LEGEND

◆	PROPOSED SPOT ELEVATION
◆	EXISTING SPOT ELEVATION
—56—	PROPOSED CONTOUR
—5626—	EXISTING CONTOUR
	SWALE
	PROPERTY LINE
	CONCRETE
	PROPOSED ASPHALT
T.C. 56.50	TOP OF CURB
T.A. 56.00	TOP OF ASPHALT
	BASIN BOUNDARY

SCALE: 1" = 20'

PROJECT BENCHMARK –

A STANDARD NMSHC BRASS TABLET, STAMPED "STA. I-25-25", SET IN TOP OF A CONCRETE POST FLUSH WITH THE GROUND. TO REACH THE STATION FROM THE INTERSECTION OF LOMAS BLVD. N.E. AND UNIVERSITY BLVD. N.E. GO WEST ON LOMAS BLVD. N.E. 0.55 MI. TO THE CROSSING OF I-25, THEN BACK NORTH UP THE OVERPASS EMBANKMENT APPROXIMATELY 100 ft. TO THE STATION AT THE N.E. CORNER OF THE BRIDGE. ELEVATION = 5068.41 ft. (M.S.L.D.)

TEMPORARY BENCHMARK –

TOP OF CONCRETE AS SHOWN BELOW. ELEVATION = 5096.74 ft. (M.S.L.D.)

LEGAL DESCRIPTION –

TRACT C-3 LEASE PARCEL WITHIN UNPLATTED TRACT OF LAND DENOTED AS "SHOPPING CENTER."

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 765-1234, FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT 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.

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 CAN 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 SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.

DRAINAGE PLAN

The following items concerning the American Legion Post 13 Addition Grading and Drainage Plan are contained hereon:

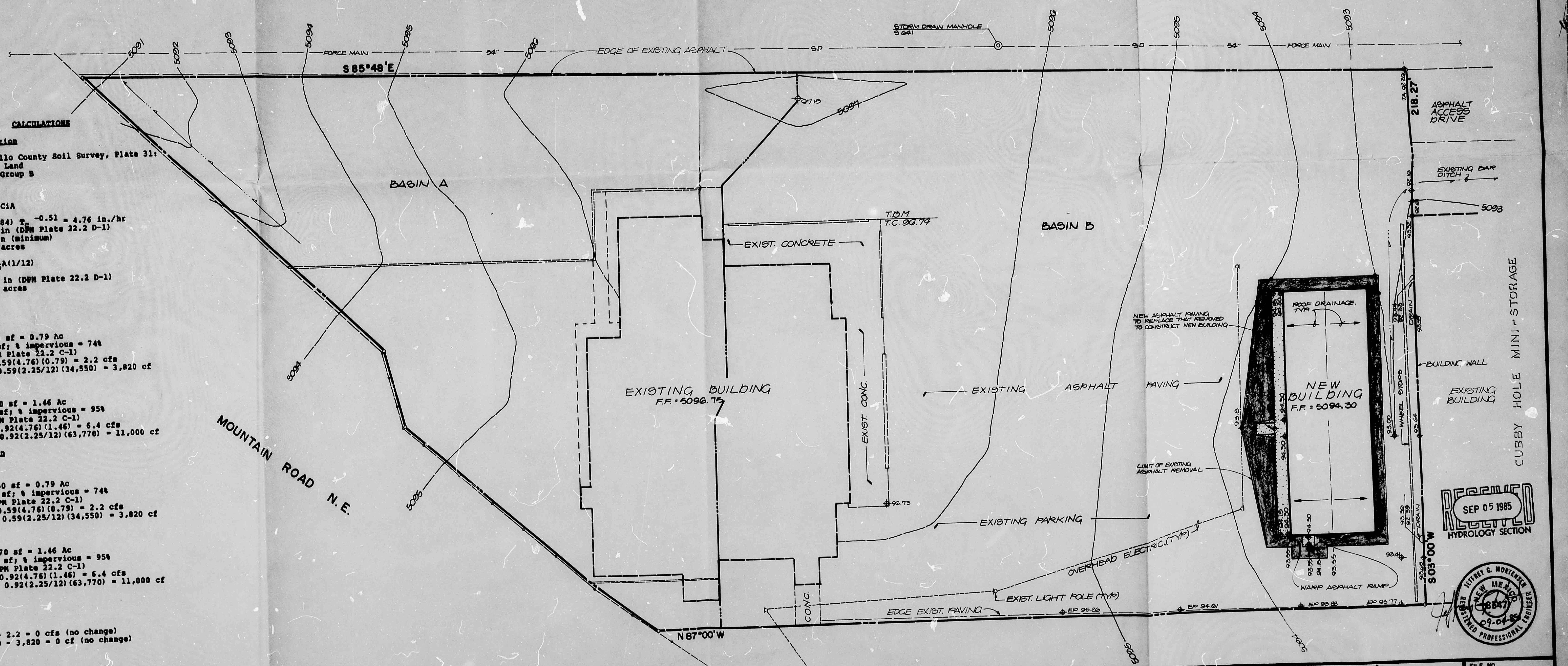
1. Vicinity Map 2. Grading Plan 3. Calculations

As shown by the Vicinity Map, the proposed improvements are located along the north side of Mountain Road N.E. at its 'Y' intersection with Lomas Boulevard N.E. The site is a lease parcel situate within an unplatted tract of land. Immediately to the east of the site is the Cubby Hole Mini-Storage facility. At present, the site is developed with an existing main building and adjacent paving and landscaping. The area to receive the new addition is currently paved with asphalt surface. The proposed construction will involve the removal of a portion of the asphalt paving and the construction of a building within that area, and the replacement of a small portion of paving to meet the building.

