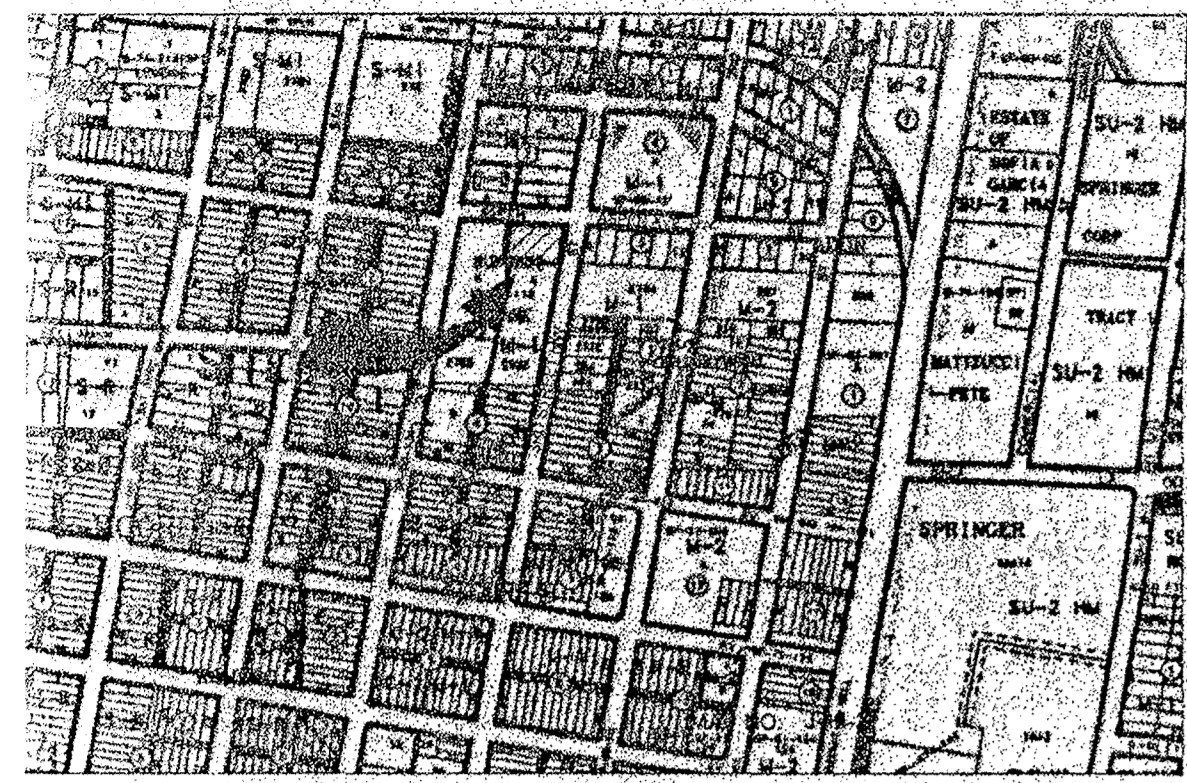
