



SCALE
0 100 200 300
FEET

DATE: 10/1/58
BY: J. H. H.

DATE: 10/1/58
BY: J. H. H.

J-23-Z
JULY 1958
JULY 1958



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 768-7844

December 5, 1986

Charles Burn
DMJM
5700 Harper Drive, NE
Albuquerque, New Mexico 87109

RE: REVISED BUILDING PERMIT DRAINAGE PLAN FOR SKYVIEW CENTER
(J-23/D15) RECEIVED NOVEMBER 19, 1986

Dear Mr. Burn:

I have reviewed the above referenced plan, dated November 19, 1986, and do hereby give approval for sign-off for Building Permit.

Please see that a copy of this approved plan is attached to the permit sets for Hydrology sign-off.

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

Cordially,

Billy J. Goolsby
Billy J. Goolsby, P.E.
C.E./Hydrology Section

cc: Rick Duran
Steve Garber

BJG/bsj

PUBLIC WORKS DEPARTMENT

ENGINEERING GROUP

Telephone (505) 768-2500

Walter Nickerson, P.E., City Engineer

AN EQUAL OPPORTUNITY EMPLOYER

DMJM

ALBUQUERQUE

PROJECT

SKYVIEW CENTER

PROJECT NO.

1671-12-01

PAGE

BY:

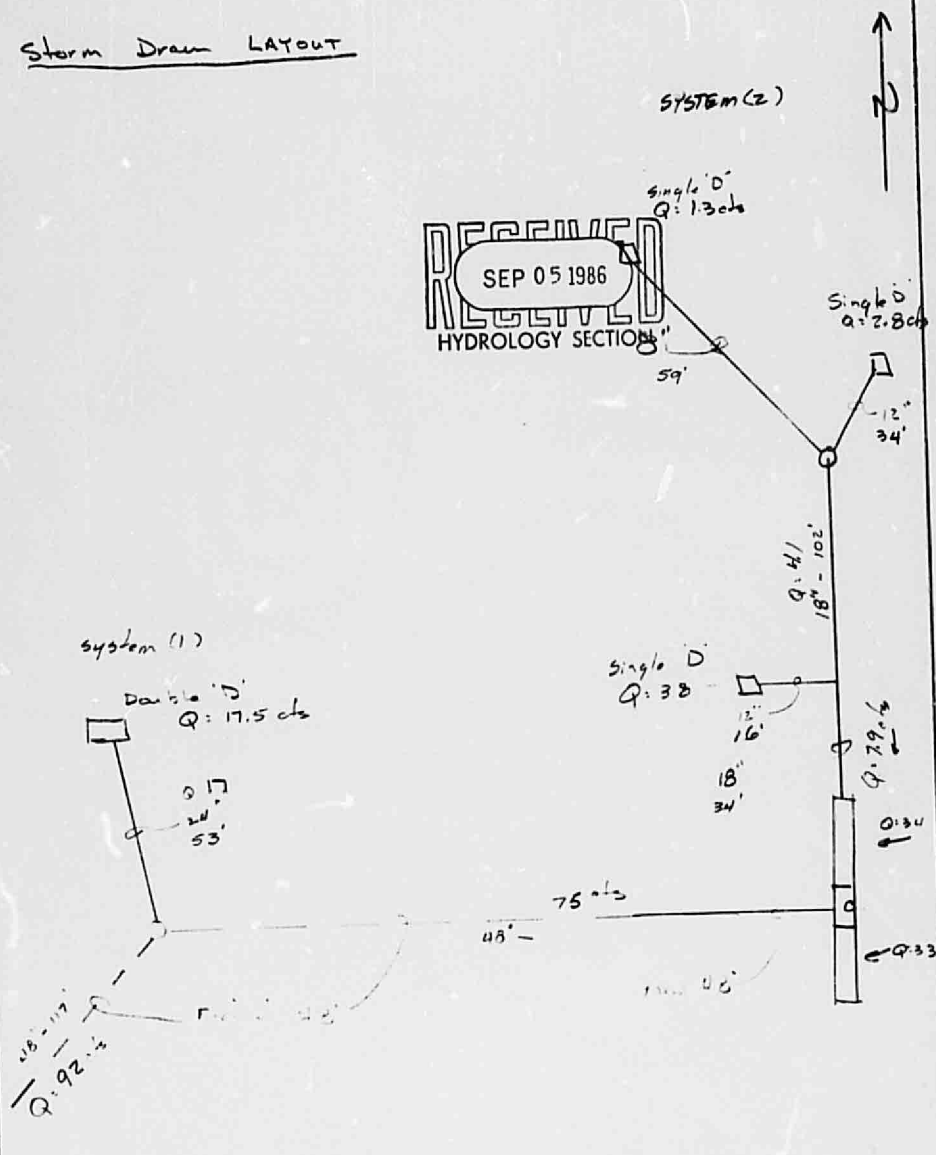
C.B.

DATE:

8-1-86

SUBJECT

DRAINAGE

Storm Drain LAYOUT

SUBJECT

SKYVIEW CENTER

BY: P. Burn

DATE: 8-21-86

SHEET 2 OF 3

HGL Sur System (2)

[illegible]

DAUM

PROJECT

SKYVIEW CENTER

PROJECT NO.

BY:

SUBJECT

HGL Surr System (2)

DATE:

SHEET 3 OF 3

STRUCTURE	STATION	SD SIZE	Q	A	V	K	S _p	L	Δ	LOSSES							E.G.	h _v	H.G.		
										H _f	H _o	H _d	H _t	H _{mh}	H _{misc}	ΣH _L					
Tac	0+34																				
		12	3.8	0.79	4.84	35.6	0.011746	16	-	0.18						0.18	59.01	0.36	58.65		
CB	0+50									CB Friction					0.50	0.50	59.19	0.36	58.83		
										Grate = 61.60	OK						59.69	0.36	59.33		
MH	1+36																				
		2	1.3	0.35	3.72	12	0.011673	59	-	0.68						0.68	59.00	0.22	58.78		
CB	1+95									CB Friction					0.5	0.5	59.68	0.22	59.46		
										Grate = 63.20	OK						60.18	0.22	59.96		

DMJM

ALBUQUERQUE

PROJECT

SKY VIEW CENTER

PROJECT NO.

4671-12-01

PAGE

BY:

C. E. Bunn

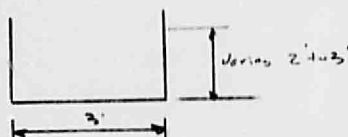
DATE:

8-21-86

SUBJECT

DRAINAGE CALCS - City Project No. 2996

Catch Basin - Full Street Width



RECEIVED
SEP 05 1986
HYDROLOGY SECTION

Capacity @ 2'

S: 0.05 %

$$Q = \frac{1.486}{0.013} (6) \left(\frac{1}{4}\right)^{1/3} (0.05)^{1/2}$$

$$= 138 \text{ cfs.} \rightarrow 42 \text{ cfs} \quad 34 \text{ cfs} + (8 \text{ cfs overflow})$$

