PROJECT TITLE: SOUTHEAST AREA SUBSTATIONALDING	E ATLAS/DRNG. FILE #. L-19/D
LEGAL DESCRIPTION: NOT KNOWN	The state of the s
CITY ADDRESS: Not Known	
ENGINEERING FIRM: TOM MANNE ASSOC	- CONTACT: J.G. MORTENSEN
ADDRESS: 811 DALLAS NE	PHONE: 245-56//
OWNER: CITY OF ALBUQUERQUE	CONTACT: ARCHITECT
ADDRESS:	PHONE:
"ARCHITECT: BOEHNING PARTNESHIP	CONTACT: PAT MC MURRAY
ADDRESS: 301 GOLD SW	PHONE: 242-4044
SURVEYOR: CITY OF ALBUQUERQUE	CONTACT: LAMONTE URBAN
ADDRESS:	PHONE:
CONTRACTOR: W/A	CONTACT:
ADDRESS:	PHONE:
HYDROLOGY SECTION EPO	3 NO C NO DJ. NO
DRAINAGE REPORT DRAINAGE PLAN CONCEPTUAL GRADING & DRAINAGE PLAN GRADING PLAN EROSION CONTROL PLAN ENGINEER'S CERTIFICATION F G G G G G G G G G G G G	TYPE OF APPROVAL SOUGHT: GKETCH PLAT APPROVAL PRELIMINARY PLAT APPROVAL GITE 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)
BY: J.G. MORTENSEN	-
DIE TOKIENOW	



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 16, 1988

Jeff Mortensen, P.E. Jeff Mortensen & Associates, Inc. 811 Dallas, NE Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR SOUTHEAST AREA SUBSTATION (L-19/D43) RECEIVED DECEMBER 7, 1988 FOR FINAL PLAT APPROVAL.

Dear Mr. Mortensen:

The above referenced submittal dated 12-07-88 is approved for Building Permit sign off by Hydrology. Include this approved Plan with the construction sets routed for sign off.

If you have any questions call me at 768-2650.

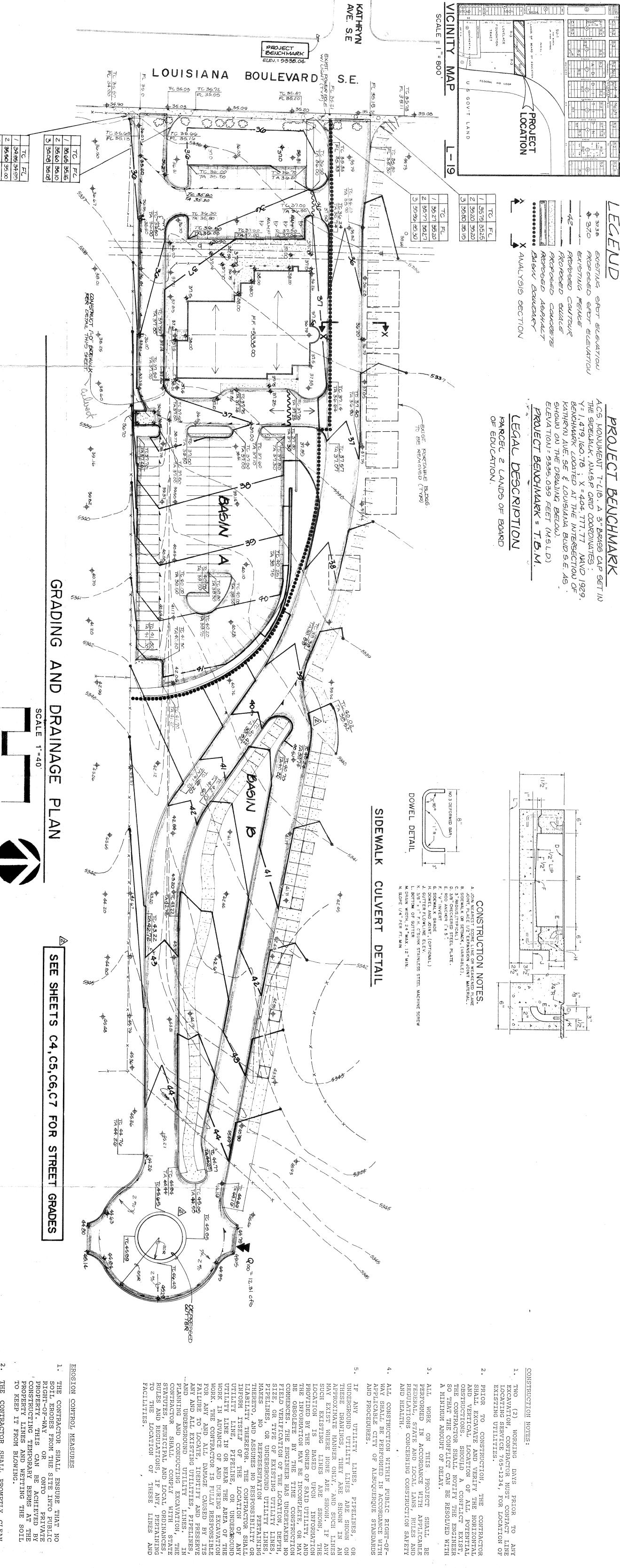
Cordially;

Roger A. Green, P.E.

