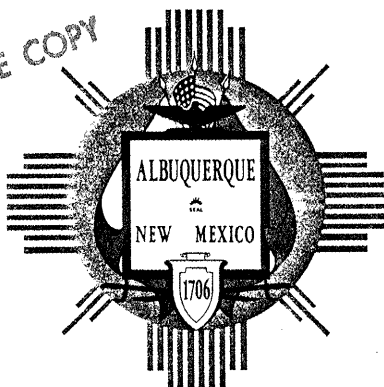


FILE COPY



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

KEN SCHULTZ
MAYOR

October 20, 1989

W. Reed Edgel
Rodriguez & Associates
122 Washington, SE
Albuquerque, New Mexico 87108

RE: DRAINAGE PLAN FOR ROCKY MOUNTAIN TRAILERS
(H-16/D30) ENGINEER'S STAMP DATED OCTOBER 6, 1989

Dear Mr. Edgel:

Based on the information provided on your submittal of October 9, 1989, the above referenced plan is approved for Building Permit and Grading/Paving Permit.

For Grading/Paving Permit, this approval letter is your permit. Upon completion of the paving, a request for inspection must be called in.

For Building Permit, a copy of the approved plan must be inserted in the construction sets prior to sign-off by Hydrology.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

Bernie J. Montoya, C.E.
Engineering Assistant

xc: Alan Martinez
Larry Caudill

BJM/bsj
(WP+989)

PUBLIC WORKS DEPARTMENT

Walter H. Nickerson, Jr., P.E.
Assistant Director Public Works

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

DRAINAGE INFORMATION SHEET

PROJECT TITLE: ROCKY MOUNTAIN TRAILERS ZONE ATLAS/DRNG. FILE #: H-16/D30

LEGAL DESCRIPTION: TRACT ONE (1), ZUNI RENTAL ADDITION

CITY ADDRESS: 2705 PRINCETON N.E. (CITY)

ENGINEERING FIRM: W. REED EDGEL, P.E. - RODRIGUEZ & ASSOC. CONTACT: MR. EDGEL
MR. RODRIGUEZ

ADDRESS: 2500 GARFIELD S.E. #5 PHONE: 266-3830

OWNER: MR. FRANK BACA CONTACT: SAME (OWNER)

ADDRESS: 2705 PRINCETON N.E. PHONE: 884-6210

ARCHITECT: N/A CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: JOHN B. TORRES, L.S. - RODRIGUEZ & ASSOC. CONTACT: MR. TORRES
MR. RODRIGUEZ

ADDRESS: 2500 GARFIELD S.E. #5 PHONE: 266-3830

CONTRACTOR: ? CONTACT: _____

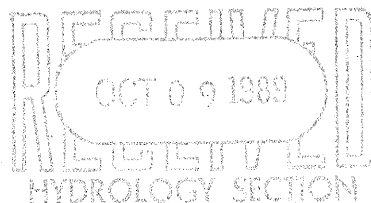
ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☒ YES

☐ NO

☐ COPY OF CONFERENCE RECAP SHEET PROVIDED



DRB NO. _____

EPC NO. _____

PROJ. NO. _____

TYPE OF SUBMITTAL:

☒ DRAINAGE REPORT

☒ DRAINAGE PLAN

☐ CONCEPTUAL GRADING & DRAINAGE PLAN

☒ GRADING PLAN

☐ EROSION CONTROL PLAN

☐ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL

☐ PRELIMINARY PLAT APPROVAL

☐ SITE DEVELOPMENT PLAN APPROVAL

☐ FINAL PLAT APPROVAL

☒ BUILDING PERMIT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☐ CERTIFICATE OF OCCUPANCY APPROVAL

☐ ROUGH GRADING PERMIT APPROVAL

☒ GRADING/PAVING PERMIT APPROVAL

☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: OCTOBER 9, 1989

BY: RODRIGUEZ & ASSOCIATES

BENCH MARK REFERENCE:

ACS STATION "12-B16", A BRASS CAP MONUMENT LOCATED AT THE SOUTHEAST INTERSECTION OF CARMICHAEL N.E. AND PRINCETON N.E. N.S. DATUM = 5086.32; PROJECT BENCH MARK(S) AS SHOWN ON THE PLAN HEREON.

LEGAL DESCRIPTION:

TRACT ONE (1), ZUNI RENTAL ADDITION, PLAT FILED IN THE COUNTY CLERK'S OFFICE OF BERNALILLO COUNTY, NEW MEXICO, ON NOVEMBER 3, 1981.