HW depth at 48" pipe

$$Q = 67 \text{ cfs} + (8 \text{ cfs overflow})$$

$$= 75 \text{ cfs}$$

Assume Culvert - Inlet Control

$$HW = 3.8'$$

$$HW = 52.0 \text{ in.} = 3.8'$$

$$= 55.8$$

$$\text{Area} = 9 \text{ sq. ft.} = 57.60 \text{ (sq. ft.)}$$

$$\text{Area} = 57.60 \text{ sq. ft.}$$

$$= 2' \text{ sq. ft.}$$

FIGURE 13: 48-Inch Diameter Concrete Pipe

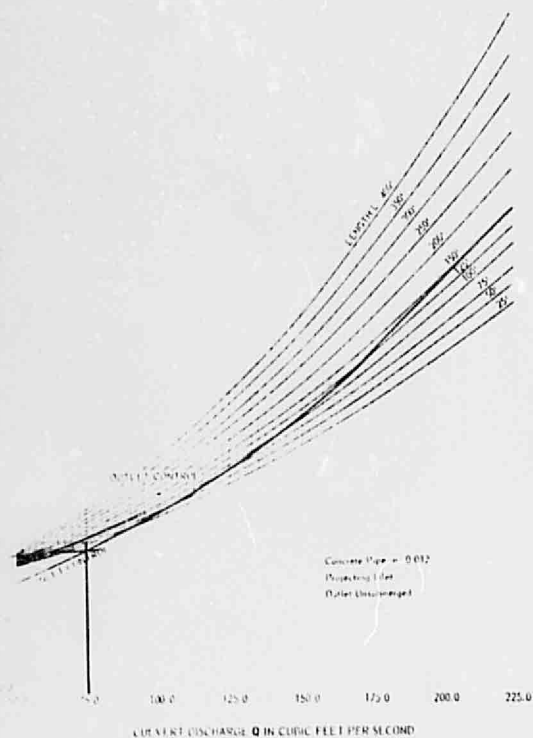
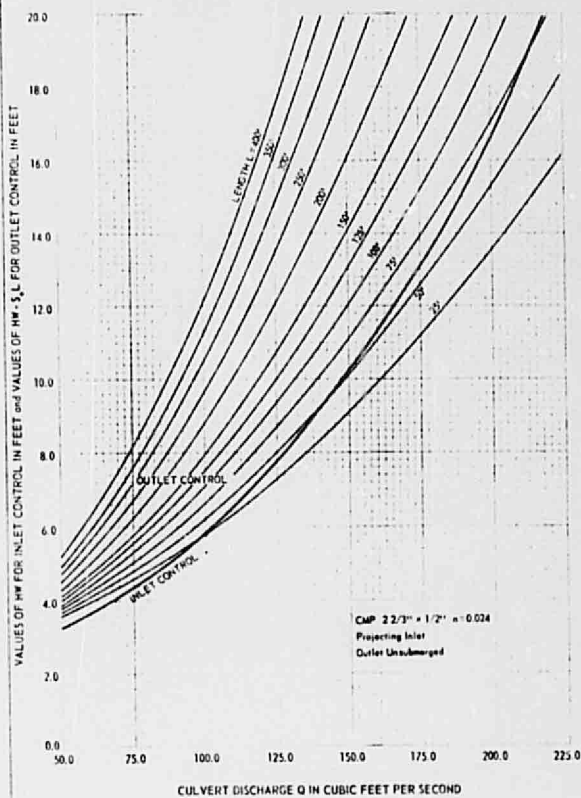
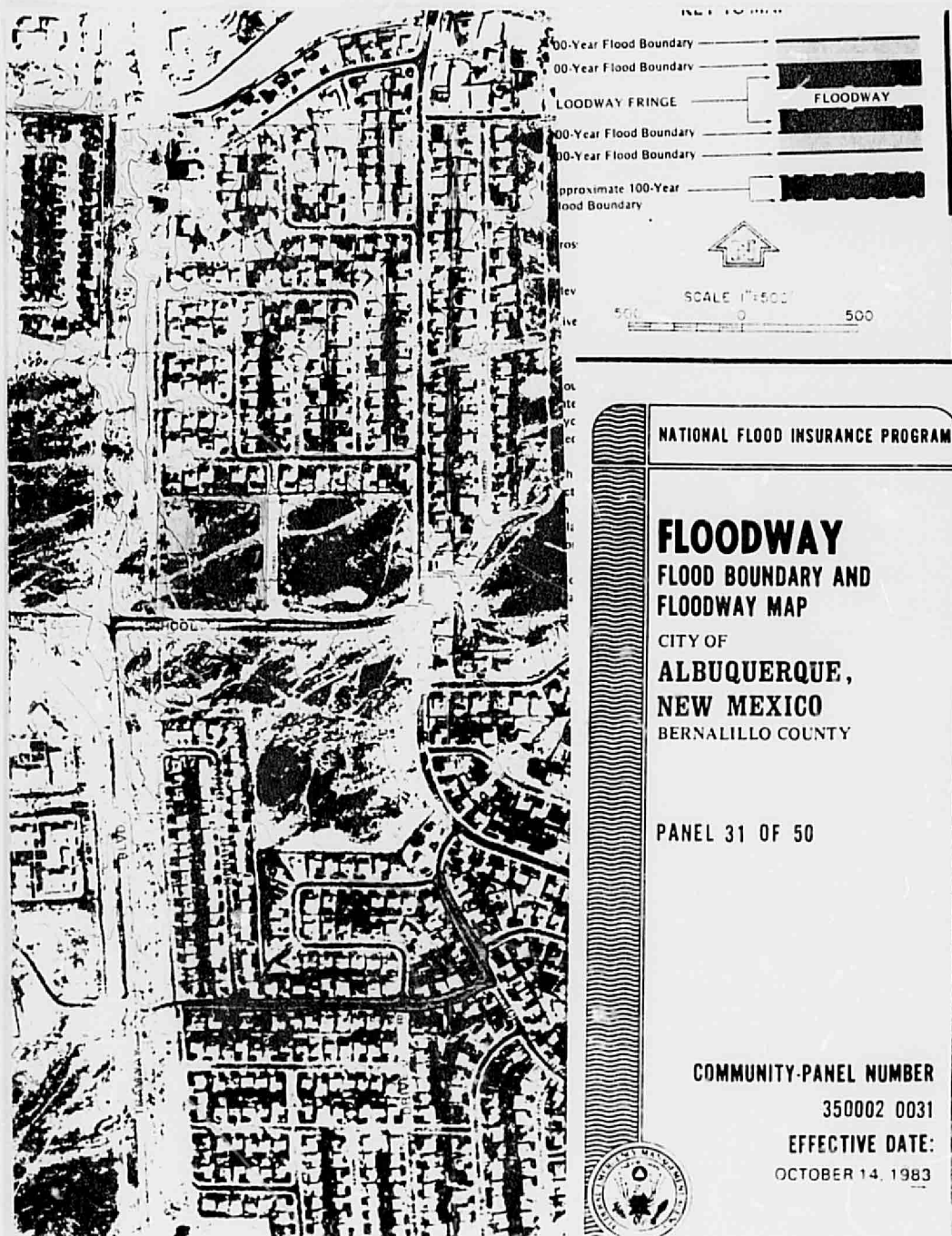


FIGURE 14: 48-Inch Diameter Corrugated Metal Pipe



Interpolate for intermediate culvert lengths

[illegible]



SKYVIEW CENTER PART ONE

# CALC	NODE 1	NODE 2	ELEV	D1	D2	Q	A	V1	V2	K	LENGTH	DELTA	HV	n
1.000	905.000	905.000	30.000	48.000	0.000	92.000	12.566	7.321	0.000	0.000	0.000	0.000	0.832	0.000
2.000	905.000	1022.000	33.200	48.000	0.000	92.000	12.566	0.000	0.000	1436.431	117.000	0.000	0.832	0.013
3.000	1022.000	0.000	33.200	48.000	48.000	92.000	1.000	5.332	7.321	0.000	6.000	45.000	0.441	0.013
4.000	1022.000	1137.000	38.850	48.000	0.000	67.000	12.566	0.000	0.000	1436.431	115.000	0.000	0.441	0.013
5.000	1137.000	1137.000	38.850	30.000	0.000	67.000	4.909	0.000	0.000	0.000	0.000	0.000	2.893	0.013

CODE	NODE	FS	FRIC L	MANH L	BEND L	EXP L	JUNC L	ANG L	CONT L	INLT L	TRANS L	TOT L	HGL	EGL
0.000	905.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	39.600	40.512
1.000	1022.000	0.004	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400	40.160	40.992
5.000	0.000	0.002	0.019	0.000	0.000	0.000	0.321	0.000	0.000	0.000	0.000	0.000	40.871	41.313
1.000	1137.000	0.002	0.250	0.000	0.000	0.000	0.321	0.000	0.000	0.000	0.000	1.051	41.122	41.563
0.000	1137.000	0.000	0.000	0.000	0.000	0.000	0.321	0.000	0.000	0.579	0.000	1.629	42.142	42.142

