DRAINAGE AND GRADING PLAN FOR ASPEN CARD STREET BUILDINGS 300 ASPEN AVENUE N.W.

FIRM MAP PANEL 35001 C0332 D

LEGEND

- EXISTING ELEV. CONTOUR TO REMAIN
- EXISTING ELEV. CONTOUR - MODIFIED
- PROPOSED ELEV. CONTOUR
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED FLOWLINE ELEVATION
- PROPOSED TOP OF CONCRETE ELEVATION
- PROPOSED TOP OF GRAVEL ELEVATION
- PROPOSED TOP OF ASPHALT ELEVATION
- PROPOSED DIRECTION OF FLOW - DRAINAGE
- EXISTING DIRECTION OF FLOW - TO REMAIN
- DOWNSPOUT LOCATION AND FLOW DIRECTION
- 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
- EXISTING POWER POLE TO BE REMAIN
- EXISTING TELEPHONE RISER TO REMAIN
- OVERHEAD POWER LINE
- EXISTING MONITORING WELL TO REMAIN
- EXISTING WATER METER TO REMAIN
- EXISTING WATER VALVE TO REMAIN
- EXISTING SANITARY SEWER MANHOLE TO REMAIN
- STREET SIGN
- BUILDING ENTRANCE
- NEW ASPHALT PAVEMENT
- NEW CONCRETE PAVEMENT

NOTE:
ALL SURFACES NOT MARKED CONCRETE PAVEMENT, STOOPS AND BUILDINGS SHALL BE RE-GRADED GRAVEL SURFACE OR LANDSCAPING. SEE LANDSCAPING PLAN FOR DETAILS.

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 (793-1234) 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. 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.
6. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
7. 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.

KEYED NOTES

1. CONCRETE SIDEWALK CULVERT WITH STEEL PLATE TOP PER CITY OF ALBUQUERQUE STANDARD DRAWING #2236.
2. IN-FILL CONCRETE CURB. MATCH EXISTING ELEVATIONS AND ASSURE SMOOTH TRANSITION.
3. CONCRETE SIDEWALK PER CITY OF ALBUQUERQUE STANDARD DRAWING #2430.
4. CONCRETE MEDIAN CURB AND GUTTER PER CITY OF ALBUQUERQUE STANDARD DRAWING #2415.
5. CONCRETE DRIVEPAD PER CITY OF ALBUQUERQUE STANDARD DRAWING #2425.
6. EXISTING CONCRETE DRIVEPAD TO REMAIN.
7. ASPHALT PAVEMENT, SEE SITE PLAN FOR DETAILS.
8. CONCRETE TURN-DOWN SLAB, SEE SITE PLAN FOR DETAILS.
9. CONCRETE HEADER CURB, SEE SITE PLAN FOR DETAILS.
10. EXISTING CONCRETE CURB TO REMAIN.
11. REFUSE BIN ENCLOSURE, SEE SITE PLAN FOR DETAILS.
12. PROVIDE 2' CONCRETE CURB OPENING.
13. WHEEL CHAIR CURB ACCESS RAMP, CONSTRUCT ACCORDING WITH CITY OF ALBUQUERQUE REQUIREMENTS (STANDARD DRAWING #2441).

FLOOD INSURANCE INFORMATION: The project is located in Zone X (areas determined to be outside the 500-year flood), according to the Federal Insurance Rate Map (FIRM) Panel 35001 C0332 D, dated 9/26/1997, effective date September 26, 1997, index map revised August 16, 1998, as shown on the FIRM map panel no. 35001 C0332 D.

EXISTING ON SITE CONDITIONS: The site is presently undeveloped and provides storage for equipment on the north by Aspen Avenue N.W. an asphalted street with a curb and gutter, but no sidewalk; on the east by 3rd Street NW, an asphalted street with a curb and gutter but has no sidewalk; on the south by paved, unimproved gravel parking lot; on the west by an unimproved gravel lot, the subject property. Topographic information shows surface drainage flows on site, no underground storm drain system exists on 3rd Street, with a catch basin at the curb return at the south-west corner of Aspen and 3rd Street.