LEGEND:

TC=84.17 = TOP OF CURB ELEVATION
 RE=83.51 = CURB FINISH ELEVATION
 --- = EXISTING OR PROPOSED CURB
 --- = EXISTING CONTOUR
 --- = PROPOSED CONTOUR
 --- = EXISTING FENCE
 --- = PROPOSED SPOT ELEVATION

CONSTRUCTION NOTES:

- 1.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST LOCATE 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 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 CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT FOR STORM RUN-OFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- 1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTIES.
- 2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREETS.
- 3.) THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT WITHIN PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

DRAINAGE COMMENTS:

THE FOLLOWING ITEMS CONCERNING THE SUBJECT SITE ARE CONTAINED ON THE GRADING AND DRAINAGE PLAN AS SHOWN HEREON:

- 1.) SITE GRADING AND DRAINAGE PLAN
- 2.) VICINITY MAP
- 3.) LEGAL DESCRIPTION
- 4.) LIMITS AND CHARACTER OF THE EXISTING AND PROPOSED IMPROVEMENTS
- 5.) HYDRAULIC DRAINAGE CALCULATIONS

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED AT THE SOUTHWEST INTERSECTION OF CLAREMONT AVENUE N.E. AND PRINCETON DRIVE N.E. IN THE CITY OF ALBUQUERQUE, NEW MEXICO; AT PRESENT, THE SUBJECT SITE IS DEVELOPED, HAVING AN EXISTING COMMERCIAL BUILDING AND ASPHALT PAVED PARKING AREA.

PRESENTLY, THE EXISTING DEVELOPED SITE DRAINS TOWARDS THE SOUTHWEST PROPERTY CORNER AND THRU AN OPENING AT AN EXISTING FENCE LINE WHICH ALLOWS STORM RUNOFF TO DISCHARGE ONTO ADJACENT PROPERTIES; SAID RUNOFF DOES PRESENTLY HAVE AN ADVERSE AFFECT ON DOWNSTREAM PROPERTIES.

THE PROPOSED PLAN SHOWS THAT CERTAIN PORTIONS OF THE EXISTING PAVED PARKING AREAS ARE TO BE REMOVED, BE REGRADED, AND REPAVED ACCORDING TO PLAN HEREON SO AS TO REDIRECT STORM RUNOFF TO FREE DISCHARGE THRU THE REVISED EXISTING DRIVE-PAD AND INTO PRINCETON DRIVE N.E., THEREBY ELIMINATING THE PRESENT ADVERSE AFFECT OF STORM RUNOFF TO DOWNSTREAM PROPERTIES.

ACKNOWLEDGING THAT THE SUBJECT SITE AND EXISTING IMPROVEMENTS LIE ON AN FORMER SANITARY LANDFILL SITE, THIS PLAN AND DESIGN IS SUBJECT TO RESULTS OF SOIL TESTS, TO BE PERFORMED BY A LICENSED SOILS ENGINEER; THESE TESTS MAY DISCLOSE THE NEED FOR SUBGRADE IMPROVEMENTS.

THE PROJECT SITE, (1.) DOES NOT LIE WITHIN A FLOOD PLAIN, (2.) DOES NOT LIE ADJACENT TO A NATURAL OR ARTIFICIAL WATER COURSE, (3.) HAS NO DRAINAGE EASEMENTS ON THE PROPERTY.

BASED ON A SITE INVESTIGATION, IT HAS BEEN DETERMINED THAT THE FREE DISCHARGE OF SURFACE FLOWS OF THE EXISTING AND PROPOSED QUANTITIES HAVE NO ADVERSE AFFECT ON DOWNSTREAM PROPERTIES.

DRAINAGE CALCULATIONS:

I. REFERENCES:

- A. CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), VOL. 2, DESIGN CRITERIA, CHAPTER 22, DRAINAGE, FLOOD CONTROL AND EROSION CONTROL.
- B. SOIL SURVEY OF BERNALILLO COUNTY AND PARTS OF SANDOVAL AND VALENCIA COUNTIES, NEW MEXICO, UNITED STATES DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, (SCS SHEET NO. 21).

II. GENERAL INFORMATION:

- A. SOIL TYPE: SOIL TYPE IS "CU", CUT AND FILL LAND, HYDROLOGIC SOIL GROUP "A".
- B. IMPERVIOUSNESS:

SITE AREA = 3.19 ACRES, (139,300.03 SQ. FT.).

C. TYPE OF SURFACE (DEVELOPED): EXISTING AND PROPOSED:

HARD SURFACED (ASPHALT/GRAVEL) = 2.68 AC. = 84' X 11' (C=0.95) = 0.80
 BUILDING ROOF AREA = 0.34 AC. = 11' X 11' (C=0.90) = 0.10
 LANDSCAPED AREA = 0.17 AC. = 05' X 05' (C=0.25) = 0.01
 UNDEVELOPED AREA = 0.00 AC. = 0' X 0' (C=0.40) = 0.00

AVERAGE "WEIGHTED" "C" = 0.91

- D. RAINFALL, 100-YR., 6-HR., R_6 : (SEE REF. A., PLATE 22.2 D-1)
 $R_6 = 2.2$ INCHES.