CODES

1 - PIPE SECTION 2 - MANHOLE 3 - PIPE-BEND 4 - EXPANSION 5 - JUNCTION
6 - ANGLE - POINT 7 - CONTRACTION 8 - INLETS 9 - TRANSITIONS

SKYVIEW CENTER PART TWO

#	CALC	NODE 1	NODE 2	ELEV	D1	D2	D	A	V1	V2	K	LENGTH	DELTA	HV	n
1.000	1137.000	1137.000	45.250	30.000	0.000	67.000	4.909	13.649	0.000	0.000	0.000	0.000	0.000	2.893	0.015
2.000	1137.000	1145.500	45.900	30.000	0.000	67.000	4.909	0.000	0.000	410.171	8.500	0.000	0.000	2.893	0.013
3.000	1145.500	0.000	45.900	30.000	30.000	67.000	1.000	12.406	13.649	0.000	2.000	0.000	0.000	2.390	0.013
4.000	1145.500	1153.500	46.400	30.000	0.000	60.900	4.909	0.000	0.000	410.171	8.000	0.000	0.000	2.390	0.013
5.000	1153.500	0.000	46.400	30.000	0.000	55.600	4.909	0.000	0.000	410.171	15.500	0.000	0.000	1.992	0.013
6.000	1153.500	1169.000	47.800	30.000	0.000	55.600	1.000	9.738	11.327	0.000	2.000	0.000	0.000	1.992	0.013
7.000	1169.000	0.000	47.800	30.000	0.000	47.800	4.909	0.000	0.000	410.171	8.000	0.000	0.000	1.472	0.013
8.000	1169.000	1177.000	48.200	30.000	0.000	47.800	1.000	8.149	9.738	0.000	2.000	0.000	0.000	1.472	0.013
9.000	1177.000	0.000	48.200	30.000	0.000	40.000	4.909	0.000	0.000	410.171	23.000	0.000	0.000	1.031	0.013
10.000	1177.000	1200.000	49.750	30.000	0.000	40.000	1.000	1.701412E+38	0.000	0.000	0.000	0.000	0.000	2.641944E+36	0.013
11.000	1200.000	1200.000	49.750	0.000	30.000	40.000	1.000	1.701412E+38	0.000	0.000	0.000	0.000	0.000	2.641944E+36	0.013

CODE	NODE	FS	FRIC L	MANH L	BEND L	EXP L	JUNC L	ANG L	CONT L	INLT L	TRANS L	TOT L	HGL	EGL
1.000	1137.000	0.000	0.000	0.000	0.000	0.000	0.321	0.000	0.000	0.000	0.000	2.158	47.750	50.643
1.000	1145.500	0.027	0.227	0.000	0.000	0.000	0.321	0.000	0.000	0.000	0.000	2.385	47.977	50.870
5.000	0.000	0.022	0.049	0.000	0.000	0.000	0.457	0.000	0.000	0.000	0.000	2.842	48.937	51.327
1.000	1153.500	0.022	0.176	0.000	0.000	0.000	0.457	0.000	0.000	0.000	0.000	3.019	49.113	51.503
5.000	0.000	0.018	0.040	0.000	0.000	0.000	0.367	0.000	0.000	0.000	0.000	3.386	49.678	51.870
1.000	1169.000	0.018	0.285	0.000	0.000	0.000	0.367	0.000	0.000	0.000	0.000	3.671	50.163	52.155
5.000	0.000	0.014	0.032	0.000	0.000	0.000	0.398	0.000	0.000	0.000	0.000	4.068	51.081	52.553
1.000	1177.000	0.014	0.189	0.000	0.000	0.000	0.398	0.000	0.000	0.000	0.000	4.177	51.189	52.662
5.000	0.000	0.010	0.023	0.000	0.000	0.000	0.310	0.000	0.000	0.000	0.000	4.487	51.941	52.972
1.000	1200.000	0.010	0.219	0.000	0.000	0.000	0.310	0.000	0.000	0.000	0.000	4.706	52.160	53.191
5.000	1200.000	1.701412E+38	1.701412E+38	0.000	0.000	0.000	0.000	1.701412E+38	0.000	0.000	0.000	0.000	1.701412E+38	1.674992E+38

CODES

- 1 - PIPE SECTION 2 - MANHOLE 3 - PIPE-BEND 4 - EXP. TON 5 - JUNCTION
 6 - ANGLE - POINT 7 - CONTRACTION 8 - INLETS 9 - TRANS. TNS

SKYVIEW CENTER PART TWO (ADDENDUM)

#	CALC	NODE 1	NODE 2	ELEV	D1	D2	Q	A	V1	V2	K	LENGTH	DELTA	HV	n
1.000	1200.000	1200.000	49.660	30.000	0.000	40.000	4.909	8.149	0.000	0.000	0.000	0.000	0.000	1.831	0.013
2.000	1200.000	0.000	49.750	24.000	30.000	40.000	1.000	6.366	8.149	0.000	0.000	6.000	45.000	0.629	0.013
3.000	1200.000	1205.500	51.800	24.000	0.000	20.000	3.142	0.000	0.000	226.224	8.000	0.000	0.629	0.013	
4.000	1205.500	0.000	51.800	18.000	24.000	20.000	1.000	5.659	6.366	0.000	4.000	45.000	0.497	0.013	
5.000	1205.500	1229.500	54.000	18.000	0.000	10.000	1.767	0.000	0.000	105.043	17.000	0.000	0.497	0.013	
6.000	1229.500	0.000	54.000	18.000	0.000	10.000	1.767	0.000	0.000	0.000	0.000	0.000	0.497	0.013	

CODE	NODE	FS	FRIC L	MANH L	BEND L	EXP L	JUNC L	ANG L	CONT L	INLT L	TRANS L	TOT L	HGL	EGL
5.000	1200.000	0.000	0.000	0.000	0.000	0.000	1.701412E+38	0.000	0.000	0.000	0.000	1.701412E+38	52.160	5
3.191														
5.000	0.000	0.000	0.052	0.000	0.000	0.000	0.776	0.000	0.000	0.000	0.000	1.701412E+38	53.338	53.967
1.000	1205.500	0.000	0.063	0.000	0.000	0.000	0.776	0.000	0.000	0.000	0.000	1.701412E+38	53.400	54.029
5.000	0.000	0.009	0.034	0.000	0.000	0.000	1.132	0.000	0.000	0.126	0.000	1.701412E+38	54.664	55.162
1.000	1229.500	0.009	0.154	0.000	0.000	0.000	1.132	0.000	0.000	0.000	0.000	1.701412E+38	54.819	55.316
8.000	0.000	0.000	0.000	0.000	0.000	0.000	1.132	0.000	0.000	0.099	0.000	1.701412E+38	55.415	55.415

CODES

- | | | | | |
|-------------------|-----------------|---------------|-----------------|--------------|
| 1 - PIPE SECTION | 2 - MANHOLE | 3 - PIPE-BEND | 4 - EXPANSION | 5 - JUNCTION |
| 6 - ANGLE - POINT | 7 - CONTRACTION | 8 - INLETS | 9 - TRANSITIONS | |

Inlet Station	Outlet Mtr. Surf. Elevation	Diameter Outlet (Ft.)	Discharge Outlet (cfs)	Length Outlet (Ft.)	Friction Slope (Ft./Ft.)	Friction Loss (Ft.)	Outlet Vel. (fps)	Contraction Loss	Q(cfs) In To Junct.	Inlet Pipe Diameter
1022.0000	39.6800	4.0000	92.0000	117.0000	0.0041	0.4800	7.3211	0.2083	67.0000	4.0000
1137.0000	41.1900	4.0000	67.0000	115.0000	0.0022	0.2582	5.3317	0.1105	67.0000	4.0000
1145.5000	47.0500	2.5000	67.0000	8.5000	0.0267	0.2268	13.6491	0.7241	60.9000	2.5000
1153.5000	49.0800	2.5000	60.9000	15.5000	0.0220	0.3417	12.4065	0.5983	55.6000	2.5000
1169.0000	51.0600	2.5000	55.6000	8.0000	0.0184	0.1478	11.3267	0.4987	47.8000	2.5000