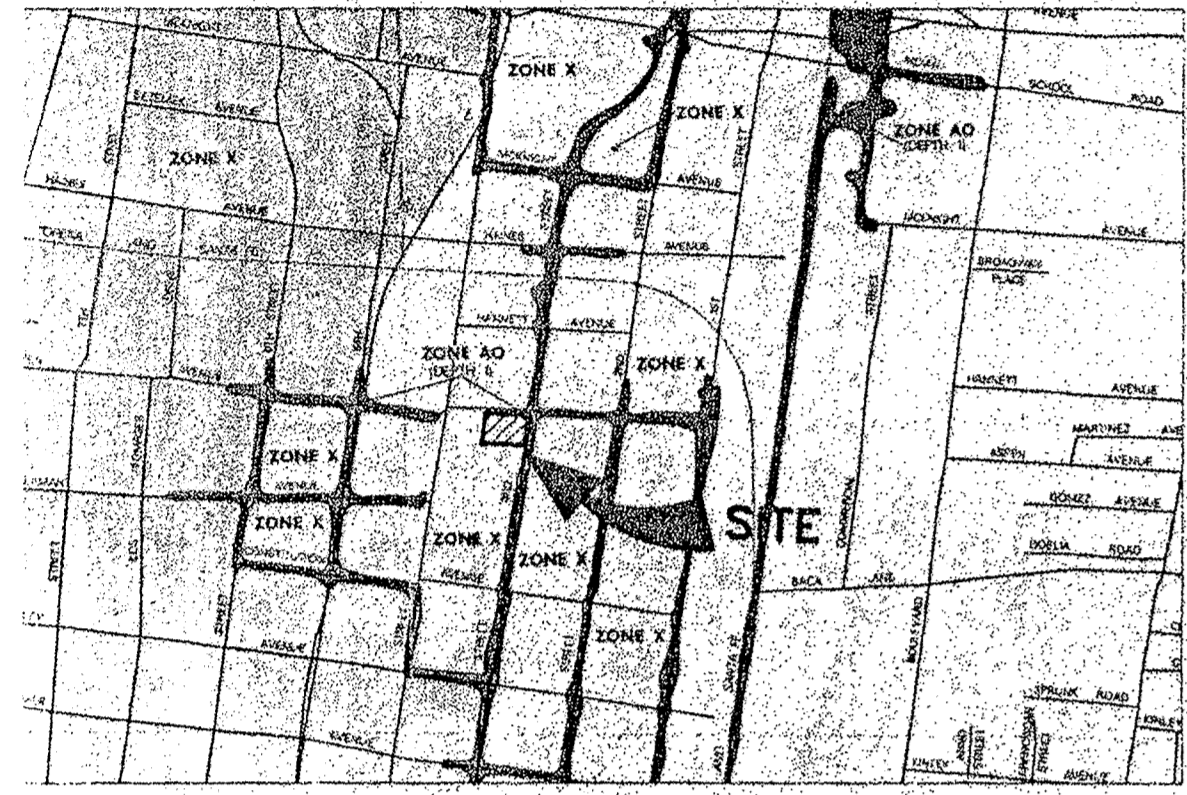


