

DRAINAGE PLAN

The following items concerning the Valley Federal Savings Bank Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

The proposed improvements, as shown by the Vicinity Map, are located at the northeast corner of the intersection of Eubank Boulevard N.E. and Indian School Road N.E. At present, the site is partially developed. A temporary banking facility and parking lot has been constructed on the east end of the site. The remainder of the construction will be a permanent banking facility with associated parking.

As shown by Plate H-21 of the Albuquerque Master Drainage Study, the site does not lie within a designated Flood Hazard Zone. Further study of this plate reveals that a storm drainage facility is available to the west of the site along Indian School Road N.E. All lots within this area are developed. This site would be considered an infill site.

The Grading Plan shows 1) existing and proposed grades indicated by spot elevations and contours at 1' 0" intervals, 2) continuity between existing and proposed elevations, 3) the limit and character of the existing improvements, and 4) the limit and character of the proposed improvements. As shown by this plan, the proposed improvements consist of the construction of a building with associated parking and landscaping. At present, the site drains from east to west. Mary Ellen Street N.E. along the east property line is developed and paved. It essentially prevents flows from entering the site from the east. Indian School Road N.E. along the south property line is also developed and is approximately parallel with the site in elevation. Eubank Boulevard N.E. to the west is paved and is lower than the project site. The land to the north of the project site is developed as an apartment building and office buildings. The drainage pattern for those sites is already established and the flows are away from the project site. Offsite flows entering the project site will be negligible. The proposed construction will discharge runoff through two curb openings and a sidewalk culvert.

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 for this analysis in accordance with the City of Albuquerque Development Process Manual, Volume II. As shown by these calculations, the proposed improvements will result in an increase in runoff discharge from the site. This pattern of runoff is consistent with the predesign conference recap which accompanies this submittal.

CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey, Plate 32:
Etc Embudo Tijeras Complex
Hydrologic Soil Group B

Rational Method

Discharge: $Q = C_i A$
where C varies
 $i = P_6 (6.84) T_c^{-0.51} = 5.28 \text{ in/hr}$
 $P_6 = 2.5 \text{ in (DPM Plate 22.2D-1)}$
 $T_c = 10 \text{ min (minimum)}$
 $A = \text{area, acres}$
Volume: $V = C_p A (1/12)$
where C varies
 $P_6 = 2.5 \text{ in (DPM Plate 22.2D-1)}$
 $A = \text{area, sf}$

Existing Condition

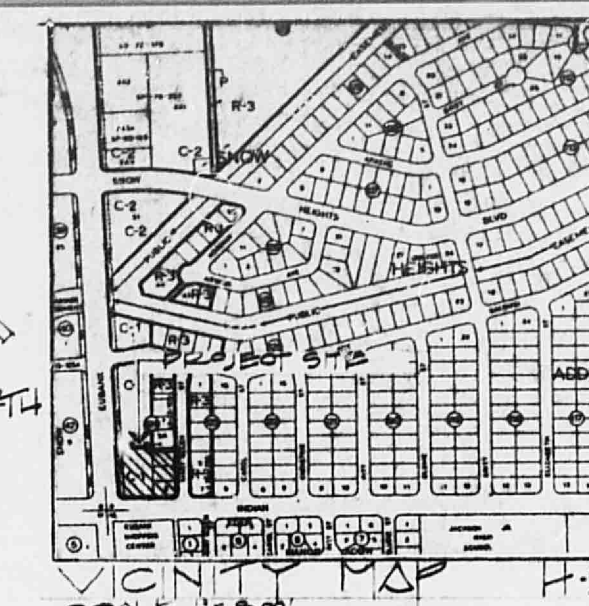
$A_{\text{total}} = 51,000 \text{ sf} = 1.17 \text{ Ac}$
 $A_{\text{imp}} = 17,600 \text{ sf}; \% \text{ impervious} = 35\%$
 $'C' = 0.50 \text{ (DPM Plate 22.2C-1)}$
 $Q_{100} = C_i A = 0.50 (5.28) 1.17 = 3.1 \text{ cfs}$
 $V_{100} = C_p A = 0.50 (2.5/12) 51,000 = 5313 \text{ cf}$

