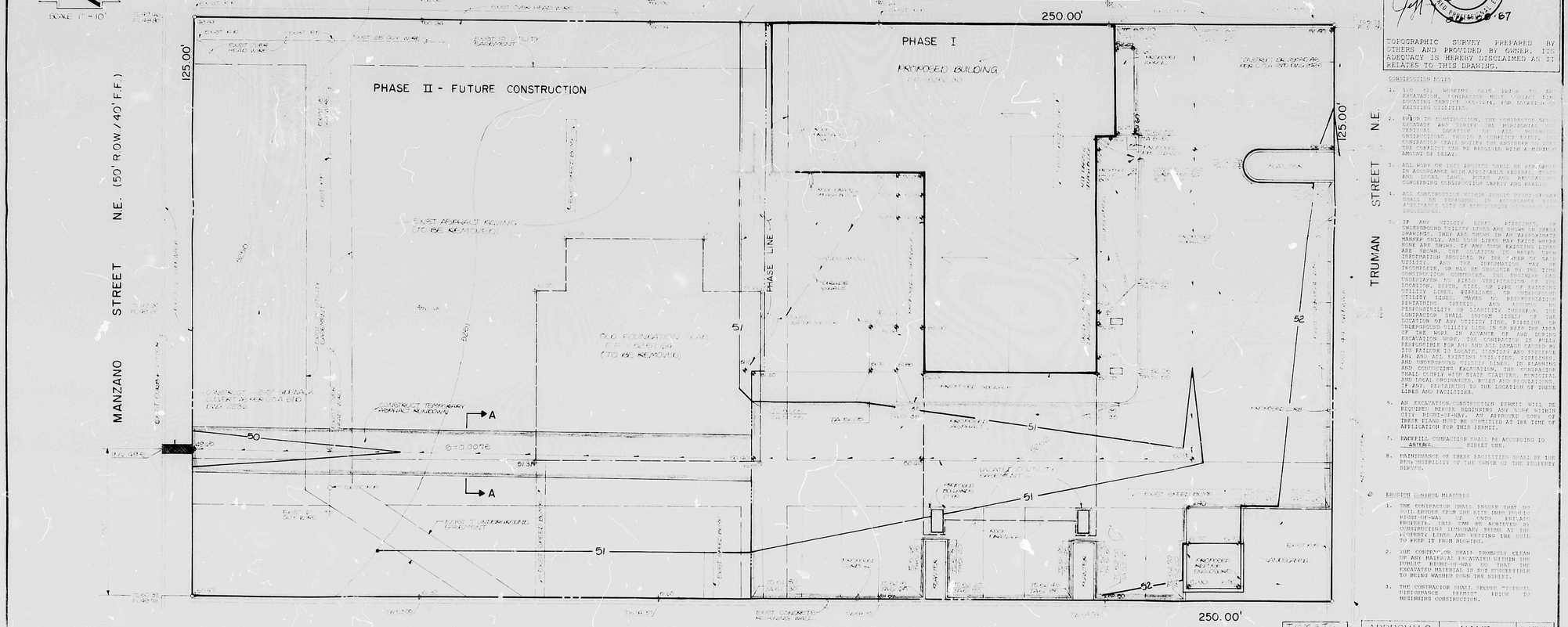
Where C = 0.6
A = 2(0.67)
g = 32.2 ft/sec²
h = 1.2(0.67)

By programmable calculator,
Q100 = 2.2 cfs
$d_{100} = 0.017 \cdot V_{100} = 2.2$ cfs

GRADING AND DRAINAGE PLAN PREPARED UNDER THE SUPERVISION OF

JEFFREY C. MORTIMER
NEW MEXICO
8547
REGISTERED PROFESSIONAL ENGINEER
6-8-87

TOPOGRAPHIC SURVEY PREPARED BY OTHERS AND PROVIDED BY OWNER. ITS ADEQUACY IS HEREBY DISCLAIMED AS IT RELATES TO THIS DRAWING.



CONSTRUCTION NOTES

1. NOTE: (1) WORKING DAYS PRIOR TO AN EXCAVATION, CONTRACTOR MUST CONTACT ONE-CALL LOCATING SERVICE 265-1326, FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL CONFLICTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY. THE CONFLICT MAY BE RESOLVED WITH A MINOR AMOUNT OF LEGAL.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS.
5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND OTHER LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY. ALL OF THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER DISCLAIMS ALL FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF AS TO THE LOCATION OF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITY LINES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
6. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
7. BACKFILL COMPACTION SHALL BE ACCORDING TO ASTM D-1557 STANDARDS.
8. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

EROSION CONTROL MEASURES

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY, OR UPON PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND TRAPPING THE SOIL TO KEEP IT FROM DRAINING.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. THE CONTRACTOR SHALL SECURE "TEMPORARY DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.

APPROVALS	NAME	DATE
A.C.E./DESIGN		6/30/87
INSPECTOR		3-10-88
A.C.E./FIELD		2-1-88

THIS PLAN SHOT TWICE ONCE ON LIGHT AND ONCE ON DARK.

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

REF. 21 DATE 2/24/92 OD 12

CITY OF ALBUQUERQUE
This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business.
The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (NSI15-1977).
Karen Aiken
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: MAY 8 1990
Norberta Sanchez

BOHANNAN-HUSTON
8 DALLAS N.E. - ALBUQUERQUE - NEW MEXICO - 87108
ENGINEERS

NO.	DATE	BY	REVISIONS

DESIGNED BY J.G.M.
DRAWN BY R.A.R.
APPROVED J.G.M.
JOB NO. 870691
DATE 6/87

GRADING & DRAINAGE PLAN
TRUMAN PROPERTIES
PHASE I

K17/D54

FILE NO. C-2
SHEET 1 OF 1

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

C D