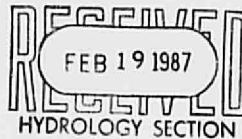
JUNCTION LOSSES									Loss For	Final
Velocity In (fps)	Q * V Product	V^2 /2g	Expansion Loss	Bend Angle 'K'	Bend Loss	T Hd. Loss (Ft.)	Sur. Inflow (Ent. 1.3)	Inlet Shape (Ent. 0.5)	Inflow/Shap (Ft.)	Head Loss (Ft.)
5.3317	357.2236	0.4420	0.1547	0.4250	0.1878	1.0309			0.0000	1.5189
5.3317	357.2236	0.4420	0.1547		0.0000	0.5114			0.0000	0.7656
12.4065	755.5532	2.3930	0.8376		0.0000	1.7777			0.0000	2.0153
11.3267	629.7672	1.9946	0.6981		0.0000	1.6381			0.0000	1.9799
9.7377	465.4642	1.4742	0.5160		0.0000	1.1617			0.0000	1.3087

Hydraulic
Grade Line
Elevation

41.19
41.96
49.08
51.06
52.37

J23/D15

DMJM



February 11, 1987

Skyview Partners, Ltd.
1336 Wyoming Blvd., N. E.
Albuquerque, New Mexico 87112

ATTN: Mr. Steve Garber

RE: Skyview Center 4671-12-01

Dear Sir:

On Wednesday, February 4, a meeting was held in the offices of Mr. Bill Mueller, City of Albuquerque. In attendance were myself, yourself, John Myers, Bill Mueller, Walt Nickerson, Jim Fink and Dan Hogan. The subject of the meeting was the financial responsibility for the reconstruction of the drop inlet located in the median of Indian School Road between Tramway Blvd. and Cumbres St. The structure was originally constructed early in the 1980's as part of the Tramway Blvd. Urban Systems Project. As such it was designed through the City of Albuquerque and constructed by the City, State and Federal Governments.

Development of Area 2, Sproul Security Subdivision (your Skyview Center) necessitates modification of the drop inlet to allow construction of a left turn bay from Indian School Road to the subject project. Our original design concept was to provide grates and structural members so that traffic could cross the existing drop inlet. Through the City DRC process the design concept was revised to provide a transverse grate the full width of Indian School Road and removal of the existing structure. This will provide a superior drainage facility and is in the best interest of all concerned.

Daniel, Mann, Johnson, & Mendenhall
Suite 280, 5700 Harper Drive, N.E.
Albuquerque, New Mexico 87109
Telephone: 505/822-7955

Planning
Engineering
Systems
Economics

Skyview Partners, Ltd.

February 11, 1987

Page - 2 -

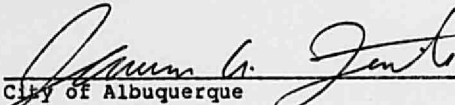
Due to ordinance conditions and resulting time constraints the City of Albuquerque cannot participate in the reconstruction of the existing structure. They have instead elected to participate in the construction of drainage structures for your future project on Area 3A, Sproul Security Subdivision. This participation will be limited to paying construction costs of the drainage facilities that are within City controlled areas ; that is, they will be limited to construction from your west property line to the existing drainage facilities and/or within the storm drainage easement along your south property line. This will require a separate, stand alone, set of construction documents that will go through the DRC review process. The City acknowledges their agreement to this particular financial obligation by their signature on this letter.

Sincerely,



J. J. Bordenave, P.E.

ACKNOWLEDGE



City of Albuquerque

JJB:cs

cc: Bill Mueller
John Myers
Walt Nickerson
Jim Fink
Dan Hogan
Fred Aguirre

DMJM

FILE COPY



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 768-7644

December 5, 1986

Charles Burn
DMJM
5700 Harper Drive, NE
Albuquerque, New Mexico 87109

RE: REVISED BUILDING PERMIT DRAINAGE PLAN FOR SKYVIEW CENTER
(J-23/D15) RECEIVED NOVEMBER 19, 1986

Dear Mr. Burn:

I have reviewed the above referenced plan, dated November 19, 1986, and do hereby give approval for sign-off for Building Permit.

Please see that a copy of this approved plan is attached to the permit sets for Hydrology sign-off.

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

Cordially,

Billy J. Goolsby

Billy J. Goolsby, P.E.
C.E./Hydrology Section

cc: Rick Duran
Steve Garber

BJB/bsj

PUBLIC WORKS DEPARTMENT

ENGINEERING GROUP

Telephone (505) 768-2500

Walter Nickerson, P.E., City Engineer

AN EQUAL OPPORTUNITY EMPLOYER

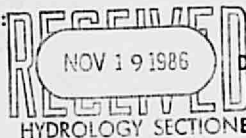
DRAINAGE INFORMATION SHEET

PROJECT TITLE: SKYVIEW CENTER ZONE ATLAS/DRNG. FILE #: J23-D15
 LEGAL DESCRIPTION: AREA 2 - SPROUL-SECURITY DIVISION NO. 2
 CITY ADDRESS: _____
 ENGINEERING FIRM: DMJM CONTACT: CHARLES BURM
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 OWNER: SKYVIEW PARTNERSHIP, LTD. CONTACT: STEVE GARBER
 ADDRESS: 1336 WYOMING BLVD. PHONE: 294-9595
 ARCHITECT: DESIGN COLLABORATIVE SOUTHWEST CONTACT: MARK SCHIFF
 ADDRESS: 105 FOURTH STREET, S. W. PHONE: 843-9639
 SURVEYOR: DMJM (TOPO ONLY) CONTACT: WALT RICHARDS
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 CONTRACTOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☐ YES☐ NO

☐ COPY OF CONFERENCE RECAP
 SHEET PROVIDED

DRB NO. 86-335HYDROLOGY SECTION EPC NO. 2-71-178-5

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 Revision to (SPECIFY)
Approved Plan.

DATE SUBMITTED: 11-19-86BY: Charles Burm

DMJM/ Adam, Hamlyn, Anderson

Reply To: ☐ Phoenix, Arizona 85014
☒ Albuquerque, NM 87109

4751 North Fifteenth Street
5700 Harper Dr. N.E., Suite 280

602-264-1397
505-822-7955

LETTER OF TRANSMITTAL

TO: CITY of Albuquerque
Design Hydrology

ATTN: Mr. Billy Goolsby

DATE: <u>11-19-86</u>	PROJECT NO. <u>4671-12-01</u>
PROJECT: <u>SKYVIEW CENTER</u>	

WE TRANSMIT:

- ☒ herewith ☐ under separate cover via _____
☐ in accordance with your request _____

FOR YOUR:

- ☒ approval ☐ distribution to parties ☐ information
☐ review & comment ☐ record
☐ use ☐ _____

THE FOLLOWING:

- ☒ prints ☐ copy of letter ☐ change order
☐ originals ☐ specifications ☐ calculations
☐ shop drawings ☐ _____

Copies	Dwg. No.	DESCRIPTION	Action Code
1		Revised Grading Plan	E
1		Info Sheet	

Action Code

- A. REVIEWED
B. REVIEWED AS NOTED
C. REVISE & RESUBMIT

D. REJECTED

E. See REMARKS below

REMARKS: Billy, This should be the last change I hope.

COPIES TO: _____

If enclosures are not as noted,
please inform us immediately.

SIGNED: Charles B. Brun

FILE COPY



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 768-7644

November 11, 1986

Charles Burn
DMJH
5700 Harper Drive, NE
Albuquerque, New Mexico 87109

RE: REVISED BUILDING PERMIT DRAINAGE PLAN FOR SKYVIEW CENTER
(J-23/D15) RECEIVED OCTOBER 24, 1986

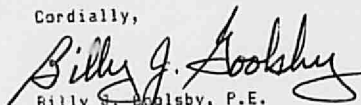
Dear Mr. Burn:

I have reviewed the above referenced plan, dated October 31, 1986, and do hereby give approval for sign-off for Building Permit.