- E. TIME OF CONCENTRATION, T_c : TEN (10) MINUTES FOR A SITE THIS SIZE.

- F. RAINFALL INTENSITY, "I", (SEE REF. A., PLATE 22.2 D-2)
 $I = R_6 \times 6.84 \times T_c^{-0.51} = 2.2 \times 6.84 \times (10)^{-0.51} = 4.65 \text{ IN./H.}$

III. PEAK DISCHARGE: (Q = CIA)

DEVELOPED: $Q_{100} = 0.91 \times 4.65 \times 3.19 = 13.50 \text{ cfs}$
 EXISTING
 $Q_{10} = 0.657 \times 13.50 = 8.87 \text{ cfs}$

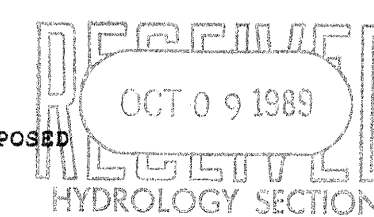
DEVELOPED: $Q_{100} = 0.91 \times 4.65 \times 3.19 = 13.50 \text{ cfs}$
 PROPOSED
 $Q_{10} = 0.657 \times 13.50 = 8.87 \text{ cfs}$

IV. PEAK VOLUME:

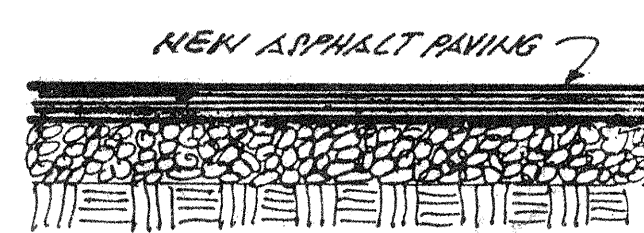
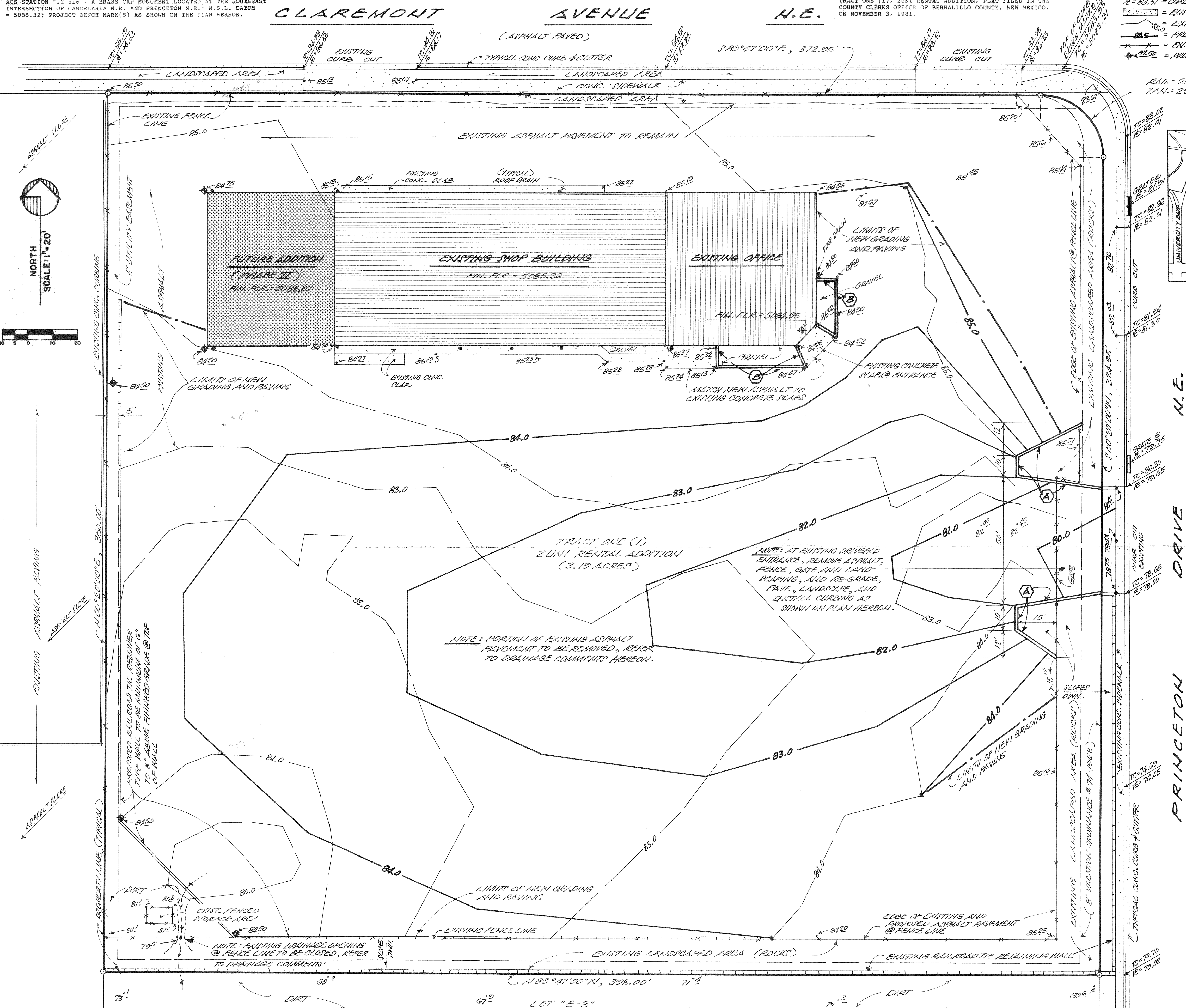
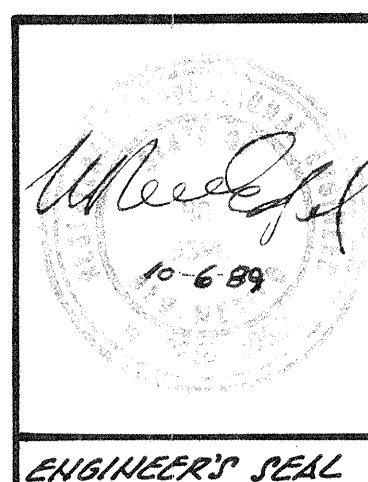
- A. EXISTING CONDITIONS:
 $V_{100} = 0.91 \times (2.2/12) \times 139,300.0 = 23,239.9 \text{ CU. FT.}$
 $V_{10} = 0.657 \times 23,239.9 = 15,268.8 \text{ CU. FT.}$

