LEGAL DESCRIPTION

LOT 14-G, BLOCK 95-A, ENJOW HEIGHTS

PROJECT BENCHMARK

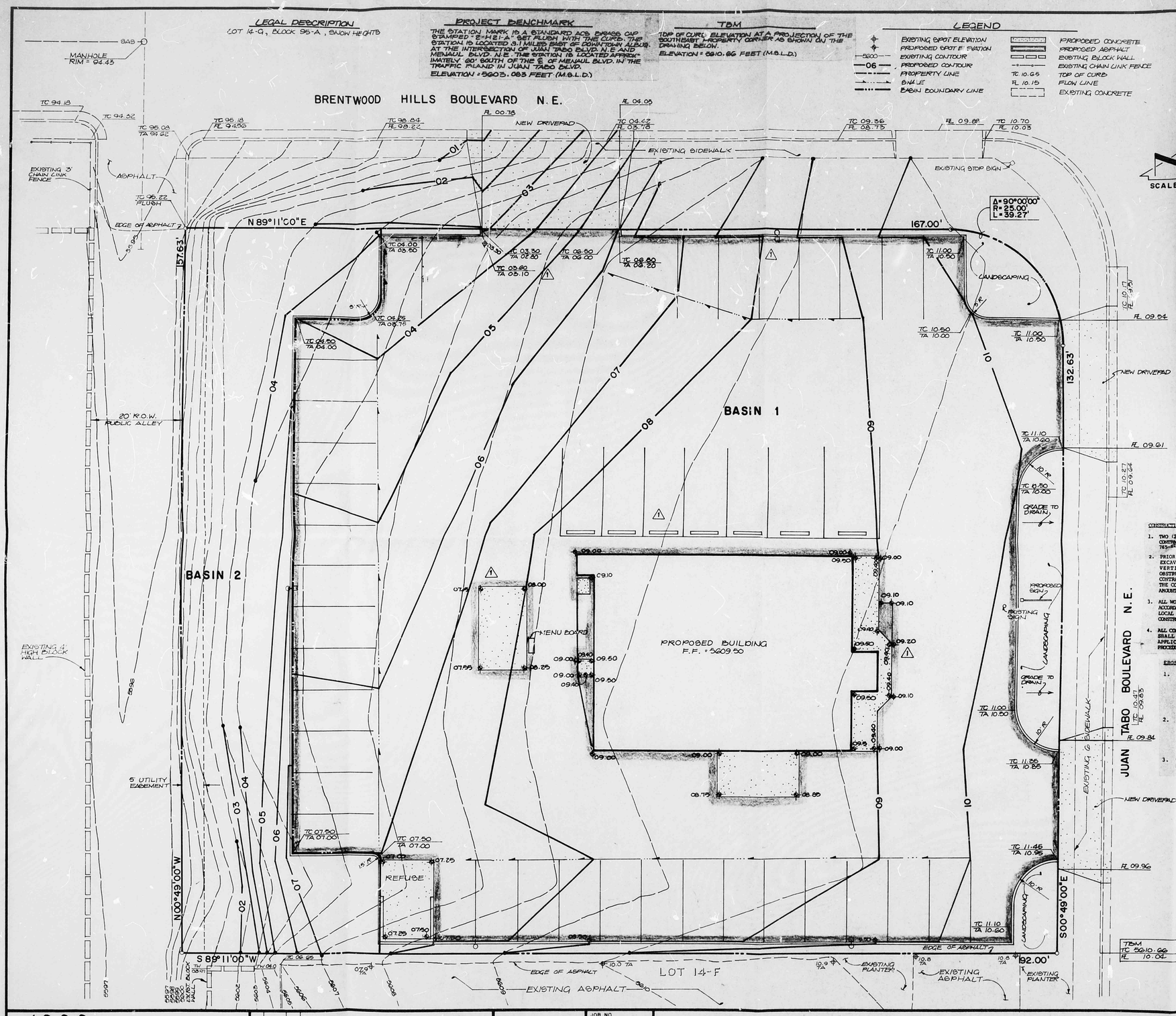
THE STATION MARK IS A STANDARD ACE BRASS CAP STAMPED "2-H21-A" SET FLUSH WITH THE CURB. THE STATION IS LOCATED 0.1 MILES EAST OF DOWNTOWN ALBUQ. AT THE INTERSECTION OF JUAN TABO BLVD. N.E. AND MENAUL BLVD. N.E. THE STATION IS LOCATED APPROXIMATELY 60' SOUTH OF THE ℄ OF MENAUL BLVD. IN THE TRAFFIC ISLAND IN JUAN TABO BLVD.
ELEVATION = 5603.083 FEET (M.S.L.D.)

TBM

TOP OF CURB, ELEVATION AT A PROJECTION OF THE SOUTHEAST PROPERTY CORNER AS SHOWN ON THE DRAWING BELOW.
ELEVATION = 5610.66 FEET (M.S.L.D.)