**DRAINAGE AND GRADING PLAN
FOR ASPEN/3RD STREET BUILDINGS
300 ASPEN AVENUE N.W.**

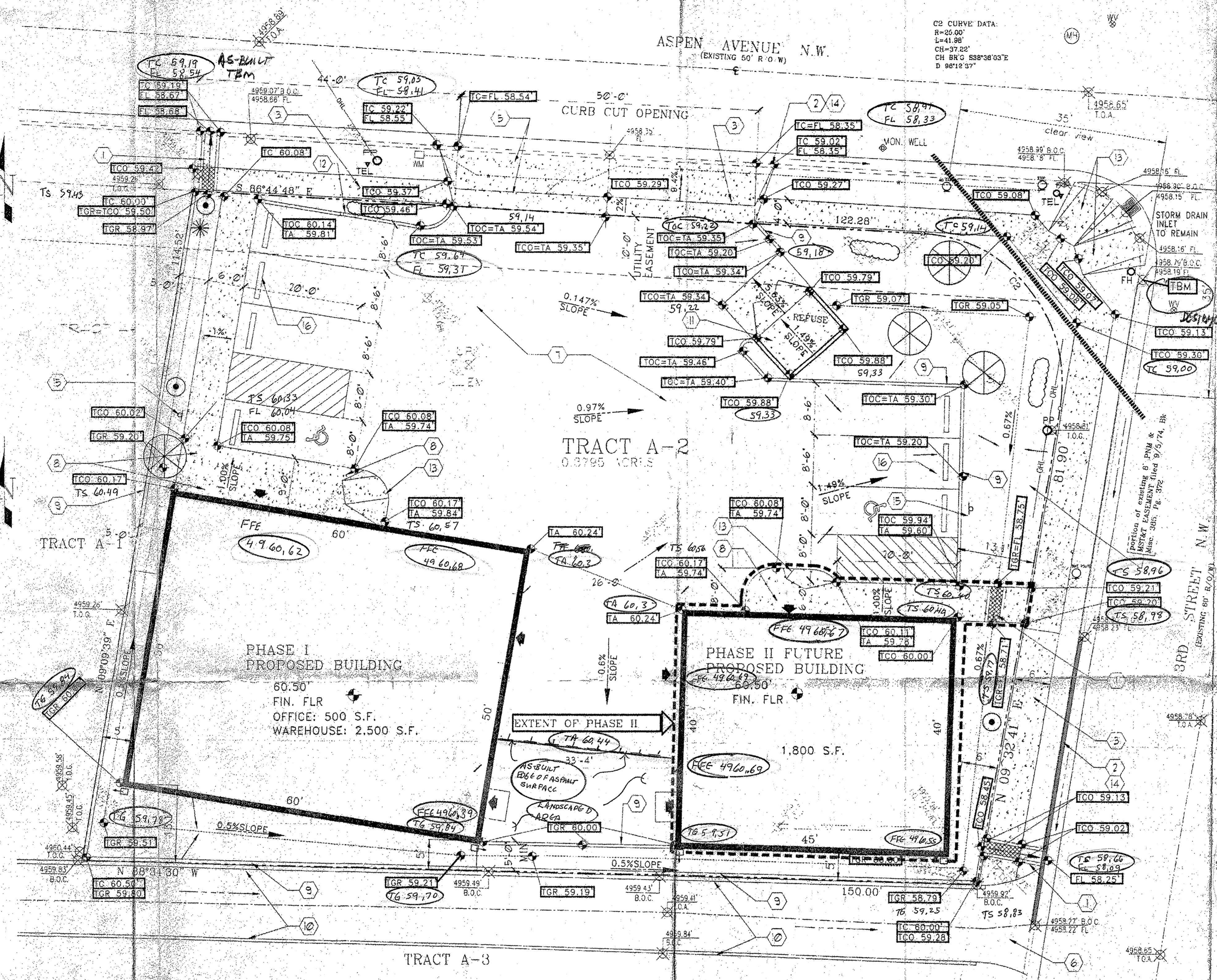


LOCATION MAP
MAP NO: J-14-Z
NOT TO SCALE



FORM MAP: PANEL 35001 C0332 D
NOT TO SCALE

- LEGEND**
- 4959 --- EXISTING ELEV. CONTOUR TO REMAIN
 - - - - - EXISTING ELEV. CONTOUR - MODIFIED
 - PROPOSED ELEV. CONTOUR
 - TC 59.43 PROPOSED TOP OF CURB ELEVATION
 - FL 58.12 PROPOSED FLOWLINE ELEVATION
 - TCO 59.54 PROPOSED TOP OF CONCRETE ELEVATION
 - TA 58.35 PROPOSED TOP OF ASPHALT ELEVATION
 - 0.5% SLOPE PROPOSED DIRECTION OF FLOW - DRAINAGE
 - EXISTING DIRECTION OF FLOW - TO REMAIN
 - DOWNSPOUT LOCATION AND FLOW DIRECTION
 - 59.80' FIN. FLR PROPOSED BUILDING FINISH FLOOR ELEVATION
 - EXISTING TOP OF GRAVEL ELEV. TO REMAIN
 - EXISTING BACK OF CURB - ELEV. TO REMAIN
 - EXISTING FLOWLINE ELEV. TO REMAIN
 - EXISTING TOP OF ASPHALT ELEV. TO REMAIN
 - EXIST. TOP OF GRAVEL ELEVATION TO BE RE-GRADED
 - OPP EXISTING POWER POLE TO BE REMAIN
 - TEL EXISTING TELEPHONE RISER TO REMAIN
 - OHL OVERHEAD POWER LINE
 - MON. WELL EXISTING MONITORING WELL TO REMAIN
 - WM EXISTING WATER METER TO REMAIN
 - WV EXISTING WATER VALVE TO REMAIN
 - SM EXISTING SANITARY SEWER MANHOLE TO REMAIN
 - SS STREET SIGN
 - BE BUILDING ENTRANCE
 - NEW ASPHALT PAVEMENT
 - NEW CONCRETE PAVEMENT



