

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 20, 1990

Victor Chavez, P.E. Chavez-Grieves Consulting Engineers 4600-C Montgomery Boulevard, NE Albuquerque, New Mexico 87109

RE: DRAINAGE PLAN FOR THE GIBBON EXHIBIT @ THE RIO GRANDE ZOO (K-13/D30) ENGINEER'S STAMP DATED AUGUST 6, 1990

Dear Mr. Chavez:

Based on the information provided on your submittal of August 7, 1990, the above referenced plan is approved for Building Permit.

Please attach a copy of this plan to the construction sets prior to sign-off by Hydrology.

Also, please advise your client that no further approvals will be granted until a Master Drainage plan for the entire zoo area is submitted for review.

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

Cordially,

Fred J. Aguirre, P.E.

Hydrologist

BJM:FJA/bsj (WP+2113)

PUBLIC WORKS DEPARTMENT

DRAINAGE INFORMATION SHEET

PROJECT TITLE: GIBBON EXHIBIT	ZONE ATLAS/DRNG.FILE #: K-13 / D30
LEGAL DESCRIPTION: TOWN 10 NORTH, RANGE 3	EAST, SECTION 19
TOWN OF ATRISCO GRANT - RIO GRNADE ZOO	
CITY ADDRESS: RIO GRANDE ZOO	
ENGINEERING FIRM: CHAVEZ-GRIEVES CONSULTING ENGI	INEERS, INCCONTACT: VICTOR CHAVEZ
ADDRESS: 4600-C MONTGOMERY NE, SUITE	
OWNER: ALBUQUERQUE, NEW MEXICO 871 CITY OF ALBUQUERQUE	CONTACT: MR. RAY DARNELL
ADDRESS: RIO GRANDE ZOO	PHONE: 843-7413
ARCHITECT: DALE CRAWFORD & ASSOCIATES	CONTACT: FRANCIS
ADDRESS: 117 JEFFERSON NE, ABQ., NM 8	37108 PHONE: 265-0986
SURVEYOR: N/A	CONTACT:
ADDRESS:	
CONTRACTOR: N/A	
ADDRESS:	
NO EPC	3 NO C NO DJ. NO
TYPE OF SUBMITTAL: CHE	CK TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT	SKETCH PLAT APPROVAL
X DRAINAGE PLAN	PRELIMINARY PLAT APPROVAL
CONCEPTUAL GRADING & DRAINAGE PLAN GRADING PLAN	SITE DEVELOPMENT PLAN APPROVAL FINAL PLAT APPROVAL
FROSTON CONTROL DIAM	BUILDING PERMIT APPROVAL
ENGINEER'S CERTIFICATION	FOUNDATION PERMIT APPROVAL
AUG 7 1990 -	CERTIFICATE OF OCCUPANCY APPROVAL
E CHEARALEGISTIVISION	ROUGH GRADING PERMIT APPROVAL GRADING/PAVING PERMIT APPROVAL
DATE SUBMITTED SANG/90 1990 BY:	OTHER (SPECIFY)
HYDROLOGY DIVISION	

EXISTING CONDITIONS:

The proposed Gibbon Exhibit is located in a fully developed area of the Zoo which includes the former main entrance and the original Seal Exhibit. Existing surfaces are, for the most part, impermeable with either paving or roofing or are part of an enclosed water feature which contributes no runoff. Flows from the area are handled through an existing drainage system that discharges to the south, turns at the new entry, and extends to an existing storm drain located on 10th Street. As-built information for the existing system is not available except for the features in the immediate vicinity of the Gibbon Exhibit. Original contributing areas were far in excess of the existing drainage area which has been reduced through recent Zoo developments. Comments from Zoo maintenance personnel indicate that capacities have been adequate to handle all flows from the existing basin.

PROPOSED CONDITIONS:

Development of the Gibbon and Orangutan Exhibits will reduce the overall coefficient of runoff in the basin. Closed contours will be provided in the Gibbon Exhibit and the total permeable area will be increased. The existing drainage system will be replaced and extended through the area of new construction. Grades will be provided at the new inlets to accommodate existing flow patterns. Discharge from the Nocturnal Exhibit, located approximately 135 feet north of the new westernmost inlet, is 1.45 feet higher. This will allow for either surface flows in excess of one percent to the new inlet or for the extension of the new drainage system when the intermediate area is developed. Existing drainage patterns will be maintained and new drainage flows will be directed to the new

The Zoo has budgeted approximately \$175,000.00 for a master plan drainage system for the 1991 fiscal year. This project will accommodate flows from the Hoofstock area and surrounding areas which include this project. The design of this project will accommodate either no change which handles existing flows or will allow the extension of the new portion to the east for tie-in to the existing facility in 10th Street.

EG 45.66

WALK

DROP INLET

45.31 @ 0 RIM EXIST.