OFF-SITE DRAINAGE CONTRIBUTION - None

PROPOSED IMPROVEMENTS: Two buildings with a total of 5000 square feet of warehouse 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: 0.1795 ACRES

ZONE 2 (DPM FIGURE A-1, p 22-7)

100 YEAR STORM DEPTH (DPM TABLE A-7, p 22-8)

EVENT INCHES	P_{360} 1.97	P_{360} 3.2	P_{10} 2.96	P_{6} 3.12	P_{24} 3.67

100 YR 6 HR STORM EVENT

TREATMENT	A	B	C	D	
Q_{PEAK} (CFS/ACRE)	1.29	2.03	2.87	4.37	(DPM TABLE A-9, p 22-13)
E_{360} (INCHES)	0.44	0.67	0.99	1.97	(DPM TABLE A-8, p 22-13)

EQUATIONS REQUIRED

$Q_{PEAK\ TOTAL}\ (Q_{PT}) \quad Q_{PT} = Q_{PA}\,A_P + Q_{PB}\,A_B + Q_{PC}\,A_C + Q_{PD}\,A_D$ (DPM EQ. a-10, p 22-18)

E_{360}(WEIGHTED) $E = [E_A * A_A + E_B * A_B + E_C * A_C + E_D * A_D]/[A_A + A_B + A_C + A_D]$ (DPM EQ. a-3, p 22-14)

V_{360} (VOLUME RUNOFF) $V_{360} = E_{360}$ WEIGHTED$*[A_A + A_B + A_C + A_D]/12$ (DPM EQ. a-6, p 22-14)

$V_{10\ DAYS}$ $V_{10\ DAYS} = V_{360} + A_P * [P_{10\ DAYS} - P_{360}]/12IN/FT$ (DPM EQ. a-9, p 22-14)

EXISTING CONDITIONS

TREATMENT	A	B	C	D
AREA (ACRES)	0	0	0.03795 AC.	0.000 AC

$Q_{PEAK\ TOTAL}(Q_{PT})$ = 1.09 CFS

V_{360} = 1363 CF

DEVELOPED CONDITIONS

TREATMENT	A	B	C	D
AREA (ACRES)	0.00	0.00	0.0800 AC.	0.3000 AC.

$Q_{PEAK\ TOTAL}(Q_{PT})$ = 1.54 CFS

V_{360} = 2432 CF

INCREASE IN RUNOFF QUANTITY = 1.54 - 1.09 = 0.45 CFS (NEGLIGIBLE)

INCREASE IN RUNOFF VOLUME = 2432 - 1363 = 1069 CF

THE NEGLIGIBLE RUNOFF QUANTITY INCREASE, WHICH WILL BE ALLOWED TO FREE DISCHARGE TO THE STREETS, WILL NOT ADVERSELY IMPACT THE STREET AND/OR CATCH BASIN CAPACITY.

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.

BENCHMARK: 24-J14 ELEVATION 4958.365

SCALE IN FEET
1" = 10'

300 ASPEN AVENUE N.W.

REVISION	DATE	DESCRIPTION

APPROVALS	ENGINEER	DATE

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, PE

RHOMBUS P.A., INC.
FACILITIES ENGINEERS & ENVIRONMENTAL CONSULTANTS
e-mail: rhombus@nmia.com
web site: www.RHOMBUSPA.COM
2820 San Mateo NE Suite B, Albuquerque, NM 87110
TEL (505) 881-6690 FAX (505) 881-6896

DRAWN BY	RG	CHECKED BY	CT	FIELD WORK BY	CK, RG	DATE	9/9/2002

PROJECT TITLE:
WAREHOUSE ON ASPEN

SHEET TITLE:
DRAINAGE AND GRADING PLAN

MAP NO	J-14-Z	RHOMBUS JOB NO	02-C2-191	SHEET	OF