I do find it a little strange that the plan date is later than the submittal date. However, since it is the date for the latest revision, please see that a copy of this approved plan is attached to the permit sets for Hydrology sign-off.

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

Cordially,


Billy G. Goolsby, P.E.
C.E./Hydrology Section

cc: Rick Duran
Steve Fowler

BJG/bsj

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

DRAINAGE INFORMATION SHEET

PROJECT TITLE: SKYVIEW CENTER ZONE ATLAS/DRNG. FILE #: J23-D15
 LEGAL DESCRIPTION: AREA 2 SPROUL-SECURITY SUBDIVISION NO. 2
 CITY ADDRESS: _____
 ENGINEERING FIRM: DMJM CONTACT: CHARLES BURM
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 OWNER: SKYVIEW PARTNERSHIP, LTD. CONTACT: STEVE FOWLER
 ADDRESS: 1336 WYOMING BLVD. PHONE: 294-9595
 ARCHITECT: DESIGN COLLABORATIVE, S. W. CONTACT: MARK SCHIFF
 ADDRESS: 105 FOURTH STREET, S. W. PHONE: 843-9639
 SURVEYOR: DMJM (TOPO ONLY) CONTACT: WALT RICHARDS
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 CONTRACTOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

YES

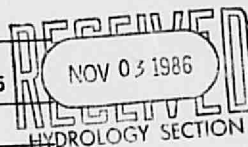
NO

COPY OF CONFERENCE RECAP
SHEET PROVIDED

DRB NO. 86-335

EPC NO. Z-71-178-5

PROJ. NO. _____



TYPE OF SUBMITTAL:

_____ DRAINAGE REPORT
_____ DRAINAGE PLAN
_____ CONCEPTUAL GRADING & DRAINAGE PLAN
X 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
X OTHER Reason to Approve I plan. (SPECIFY)

DATE SUBMITTED: 10-31-86

BY: Charles Burn

DMJM/ Adam, Hamlyn, Anderson

Reply To: ☐ Phoenix, Arizona 85014
☒ Albuquerque, NM 87109

4751 North Fifteenth Street
5700 Harper Dr. N.E., Suite 280

602-264-1397
505-822-7955

LETTER OF TRANSMITTAL

TO: CITY OF Albuquerque
Public Works
Design Hydrology
ATTN: Mr. Billy Gasky

DATE: <u>10-31-86</u>	PROJECT NO. <u>4671-12-01</u>
PROJECT: <u>SKYVIEW CENTER</u>	

WE TRANSMIT:

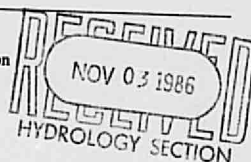
☒ herewith ☐ under separate cover via _____
☐ in accordance with your request _____

FOR YOUR:

☒ approval ☐ distribution to parties ☐ information
☐ review & comment ☐ record
☐ use ☐ _____

THE FOLLOWING:

☒ prints ☐ copy of letter ☐ change order
☐ originals ☐ specifications ☐ calculations
☐ shop drawings ☐ _____



Copies	Dwg. No.	DESCRIPTION	Action Code
1		Revised Grading Plan for SKYVIEW	E
1		Info Sheet	

Action Code A. REVIEWED D. REJECTED
 B. REVIEWED AS NOTED E. See REMARKS below
 C. REVISE & RESUBMIT

REMARKS: I hope this is the last one.

COPIES TO: _____

If enclosures are not as noted,
please inform us immediately.

SIGNED: Charles Baird

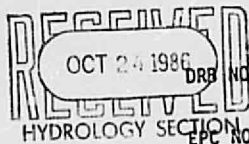
DRAINAGE INFORMATION SHEET

PROJECT TITLE: SKYVIEW CENTER ZONE ATLAS/Drng. FILE #: J23-D15
 LEGAL DESCRIPTION: AREA 2 SPROUL-SECURITY SUBDIVISION NO. 2
 CITY ADDRESS: _____
 ENGINEERING FIRM: DMJM CONTACT: CHARLES BURM
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 OWNER: SKYVIEW PARTNERSHIP, LTD. CONTACT: STEVE FOWLER
 ADDRESS: 1336 WYOMING BLVD. PHONE: 294-9595
 ARCHITECT: DESIGN COLLABORATIVE, S. W. CONTACT: MARK SCHIFF
 ADDRESS: 105 FOURTH STREET, S. W. PHONE: 843-9639
 SURVEYOR: DMJM (TOPO ONLY) CONTACT: WALT RICHARDS
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 CONTRACTOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☐ YES☐ NO

☐ COPY OF CONFERENCE RECAP
☐ SHEET PROVIDED



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 Revision to (SPECIFY)
Approved Plan.

DATE SUBMITTED: 10-24-86BY: Charles Burm

DMJM/ Adam, Hamlyn, Anderson

Reply To: ☐ Phoenix, Arizona 85014
☒ Albuquerque, NM 87109

4751 North Fifteenth Street
5700 Harper Dr. N.E., Suite 280

602-264-1397
505-822-7955

LETTER OF TRANSMITTAL

TO: CITY OF ALBUQUERQUE
Public Works Department
Design Hydrology Section
ATTN: Mr. Billy Goolsby

DATE:	PROJECT NO.
<u>10-24-86</u>	<u>4671-12-01</u>
PROJECT:	
<u>SKYVIEW CENTER</u>	
<u>GRADING PLAN</u>	

WE TRANSMIT:

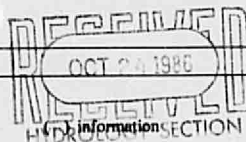
☒ herewith ☐ under separate cover via _____
☐ in accordance with your request _____

FOR YOUR:

☒ approval ☐ distribution to parties
☐ review & comment ☐ record
☐ use ☐ _____

THE FOLLOWING:

☒ prints ☐ copy of letter ☐ change order
☐ originals ☐ specifications ☐ calculations
☐ shop drawings ☐ _____



Copies	Dwg. No.	DESCRIPTION	Action Code
1		Revised Grading & Drainage Plan.	E
1		DRAINAGE Information Sheet.	

Action Code

A. REVIEWED
B. REVIEWED AS NOTED
C. REVISE & RESUBMIT

D. REJECTED
E. See REMARKS below

REMARKS: Billy, I have boxed the changed Areas 3 & 4
It there are any questions, please call

COPIES TO: _____

If enclosures are not as noted,
please inform us immediately.

SIGNED: Charles Bunn

FILE COPY



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 768-7644

October 7, 1986

Charles Burn
DHJM
5700 Harper Drive, NE
Albuquerque, New Mexico 87109

RE: REVISED DRAINAGE PLAN FOR SKYVIEW CENTER
(J-23/D15) RECEIVED OCTOBER 2, 1986

Dear Mr. Burn

The above referenced plan, dated September 26, 1986, is hereby approved.

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

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

Cordially,

Billy J. Goolbsy, P.E.
C.E./Hydrology Section

BJG/bsj

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

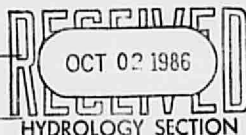
DRAINAGE INFORMATION SHEET

PROJECT TITLE: SKYVIEW CENTER ZONE ATLAS/DRNG. FILE #: J23-D15
 LEGAL DESCRIPTION: AREA 2 SPROUL-SECURITY SUBDIVISION NO. 2
 CITY ADDRESS: _____
 ENGINEERING FIRM: DMJM CONTACT: CHARLES BURM
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 OWNER: SKYVIEW PARTNERSHIP, LTD. CONTACT: STEVE FOWLER
 ADDRESS: 1336 WYOMING BLVD. PHONE: 294-9595
 ARCHITECT: DESIGN COLLABORATIVE, S. W. CONTACT: MARK SCHIFF
 ADDRESS: 105 FOURTH STREET, S. W. PHONE: 843-9639
 SURVEYOR: DMJM (TOPO ONLY) CONTACT: WALT RICHARDS
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 CONTRACTOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☐ YES☐ NO☐ COPY OF CONFERENCE RECAP
SHEET PROVIDEDDRB NO. 86-335EPC NO. Z-71-178-5

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 *Revision to Approval* (SPECIFY)
Plan.