As shown by Panel 29 of 50 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. In addition, this site does not appear to contribute to an existing flood hazard area. Review of Plate J-15 of the City of Albuquerque Storm Drainage Facility Maps indicates that there is an existing 54-inch force main storm drain along the north edge of the project site. Field investigation has revealed that this site drains from west to east to the northeast corner of the site where the runoff from the site discharges to an existing bar ditch along a private road known as Legion Road. Runoff flows along the bar ditch and is intercepted by an existing 24-inch culvert beneath the entrance to the Cubby Hole Mini-Storage facility. Review of the drainage report for the Cubby Hole Mini-Storage facility indicates that this culvert discharges into an existing underground storm drain system which drains to the north and possibly connects with the force main system discussed above.

The Grading Plan shows 1) existing and proposed grades indicated by spot elevations and contours at 1'-0" intervals, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements, and 4) continuity between existing and proposed grades. As shown by this plan, the proposed improvements consist of the construction of a new building addition within the existing asphalt parking lot. At present, the site drains from west to east to the northeast corner of the site where the runoff is discharged to the previously mentioned bar ditch. The proposed improvements will not alter the characteristics of the historic discharge of runoff from this site. This is demonstrated not only by the calculations, but also by the fact that no work is proposed at the discharge point from the site.

The Calculations shown hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Rational Method has been used for this analysis in accordance with the City of Albuquerque Development Process Manual, Volume II. As shown by these calculations, the site has been analized as two separate drainage basins, A and B. The calculations further demonstrate that the proposed improvements will not increase the peak discharge or volume of runoff generated by this site.



CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey, Plate 31:
Cu Cut and Fill Land
Hydrologic Soil Group B

Rational Method

Discharge: $Q = CiA$
where C varies
$i = P_6\ (6.84)\ T_c^{-0.51} = 4.76$ in./hr
$P_6 = 2.25$ in (DPM Plate 22.2 D-1)
$T_c = 10$ min (minimum)
A = area, acres

Volume: $V = CP_6A(1/12)$
where C varies
$P_6 = 2.25$ in (DPM Plate 22.2 D-1)
A = area, acres

Existing Condition

Basin A

$A_{total} = 34{,}550$ sf $= 0.79$ Ac
$A_{imp} = 25{,}530$ sf; % impervious = 74%
'C' = 0.59 (DPM Plate 22.2 C-1)
$Q_{100} = CiA = 0.59(4.76)(0.79) = 2.2$ cfs
$V_{100} = CP_6A = 0.59(2.25/12)(34{,}550) = 3{,}820$ cf

Basin B

$A_{total} = 63{,}770$ sf $= 1.46$ Ac
$A_{imp} = 62{,}720$ sf; % impervious = 95%
'C' = 0.92 (DPM Plate 22.2 C-1)
$Q_{100} = CiA = 0.92(4.76)(1.46) = 6.4$ cfs
$V_{100} = CP_6A = 0.92(2.25/12)(63{,}770) = 11{,}000$ cf

Developed Condition

Basin A

$A_{total} = 34{,}550$ sf $= 0.79$ Ac
$A_{imp} = 25{,}530$ sf; % impervious = 74%
'C' = 0.59 (DPM Plate 22.2 C-1)
$Q_{100} = CiA = 0.59(4.76)(0.79) = 2.2$ cfs
$V_{100} = CP_6A = 0.59(2.25/12)(34{,}550) = 3{,}820$ cf

Basin B

$A_{total} = 63{,}770$ sf $= 1.46$ Ac
$A_{imp} = 62{,}720$ sf; % impervious = 95%
'C' = 0.92 (DPM Plate 22.2 C-1)
$Q_{100} = CiA = 0.92(4.76)(1.46) = 6.4$ cfs
$V_{100} = CP_6A = 0.92(2.25/12)(63{,}770) = 11{,}000$ cf

Comparison

Basin A

$\Delta Q_{100} = 2.2 - 2.2 = 0$ cfs (no change)
$\Delta V_{100} = 3{,}820 - 3{,}820 = 0$ cf (no change)

Basin B

$\Delta Q_{100} = 6.4 - 6.4 = 0$ cfs (no change)
$\Delta V_{100} = 11{,}000 - 11{,}000 = 0$ cf (no change)

JEFFREY G. MORTENSEN, NEW MEXICO, 8547, REGISTERED PROFESSIONAL ENGINEER, 09-04-85

Jeff Mortensen & Associates, Inc.
811 DALLAS N.E. · ALBUQUERQUE · NEW MEXICO · 87110
ENGINEERS

NO.	DATE	BY	REVISIONS

DESIGNED BY:	J G M
DRAWN BY:	J M C
APPROVED:	J G M
JOB NO.	50991
DATE	8/85

GRADING & DRAINAGE PLAN
AMERICAN LEGION POST 13

J15/D26

FILE NO.
SHEET 1 OF 1