- KEYED NOTES**
1. CONCRETE SIDEWALK CURB WITH STEEL PLATE TOP PER CITY OF ALBUQUERQUE STANDARD DRAWING #2236.
 2. NEW CONCRETE CURB AND GUTTER MATCH EXISTING ELEVATIONS AND ASSURE SMOOTH TRANSITION.
 3. CONCRETE SIDEWALK PER CITY OF ALBUQUERQUE STANDARD DRAWING #2430.
 4. NOT USED.
 5. CONCRETE DRIVEPAD PER CITY OF ALBUQUERQUE STANDARD DRAWING #2425.
 6. EXISTING CONCRETE DRIVEPAD TO REMAIN ON ADJACENT PROPERTY.
 7. ASPHALT PAVEMENT.
 8. CONCRETE SIDEWALK AND ENTRY.
 9. CONCRETE CUT-OFF WALL PER COA STANDARD DETAIL DRAWING #2415.
 10. EXISTING CONCRETE CURB TO REMAIN ON ADJACENT PROPERTY.
 11. REFUSE BIN ENCLOSURE.
 12. NOT USED.
 13. WHEEL CHAIR CURB ACCESS RAMP PER CITY OF ALBUQUERQUE STANDARD DRAWING #2441.
 14. REMOVE EXISTING CONCRETE DRIVE PAD.
 15. HANDICAPP PARKING SIGN.
 16. CONCRETE TIRE STOP

- NOTICE TO CONTRACTOR**
1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN STREET RIGHT-OF-WAY. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
 2. ALL WORK DETAILED ON THIS PLAN TO BE PERFORMED, EXCEPT AS OTHERWISE PROVIDED HEREON, IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
 3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE (765-1234) FOR LOCATION OF EXISTING UTILITIES.
 4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS, SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM DELAY.
 5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
 6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
 7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
 8. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON MAPS AND/OR EVIDENCES ON THE GROUND, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL UTILITIES, SHOWN OR NOT SHOWN ON THE DRAWING.
 9. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
 10. CONTRACTOR IS RESPONSIBLE FOR KEEPING RUNOFF ON SITE DURING CONSTRUCTION AND CLEANING UP SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY AND ADJOINING PROPERTIES AFTER CONSTRUCTION.

FLOODPLAIN INFORMATION: The property is located in Zone X, areas determined to be outside the 500-year floodplain, according to the Floodway Insurance Rate Map of Bernalillo County, Community Panel 35001C0332D, effective September 20, 1996. Third (3rd) Street and Aspen Avenue are in Zone AO, flood depths of one foot.

EXISTING ON-SITE CONDITIONS: The site is presently unimproved and gravelled vacant land. It is bound on the north by Aspen Avenue NW, an asphalted street with concrete curb and gutter but no sidewalk; on the east by 3rd Street NW, an asphalted street with concrete curb and gutter but no sidewalk; on the south by vacant, unimproved gravel lot; and on the west by an unimproved vacant gravelled lot. The subject property is flat and an infill area. Surface drainage stays on site. An underground storm drain system exists on 3rd Street, with a catch basin on the curb return of the southwest corner of Aspen and 3rd Street.

OFF-SITE DRAINAGE CONTRIBUTION - NONE.

PROPOSED IMPROVEMENTS: Two buildings with a total of 6000 square feet of roof area will be built on the south side of the lot. Landscaping and asphalt parking will be provided.

ANALYSIS PHILOSOPHY: The site will be graded such that the post-development flows will be allowed to free discharge to Aspen and 3rd through landscaped areas. Pre-developed and post-developed runoff quantities and volumes are calculated to determine the impact of the additional impervious surfaces that will be created.

EROSION CONTROL: Water from construction activities and/or rainfall shall be retained on site through temporary ponding areas to prevent any runoff from entering the streets.

NOTE: All references are to City of Albuquerque Development Process Manual, July, 1997

TOTAL LOT SIZE: 0.3795 ACRES

PRECIPITATION ZONE 2

100 YEAR STORM DEPTH (DPM TABLE A-2, p 22-8)

EVENT INCHES	P ₃₀	P ₃₅	P ₄₀	P ₄₅	P ₅₀
	2.01	2.35	2.75	3.30	3.95

100 YR 6 HR STORM EVENT

TREATMENT	A	B	C	D
Q _{PEAK} (CFS/ACRE)	1.56	2.28	3.14	4.70
V ₃₆₀ (INCHES)	0.53	0.78	1.13	2.12

EQUATIONS REQUIRED

Q_{PEAK} TOTAL (Q_{PT}) = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D (DPM EQ. a-10, p 22-16)

E₃₆₀ (WEIGHTED) = (E_A * A_A + E_B * A_B + E_C * A_C + E_D * A_D) / A_T (DPM EQ. a-5, p 22-14)