DATE SUBMITTED: 10-1-86
 BY: Charles Burm

DMJM/ Adam, Hamlyn, Anderson

Reply To: ☐ Phoenix, Arizona 85014
☒ Albuquerque, NM 87109

4751 North Fifteenth Street
5700 Harper Dr. N.E., Suite 280

602-264-1397
505-822-7955

LETTER OF TRANSMITTAL

TO: City of Albuquerque
Design Hydrology

ATTN: Mr. Billy Golsky

DATE: <u>10-1-86</u>	PROJECT NO. <u>4671-12-01</u>
PROJECT: <u>SKYVIEW CENTER</u>	

WE TRANSMIT:

- ☒ herewith ☐ under separate cover via _____
☐ in accordance with your request

FOR YOUR:

- ☒ approval
☐ review & comment
☐ use

☐ distribution to parties
☐ record

☐ information

THE FOLLOWING:

- ☒ prints ☐ copy of letter ☐ change order
☐ originals ☐ specifications ☐ calculations
☐ shop drawings ☐ _____

Copies	Dwg. No.	DESCRIPTION	Action Code
1		SKYVIEW Center Grading Plan Revised 9-26-86	12

Action Code

- A. REVIEWED
B. REVIEWED AS NOTED
C. REVISE & RESUBMIT

D. REJECTED

E. See REMARKS below

REMARKS: Billy, The biggest change is the location of the Handicapped ramp at the North End of the East Building. If there are any questions, please call.

COPIES TO: _____

If enclosures are not as noted,
please inform us immediately.

SIGNED: Charles Burn

FILE COPY



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

September
~~February~~ 26, 1986

Charles Burn
OWN
5700 Harper Drive, NE
Albuquerque, New Mexico 87109

RE: REVISED UTILITY PLAN FOR SKYVIEW CENTER
(J-237015) RECEIVED SEPTEMBER 25, 1986

Dear Mr. Burn

The above referenced plan, dated September 25, 1986, is hereby approved. I am not sure what the approval of this plan will achieve. However, please be sure that this plan is attached to the construction set for the contractor's use.

If I can be of further assistance, please call me at 768-2650

Cordially,

Billy J. Goolsby
Billy J. Goolsby, P.E.
C.E./Hydrology Section

B.J.G./bsj

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

DRAINAGE INFORMATION SHEET

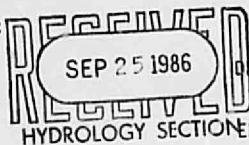
PROJECT TITLE: SKYVIEW CENTER ZONE ATLAS/DRNG. FILE #: J23-D15
 LEGAL DESCRIPTION: AREA 2 SPROUL-SECURITY SUBDIVISION NO. 2
 CITY ADDRESS: _____
 ENGINEERING FIRM: DMJM CONTACT: CHARLES BURM
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 OWNER: SKYVIEW PARTNERSHIP, LTD. CONTACT: STEVE FOWLER
 ADDRESS: 1336 WYOMING BLVD. PHONE: 294-9595
 ARCHITECT: DESIGN COLLABORATIVE, S. W. CONTACT: MARK SCHIFF
 ADDRESS: 105 FOURTH STREET, S. W. PHONE: 843-9639
 SURVEYOR: DMJM (TOPO ONLY) CONTACT: WALT RICHARDS
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 CONTRACTOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

YES

NO

COPY OF CONFERENCE RECAP
SHEET PROVIDED



ORB NO. 86-335

EPC NO. Z-71-178-5

PROJ. NO. _____

TYPE OF SUBMITTAL:

DRAINAGE REPORT

X 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

X OTHER Revised Utility Plan (SPECIFY)

DATE SUBMITTED: 9-25-86

BY: Charles Burm

DMJM

September 5, 1986



City of Albuquerque
Public Works Department
Design Hydrology
P. O. Box 1293
Albuquerque, NM 87103

RE: SKYVIEW CENTER
City Project No. 2996
DMJM No. 4671-12-01

ATTN: Billy Goolsby

Dear Mr. Goolsby:

Transmitted herewith for your review and approval are the following:

1. Revised Site Utility Plan.
2. Revised H.G.L. calculations for the Site Storm Drains.
3. Two (2) sets of revised turn bay plans.
4. Two (2) copies of revised H.G.L. calculations for left turn bay.
5. Revised S.O. 19 for the Southwest Corner.

Due to the changes at the turn bay, we have revised the site storm drain. There are now two (2) connections to the site, one (1) at the new catch basin for the turn bay and one (1) at the Southwest corner of the site.

If there are any questions, please call.

Sincerely,

Charles Burn

Charles Burn

Attachments

CB/dt

Daniel, Mann, Johnson, & Mendenhall
Suite 280, 5700 Harper Drive, N.E.
Albuquerque, New Mexico 87109
Telephone: 505/822-7955

Planning
Engineering
Systems
Economics

DRAINAGE INFORMATION SHEET

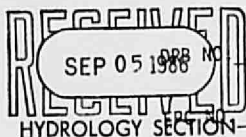
PROJECT TITLE: SKYVIEW CENTER ZONE ATLAS/DRNG. FILE #: J23-D15
 LEGAL DESCRIPTION: AREA 2 SPROUL-SECURITY SUBDIVISION NO. 2
 CITY ADDRESS: _____
 ENGINEERING FIRM: DMJM CONTACT: CHARLES BURM
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 OWNER: SKYVIEW PARTNERSHIP, LTD. CONTACT: STEVE FOWLER
 ADDRESS: 1336 WYOMING BLVD. PHONE: 294-9595
 ARCHITECT: DESIGN COLLABORATIVE, S. W. CONTACT: MARK SCHIFF
 ADDRESS: 105 FOURTH STREET, S. W. PHONE: 843-9639
 SURVEYOR: DMJM (TOPO ONLY) CONTACT: WALT RICHARDS
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 CONTRACTOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

YES

NO

COPY OF CONFERENCE RECAP
SHEET PROVIDED



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 Revision to Approval (Specify) Plan.

DATE SUBMITTED: 9-5-86

BY: Charles Burr

DRAINAGE INFORMATION SHEET

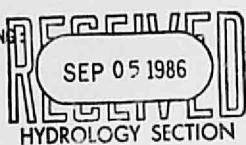
PROJECT TITLE: SKYVIEW CENTER ZONE ATLAS/DRNG. FILE #: J23-D15
 LEGAL DESCRIPTION: AREA 2 SPROUL-SECURITY SUBDIVISION 2
 CITY ADDRESS: _____
 ENGINEERING FIRM: DMJM CONTACT: CHARLES BURM
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 OWNER: SKYVIEW PARTNERSHIP, LTD. CONTACT: STEVE FOWLER
 ADDRESS: 1336 WYOMING BLVD. PHONE: 294-9595
 ARCHITECT: DESIGN COLLABORATIVE, S. W. CONTACT: MARK SCHIFF
 ADDRESS: 105 FOURTH STREET, S. W. PHONE: 843-9639
 SURVEYOR: DMJM (TOPO ONLY) CONTACT: WALT RICHARDS
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 CONTRACTOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

YES

NO

COPY OF CONFERENCE RECAP SHEET PROVIDED



DRB NO. 86-335

EPC NO. Z-71-178-5

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 Offsite Improvement (SPECIFY)
Roads.