Developed Condition

$A_{\text{total}} = 51,000 \text{ sf} = 1.17 \text{ Ac}$
 $A_{\text{imp}} = 42,800 \text{ sf}; \% \text{ impervious} = 84\%$
 $'C' = 0.80 \text{ (DPM Plate 22.2C-1)}$
 $Q_{100} = C_i A = 0.80 (5.28) 1.17 = 4.9 \text{ cfs}$
 $V_{100} = C_p A = 0.80 (2.5/12) 51,000 = 8500 \text{ cf}$

Comparison

$Q_{100} = 4.9 - 3.1 = 1.8 \text{ cfs (increase)}$
 $V_{100} = 8500 - 5313 = 3187 \text{ cf (increase)}$



LEGEND

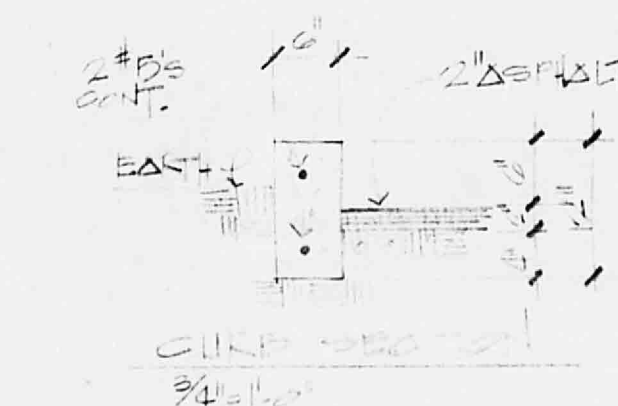
- EXIST. CONTOUR
- PROPOSED CONTOUR
- EXIST. SPOT ELEV.
- PROPOSED SPOT ELEV.
- NEW BLDG. UNDER ROOF
- NEW ASPHALT PAVING

LEGAL DESCRIPTION

CORNER 1 BLOCK 24 S.W. HEIGHTS SECTION.

PROJECT BENCHMARK

CITY OF ALB. BEARS CAP 10/21
LOCATED IN MIDDLE OF
INDIAN SCHOOL RD. @ EUBANK BLVD. N.E.
ELEV. 6540.20 FT. (MSL)



GRADING AND DRAINAGE PLAN

NORTH
SCALE 1"=20'

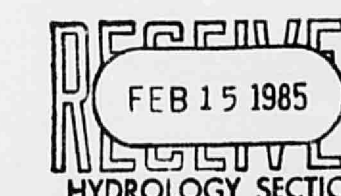
CONSTRUCTION NOTES:

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.
5. PROVIDE PARKING LOT STRIPING WHERE SHOWN ON SITE PLAN AND OR AS NOTED. ALL PARKING SHALL BE 9' WIDE UNLESS OTHERWISE INDICATED.

6. PROVIDE HANDICAPPED PARKING SYMBOLS AND SIGNS AS PER ANSI REQUIREMENTS AT PROPER LOCATIONS.
7. SMALL CAR PARKING AREA - INDICATE BY PAINTING "SMALL CAR PARKING" ON ASPHALT PAVING AT THIS AREA.
8. PROVIDE PAINTED CURB TO INDICATE NO PARKING FIRE LINE AND SIGN AS REQUIRED BY THE CITY OF ALBUQUERQUE, NEW MEXICO FIRE CODES.
9. PROVIDE PAINTED (ON ASPHALT) ONE-WAY DIRECTIONAL SYMBOLS AND SIGNS AS REQUIRED BY THE CITY OF ALBUQUERQUE, NEW MEXICO TRAFFIC ENGINEERING DEPARTMENT.
10. PROVIDE BICYCLE PARKING STANDS (3 REQUIRED) AS REQUIRED BY THE CITY OF ALBUQUERQUE, NEW MEXICO.

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.



H21/D22

DRAWING TITLE SITE PLAN & DETAILS	
PROJECT TITLE: VALLEY FEDERAL SAVINGS BANK - ABQ.	
DRWN BY: DE	DATE: 11-20-84
SHEET 81 OF 1	



Job no. 50041

REVISION 11/2/84 11/7/85