V₃₆₀ (VOLUME RUNOFF) = E₃₆₀ (WEIGHTED) * (A_A + A_B + A_C + A_D) / 12 in/ft (DPM EQ. a-6, p 22-14)

V₁₀ DAYS = V₃₆₀ * A₀ * ((P₁₀ DAYS - P₃₆₀) / 12 in/ft) (DPM EQ. a-9, p 22-14)

EXISTING CONDITIONS

TREATMENT	A	B	C	D
Q _{PEAK} TOTAL (Q _{PT})	0	0	0.03795 ac.	0.000 ac.
V ₃₆₀				

DEVELOPED CONDITIONS

TREATMENT	A	B	C	D
Q _{PEAK} TOTAL (Q _{PT})	0.00	0.0018 ac	0.00	0.2977 ac.
V ₃₆₀				

INCREASE IN RUNOFF QUANTITY = 1.59 - 1.19 = 0.40 CFS (NEGLIGIBLE)

INCREASE IN RUNOFF VOLUME = 2525 ft³ - 1560 ft³ = 965 ft³

NOTE: - TBM AS MARKED NOT USED FOR AS-BUILT ELEVATION BECAUSE IT WAS DESTROYED BY NEW CONSTRUCTION

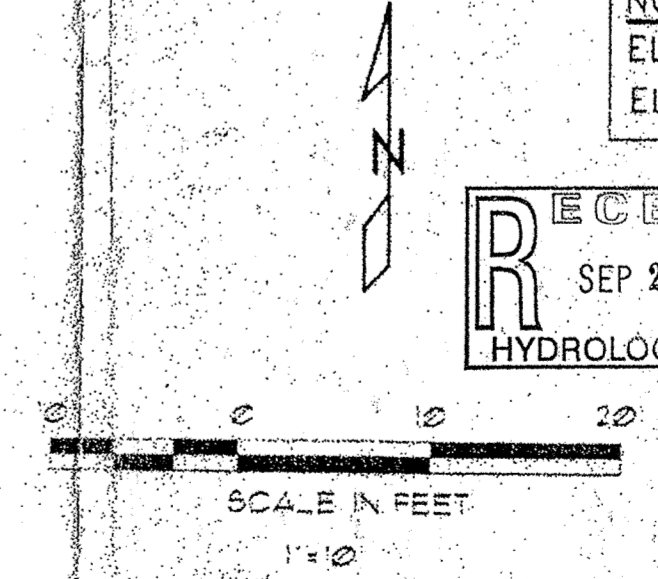
- BM 24-J14 ALSO HAS BEEN DESTROYED BY NEW CONSTRUCTION

- THE TOP OF CURB AT THE WEST END OF THE PARCEL, TC 59.19, WAS USED FOR AS-BUILT ELEVATIONS

NOTE: THIS IS NOT A BOUNDARY SURVEY. PROPERTY CORNERS, BEARINGS AND DISTANCES SHOWN HEREON ARE FOR ORIENTATION PURPOSES ONLY.

NOTE: ADD 4900 FEET TO PROPOSED SPOT ELEVATIONS TO GET MEAN SEA LEVEL DATUM ELEVATIONS.

APPROVAL	NAME	DATE
INSPECTOR		



ENGINEERS CERTIFICATION

I HEREBY CERTIFY THAT I HAVE PERSONALLY INSPECTED THE SITE AND THAT NO GRADING, FILLING OR EXCAVATION HAS OCCURRED SINCE THE DATE OF THE TOPOGRAPHIC SURVEY.

Celia S. Tomlinson 4/4/03
CELIA S. TOMLINSON, PE

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DRAWN BY: *Celia S. Tomlinson*
CHECKED BY: *Celia S. Tomlinson*
FIELD WORK BY: *Celia S. Tomlinson*
DATE: 4-4-2003

REVISION

REVISION	DATE	DESCRIPTION

APPROVALS

APPROVALS	ENGINEER	DATE

PROJECT TITLE: **WAREHOUSE ON ASPEN**

SHEET TITLE: **DRAINAGE AND GRADING PLAN**

J-14-Z RHCANBUS JOB NO: 02-C2-191 SHEET 3 OF 7