LEGEND

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- 5600 EXISTING CONTOUR
- 06 PROPOSED CONTOUR
- PROPERTY LINE
- SWALE
- BASIN BOUNDARY LINE
- PROPOSED CONCRETE
- PROPOSED ASPHALT
- EXISTING BLOCK WALL
- EXISTING CHAIN LINK FENCE
- TC 10.65 TOP OF CURB
- FL 10.15 FLOW LINE
- EXISTING CONCRETE



VICINITY MAP H-21
SCALE : 1" = 800'

SCALE : 1" = 10'

RECEIVED
DEC 02 1985
HYDROLOGY SECTION

DRAINAGE PLAN

The following items concerning the Captain D's 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 southwest corner of the intersection of Juan Tabo Boulevard N.E. and Brentwood Hills Boulevard N.E. At present, the site is undeveloped. Much of the surrounding area is currently developed thereby making this an infill site.

As shown by Plate H-21 of the Albuquerque Master Drainage Study, the site does not lie within a designated Flood Hazard Zone. At present, runoff generated from this site flows from east to west toward the adjacent alley located along the west property line. This alley slpes from south to north at a constant grade of approximately one percent for its intire length from Snowheights Boulevard N.E. to Brentwood Hills Boulevard N.E. The runoff eventually enters the Piedra Lisa Arroyo as described below.

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 grades, and 3) the limit and character of the proposed improvements. As shown by this plan, the proposed improvements consist of the construction of a restaurant along with adjacent paving and landscaping. Flows generated by Basin 1 will be routed from east to west then north onto Brentwood Hills Boulevard N.E. From that point, runoff will flow west along the south edge of Brentwood Hills Boulevard N.E. to Martha Street N.E. Martha Street N.E. then drains south to Snowheights Boulevard N.E. which drains west into the Piedra Lisa Arroyo which is the outfall for this site. Flows generated by Basin 2 will flow from east to west into the adjacent alley located along west property line. The alley then drains to Brentwood Hills Boulevard N.E. and follows the same pattern as mentioned for Basin 1. No offsite flows will enter the project site from the adjacent streets or the adjacent property located south of the project site because it has been developed in a manner such that those flows are conveyed west away from the project site.

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 increase the peak discharge to Brentwood Hills Boulevard N.E. by approximately 1.9 cfs.

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 765-2414, 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.

CALCULATIONS

Ground Cover Information

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

Rational Method

Discharge: $Q = CiA$
where C varies
$i = P_6 (6.84) T_c^{-0.51} = 5.14$ in./hr
$P_6 = 2.43$ in (DPM Plate 22.2 D-1)
$T_c = 10$ min (minimum)
A = area, acres

Volume: $V = CP_6A(1/12)$
where C varies
$P_6 = 2.43$ in (DPM Plate 22.2 D-1)
A = area, acres

Existing Condition

$A_{total} = 30,130$ sf $= 0.69$ Ac
$A_{DPP} = 0$ sf; % impervious = 0%
$C = 0.34$ (DPM Plate 22.2 C-1)
$Q_{100} = CiA = 0.34(5.14)(0.69) = 1.2$ cfs
$V_{100} = CP_6A = 0.34(2.43/12)(30,130) = 2,075$ cf

Developed Condition

Basin 1

$A_{total} = 25,635$ sf $= 0.59$ Ac
$A_{DPP} = 24,560$ sf; % impervious = 96%
$C = 0.94$ (DPM Plate 22.2 C-1)
$Q_{100} = CiA = 0.94(5.14)(0.59) = 2.9$ cfs
$V_{100} = CP_6A = 0.94(2.43/12)(25,635) = 4,880$ cf

Basin 2

$A_{total} = 4,495$ sf $= 0.10$ Ac
$A_{DPP} = 0$ sf; % impervious = 0%
$C = 0.34$ (DPM Plate 22.2 C-1)
$Q_{100} = CiA = 0.34(5.14)(0.10) = 0.2$ cfs
$V_{100} = CP_6A = 0.34(2.43/12)(4,495) = 310$ cf

Comparison

⚠ $\Delta Q_{100} = (2.9 + 0.2) - 1.2 = 1.9$ cfs (increase)
$\Delta V_{100} = (4,880 + 310) - 2,075 = 3,115$ cf (increase)

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER 12-02-85

NO	DATE	BY	REVISIONS
⚠1	11/85	LPU	REVISE PARKING LOT & CALCULATIONS

BOHANNAN-HUSTON, INC. 811 DALLAS N.E. · ALBUQUERQUE · NEW MEXICO · 87110 ENGINEERS

DESIGNED BY L.P.U.
DRAWN BY S.G.H.
APPROVED J.G.M.
JOB NO 50971
DATE 8-85

GRADING AND DRAINAGE PLAN
CAPTAIN D'S

H21/D29

FILE NO
SHEET 1 OF 1