C.E./ Hydrology

xc: Pat McMurray, Boehning Partnership

RAG/(WP+742)



view of the Alboood Hazard Area, alysis point, loar depth of rund wnstream capacity cently constructs been constructs been construct pacity exists bot that this is r Drainage Study, Volume II, indicates that the site does not lie within a decontribute runoff to a designated Flood Hazard Area. Furthermore, review of APU ntersection of Southern Avenue S.E. and Louisiana Boulevard S.E. indicates that mately 0.35 feet. The 10-year depth is approximately 0.31 feet. This would indicate Looking to the south to Gibson Boulevard S.E., a public storm drain facility 10 roadway to alleviate the flooding of that street. Lastly, the Highland Detention to mitigate flooding problems in that area. In conclusion, offsite flows are exirtland Detention Pond accepts and detains any potential offsite flows and detains an APU 30, an lat the 100-lat the that the that the that ty has been ention Pond and downstream ion and the Rational Method Rainfall 10

S

s shown by the cadway to acce ne City of All cadway will drom the existinat Basin B woulevard S.E. the Grading Plan, the proposed construction consists of a ccess the proposed Phil Chacon Park within Basin B. The e Albuquerque Survey Section. As further demonstrated by thi drain to Louisiana Boulevard S.E. and discharge the respesting grades provided, it appears that Basin A will drain to the north within Louisiana Boulevard S.E. will drain to would discharge to Southern Avenue S.E. of a new police substation within Basin The existing survey information has been by this plan, both the police substation respective runoff via private entrances rain to the south within Louisiana Boulev S.E. Consequently, Basin A would dischare new
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and

to to by

Information

CALCULATIONS

From SCS Bernalillo County s
Plate: 31: TgB - Tijeras Gr
Hydrologic Soil Group: B
Existing Pervious CN = 70 (D
Pasture or Range La
Developed Pervious CN = 61
Open Space: good c (DPM Plate 22.2 C-2 Land: fair condition) (DPM Plate 22.2 C-2 od condition) soil Survey, Gravelly Fine sandy

Ç

Using DPM Plate 22.3 D-1 Slope = 0.007 ft/ft Q = 21.1 cfs (8.8 + 12.3) d = 0.48 ft

Qrequired

for street depth = 6"
Qcapacity = 24.0 cfs > Qrequired

PLAN

PREPARED

to Peak

0078 L^{0.77}/S^{0.385} (Kirpich Equation)

2.35 in. (DPM Plate Discharge: Ø

e C varies $i = P_6 (6.84) T_C -0.5$ $P_6 = 2.35 in (DPM Pla)$ $T_C = 10 min (minimum)$ A = area, acres51 . Late * 4. 22. .97 in/hr .2D-1)

Volume: < 3630(DRO) in

Existing Condition

1. Basin A

Atotal = 75,000 sf = 1.7 Ac

C = 0.40 (Weighted average per Emer

Q100 = CiA = 3.4 cfs
% impervious = -0- %
Composite CN = 70 (DPM Plate 22.2 CDRO = 0.4 in (DPM Plate 22.2 C-4)

V100 = 3630 (DRO)A = 2,500 cf DRO = Direct A = area,

C

Developed Condition

1. Basin A

Atotal = 75,000 sf = 1.7 Ac

Roof area = 10,000 sf (0.13)

Paved area = 48,000 sf (0.64)

Landscaped area = 17,000 sf (0.23)

C = 0.78 (Weighted average per Emergency Ru

Q100 = CiA = 6.6 cfs.

Aimp = 58,000 sf; % impervious = 77 %

Composite CN = 88 (DPM Plate 22.2 C-3)

DRO = 1.3 in (DPM Plate 22.2 C-4)

V100 = 3630(DRO) A = 8,000 cf 2. Basin B
Atotal = 100,000 sf = 2.3 Ac
C = 0.40 (Weighted average per Emer
Q100 = CiA = 4.6 cfs
% impervious = -0- %
Composite CN = 70 (DPM Plate 22.2 C
DRO = 0.4 in (DPM Plate 22.2 C-4)
V100 = 3630 (DRO)A = 3,400 cf

Rule

2. Basin B
Atotal = 100,000 sf = 2.3 Ac
Paved area = 75,000 sf (0.75)

Landscaped area = 25,000 sf (0.25)

C = 0.77 (Weighted average per Emergency Ru
Q100 = CiA = 8.8 cfs

Aimp = 75,000 sf; % impervious = 75 %

Composite CN = 88 (DPM Plate 22.2 C-3)

DRO = 1.3 in (DPM Plate 22.2 C-4)

V100 = 3630(DRO) A = 10,900 cf

3.4 = 3. -2,500₩ N cfs (increase)
5,500 cf (increase)

Comparison
1. Basin A $\Delta Q_{100} = 6.6 - 6.0$ $\Delta V_{100} = 8,000$

2. Basin $\Delta Q_{100} = \epsilon$ $\Delta V_{100} = 1$ B 8.8 - 4.6 = 4.2 cfs (increase) 10,900 - 3,400 = 7,500 cf (increase)

O7.21.88
O9.75.88
TOPOGRAPHIC SU
OTHERS AND PROV
ADEQUACY IS HERE
RELATES TO THIS GRADING AND DRAINAGE UNDER THE SUPERVISION

REVISED
REVISED REVISED 09-15-88 II - 88 HIC SURVEY PREPARED AND PROVIDED BY OWNER. IS HEREBY DISCLAIMED AS TO THIS DRAWING.

07.88

3542

JEFF MORTENSEN & ASSOCIATES, INC. 811 DALLAS, N.F. DALBUQUERQUE, NM87110 DENGINEERS DELEPHONE (505) 265-5611

BOEHNING
PARTNERSHIP

S T T T 03

NOVEMBER 1988

SOUTHEAST AREA SUBSTATION

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.

THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.

ALBUQUERQUE POLICE DEPARTMENT OF NEW ME

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