DATE SUBMITTED: 9-5-86
 BY: Charles Burm

DRAINAGE INFORMATION SHEET

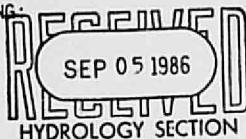
PROJECT TITLE: SKYVIEW CENTER ZONE ATLAS/DRNG. FILE #: J23-D15
 LEGAL DESCRIPTION: AREA 2 SPROUL-SECURITY SUBDIVISION NO. 2
 CITY ADDRESS: _____
 ENGINEERING FIRM: DMJM CONTACT: CHARLES BURM
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 OWNER: SKYVIEW PARTNERSHIP, LTD. CONTACT: STEVE FOWLER
 ADDRESS: 1336 WYOMING BLVD. PHONE: 294-9595
 ARCHITECT: DESIGN COLLABORATIVE, S. W. CONTACT: MARK SCHIEF
 ADDRESS: 105 FOURTH STREET, S. W. PHONE: 843-9639
 SURVEYOR: DMJM (TOPO ONLY) CONTACT: WALT RICHARDS
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 CONTRACTOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☐ YES

☐ NO

☐ COPY OF CONFERENCE RECAP
SHEET PROVIDED



DRB NO. 86-335

EPC NO. Z-71-178-5

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 Revised SO 19 (SPECIFY)

DATE SUBMITTED: 9-5-86
 BY: Charles Burm

DMJM/ Adam, Hamlyn, Anderson

Reply To: ☐ Phoenix, Arizona 85014
☒ Albuquerque, NM 87109

4751 North Fifteenth Street
5700 Harper Dr. N.E., Suite 280

602-264-397
505-822-7955

LETTER OF TRANSMITTAL

TO: City of Albuquerque

ATTN:

DATE: 9-5-86	PROJECT NO. 4671-12-01
PROJECT: SKYVIEW CENTER	

WE TRANSMIT:

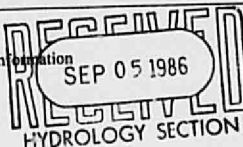
- ☒ herewith ☐ under separate cover via _____
☐ in accordance with your request _____

FOR YOUR:

- ☒ approval
☐ review & comment
☐ use

- ☐ distribution to parties
☐ record
☐ _____

☐ information



THE FOLLOWING:

- ☐ prints
☒ originals
☐ shop drawings

- ☐ copy of letter
☐ specifications
☐ _____

- ☐ change order
☐ calculations

Copies	Dwg. No.	DESCRIPTION	Action Code
1		SO 19 - Revised 9-2-86	R

Action Code

- A. REVIEWED
B. REVIEWED AS NOTED
C. REVISE & RESUBMIT

- D. REJECTED
E. See REMARKS below

REMARKS:

Greg Olson has requested Fred Aguirre's signature
on the revision before resubmitting SO 19 to Eng.
If there are any questions, please call

COPIES TO:

If enclosures are not as noted,
please inform us immediately.

SIGNED:

Charles Beard

August 7, 1986

I talked with Mr. Charles Burns today regarding his latest submittal dated July 25, 1986.

I told him that I have verified his design calculations for the storm sewer system.

He told me that he will be making some changes to the plans to comply with the agreement he has with Dan Hogan.

Therefore this letter to the file will serve as an approval to his submittal but ~~with~~ there will not be any official letter sent out until I have a chance to review the upcoming revisions.

Mr. Burns said that he does not need any letter at this time and will also wait.

B. Goolsby

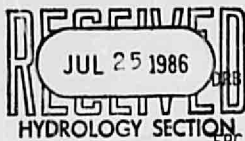
DRAINAGE INFORMATION SHEET

PROJECT TITLE: SKYVIEW CENTER ZONE ATLAS/DRNG. FILE #: J23-D15
 LEGAL DESCRIPTION: AREA 2 SPROUL-SECURITY SUBDIVISION NO. 2
 CITY ADDRESS: _____
 ENGINEERING FIRM: DMJM CONTACT: CHARLES BURM
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 OWNER: SKYVIEW PARTNERSHIP, LTD. CONTACT: STEVE FOWLER
 ADDRESS: 1336 WYOMING BLVD. PHONE: 294-9595
 ARCHITECT: DESIGN COLLABORATIVE, S. W. CONTACT: MARK SCHIFF
 ADDRESS: 105 FOURTH STREET, S. W. PHONE: 843-9639
 SURVEYOR: DMJM (TOPO ONLY) CONTACT: WALT RICHARDS
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 CONTRACTOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☐ YES☐ NO

☐ COPY OF CONFERENCE RECAP
☐ SHEET PROVIDED

DAB NO. 86-335EPC NO. Z-71-178-5

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 Public Infrastructure (SPECIFY)
improvements

DATE SUBMITTED: 7-25-86BY: Charles Burm

DMJM/ Adam, Hamlyn, Anderson

Reply To: ☐ Albuquerque, NM 87109

5700 Harper Dr., NE, Suite 280

505-822-7955

TO: CITY OF ALBUQUERQUE
Design Hydrology

ATTN: Mr. Billy Goolsby

LETTER OF TRANSMITTAL

DATE: 7-24-86	PROJECT NO. 4671-12-01
PROJECT:	

RECEIVED
JUL 25 1986
HYDROLOGY SECTION

WE TRANSMIT:

☒ herewith ☐ under separate cover via
☒ in accordance with your request

FOR YOUR:

☒ approval ☐ distribution to parties ☐ information
☒ review & comment ☐ record
☐ use ☐

THE FOLLOWING:

☒ prints ☐ copy of letter ☐ change order
☐ originals ☐ specifications ☐ calculations
☐ shop drawings ☒

Copies	Dwg. No.	DESCRIPTION	Action Code
2		Left Turn Bay Plans	
2		Drainage Calks	
2		Letter to Jim Fink	
1		Info Sheet	

Action Code

A. REVIEWED

B. REVIEWED AS NOTED

C. REVISE & RESUBMIT

D. REJECTED

E. See REMARKS below

REMARKS:

COPIES TO:

If enclosures are not as noted,
please inform us immediately.

SIGNED:

Charles Beun

FILE COPY



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

July 24, 1986

Charles Burn
DMJM
5700 Harper Drive, NE
Albuquerque, New Mexico 87109

RE: REVISED DRAINAGE PLAN FOR SKYVIEW CENTER (J-23/D15)
RECEIVED JULY 2, 1986

Dear Mr. Burn:

The above referenced plan, dated July 1, 1986, is hereby approved for the purpose of obtaining a building permit.

Please attach a copy of this approved plan along with the appropriately approved "Private Drainage Facilities Within Public Right-of-Way/Easement" document to the permit sets prior to Hydrology sign-off.

If the drop inlets and connecting lines are to be constructed by Work Order, please provide a copy of the plans along with the project number for sign-off.

If I can be of further assistance, please call 766-7644.

Cordially,

Billy J. Goolsby
Billy J. Goolsby, P.E.
C.E./Hydrology Section

BJG/bsj

PUBLIC WORKS DEPARTMENT

ENGINEERING GROUP

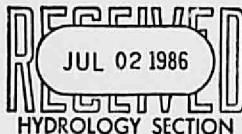
Telephone (505) 768-2500

Walter Nickerson, P.E., City Engineer

AN EQUAL OPPORTUNITY EMPLOYER

DMJM

June 19, 1986



City of Albuquerque
Design Hydrology
P. O. Box 1293
Albuquerque, New Mexico 87103

ATTN: Mr. Billy Goolsby

RE: SKYVIEW CENTER Drainage Plan J23-D15
DMJM Job # 4671-12-02

Dear Mr. Goolsby:

We have revised the above referenced plan per your request in regard to the catch basin at the Southwest corner. The catch basin has been placed in a shallow sump.

Enclosed is a copy of a letter to Mr. Jim Fink in regards to the Indian School Road turnbay. The modification to the existing structure should have no impact on the on-site drainage. Preliminary analysis of the 100 year flow in Indian School Road has been reduced from the original design of 180 cfs to approximately 68 cfs due to upstream improvements. Therefore, it was somewhat conservative to use the 180 cfs flow when we computed the hydraulic grade line for the site storm drain connection.