- B. DEVELOPED CONDITIONS:
 $V_{100} = 0.91 \times (2.2/12) \times 139,300.0 = 23,239.9 \text{ CU. FT.}$
 $V_{10} = 0.657 \times 23,239.9 = 15,268.6 \text{ CU. FT.}$

NOTE: AS SHOWN BY THE DRAINAGE CALCULATIONS HEREON, THERE WILL NOT BE AN INCREASE IN PEAK DISCHARGE OR PEAK VOLUME BEING CREATED BY THE PROPOSED PLAN AS SHOWN HEREON.

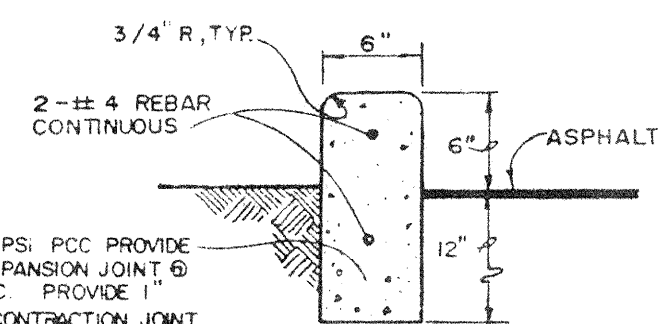


RE-GRADING-PAVING-DRAINAGE PLAN
 FOR
 ROCKY MOUNTAIN
 TRAILERS
 2705 PRINCETON, N.E.
 ALBUQUERQUE, NEW MEXICO
 OCTOBER, 1989

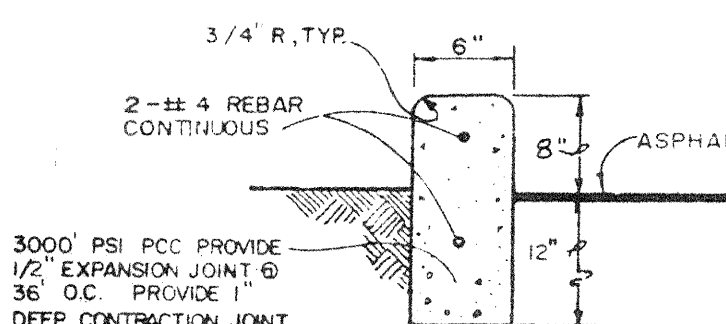


PAVING DETAIL
 SCALE: 1" = 2.0'

NEW 8" ASPHALT CONC.
 COMPACTED 6" GRAVEL SUB-BASE (95% MAX. DENSITY)
 COMPACTED DIRT SUB-GRADE (95% MAXIMUM DENSITY)



HEADER CURB DETAIL
 SCALE: 1" = 1'-0"



HEADER CURB DETAIL
 SCALE: 1" = 1'-0"