The preliminary design for the turn bay calls for 9 catch basis, 3 type "A" and 6 type double "D".

If there are any questions, please call.

Very truly yours,

Charles Burm

CB:cs

Daniel, Mann, Johnson, & Mendenhall
Suite 280, 5700 Harper Drive, N.E.
Albuquerque, New Mexico 87109
Telephone: 505/822-7955

Planning
Engineering
Systems
Economics

DRAINAGE INFORMATION SHEET

PROJECT TITLE: SKYVIEW CENTER ZONE ATLAS/DRNG. FILE #: J23-D15LEGAL DESCRIPTION: AREA 2 SPROUL-SECURITY SUBDIVISION NO. 2

CITY ADDRESS: _____

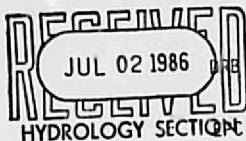
ENGINEERING FIRM: DMJMCONTACT: CHARLES BURMADDRESS: 5700 HARPER DRIVE, N. E.PHONE: 822-7955OWNER: SKYVIEW PARTNERSHIP, LTD.CONTACT: STEVE FOWLERADDRESS: 1336 WYOMING BLVD.PHONE: 294-9595ARCHITECT: DESIGN COLLABORATIVE, S. W.CONTACT: MARK SCHIFFADDRESS: 105 FOURTH STREET, S. W.PHONE: 843-9639SURVEYOR: DMJM (TOPO ONLY)CONTACT: WALT RICHARDSADDRESS: 5700 HARPER DRIVE, N. E.PHONE: 822-7955CONTRACTOR: N/A

CONTACT: _____

ADDRESS: _____

PHONE: _____

PRE-DESIGN MEETING:

☐ YES☐ NO☐ COPY OF CONFERENCE RECAP
SHEET PROVIDEDPROJ. NO. 86-335PROJ. NO. Z-71-178-5

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT☒ DRAINAGE PLAN - *Resubmitted*☐ 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:

7-2-86

BY:

Charles Burr

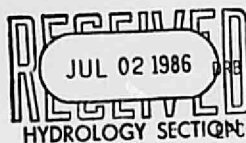
DRAINAGE INFORMATION SHEET

PROJECT TITLE: SKYVIEW CENTER ZONE ATLAS/DRNG. FILE #: J23-D15
 LEGAL DESCRIPTION: AREA 2 SPROUL-SECURITY SUBDIVISION NO. 2
 CITY ADDRESS: _____
 ENGINEERING FIRM: DMJM CONTACT: CHARLES BURM
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 OWNER: SKYVIEW PARTNERSHIP, LTD. CONTACT: STEVE FOWLER
 ADDRESS: 1336 WYOMING BLVD. PHONE: 294-9595
 ARCHITECT: DESIGN COLLABORATIVE, S. W. CONTACT: MARK SCHIFF
 ADDRESS: 105 FOURTH STREET, S. W. PHONE: 243-9639
 SURVEYOR: DMJM (TOPO ONLY) CONTACT: WALT RICHARDS
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 CONTRACTOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☐ YES☐ NO

☐ COPY OF CONFERENCE RECAP
☐ SHEET PROVIDED

NO. 86-335

Z-71-178-5

PROJ. NO. _____

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
☒ DRAINAGE PLAN - *Resubmitted*
☐ 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
☐ POST-GRADING PERMIT APPROVAL
☐ TRACING/PAVING PERMIT APPROVAL
 OTHER _____ (SPECIFY)

DATE SUBMITTED:

7-2-86

BY:

Charles Burr

FILE COPY



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

June 12, 1986

Mr. Charles Burn
DMJM
5700 Harper Drive NE
Albuquerque, NM 87108

REF REVISED DRAINAGE REPORT FOR SKYVIEW CENTER (323/D15) RECEIVED
MAY 28, 1986

Dear Mr. Burn:

I have reviewed the above referenced submittal and forward the following two (2) comments:

1. There are no elevations shown on the inlet at the driveway at the southwest corner of the property. The elevations that are given do not really indicate how the water is to be intercepted by the inlet. It appears as though the water may just flow out the driveway.
2. There is an existing drainage structure in the middle of Indian School Road. The utility plan provided indicates that this structure will be filled in and a turn lane built over the top of it. Obviously, Indian School Road is dependent upon this structure remaining as is. It cannot be filled in without providing some other means of intercepting the stormwaters in the roadway. How is this to be accomplished? If it is to be an underground system, it may or may not have an impact on the on-site system.

Should you have any questions or comments, please call.

Cordially,

Billy J. Goodisby
Billy J. Goodisby, PE
CE - Hydrology

BJG:mrk

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER

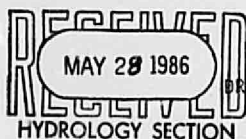
DRAINAGE INFORMATION SHEET

PROJECT TITLE: SKYVIEW CENTER ZONE ATLAS/DRNG. FILE #: J23-D15
 LEGAL DESCRIPTION: AREA 2 SPROUL-SECURITY SUBDIVISION NO. 2
 CITY ADDRESS: _____
 ENGINEERING FIRM: DMJM CONTACT: CHARLES BURM
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 OWNER: SKYVIEW PARTNERSHIP, LTD. CONTACT: STEVE FOWLER
 ADDRESS: 1336 WYOMING BLVD. PHONE: 294-9595
 ARCHITECT: DESIGN COLLABORATIVE, S. W. CONTACT: MARK SCHIFF
 ADDRESS: 105 FOURTH STREET, S. W. PHONE: 843-9639
 SURVEYOR: DMJM (TOPO ONLY) CONTACT: WALT RICHARDS
 ADDRESS: 5700 HARPER DRIVE, N. E. PHONE: 822-7955
 CONTRACTOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☐ YES☐ NO

☐ COPY OF CONFERENCE RECAP
 SHEET PROVIDED

DRB NO. 86-335EPC NO. Z-71-178-5

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:

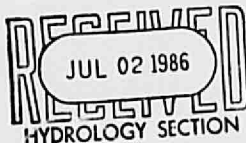
- ☐ SKETCH PLAT APPROVAL
☐ PRELIMINARY PLAT APPROVAL
☒ SITE DEVELOPMENT PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY APPROVAL
☐ ROUGH GRADING PERMIT APPROVAL
☐ GRADING/PAVING PERMIT APPROVAL
☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: 5-28-86BY: Charles Burm

DMJM/Adam, Hamlyn, Anderson

January 9, 1986

City of Albuquerque
Engineering Department
P. O. Box 1293
Albuquerque, NM 87103



ATTN: Mr. Jim Fink

RE: High Town Center - DMJM No. 4671-05-02

Dear Sir:

The following is submitted to confirm my understanding of our meeting in December, 1985 relative to the subject project. A print indicating the drainage facilities which are very unusual for the City of Albuquerque, affected by this letter is attached hereto.

Mr. Fosnaugh has given direction regarding a new median opening and left turnbay as shown on the attached sheet. To construct this traffic feature will require modification of the existing drop inlet located in the median and it is this modification that I wish to understand.

My understanding of our conversation is as follows:

1. You are receptive to the idea of altering the existing structure,
2. The alterations shall be designed such that the new structure shall have a capacity equal to or greater than the smaller of either the existing structure or the 100-year storm flow in the street at this location,
3. Cost of the design and construction of the modification shall be borne by the developer, and
4. The modified structure must meet the approval of the Traffic Engineer.

PAGE 2 - JIM FINK - DMJM 4671-05-02

If you are in agreement with this understanding, please signify by signing in the space provided below.

Sincerely,

Jean J. Bordenave
Jean J. Bordenave, P. E.

Attachments

AGREED: *Jim Fink*
Mr. Jim Fink

Subject to: The City Engineer's Approval

JJB/dt

DMJM/Adam, Hamlyn, Anderson



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

September 12, 1985

Jake Bordenave
DMJM
5700 Harper Dr. NE, Suite 280
Albuquerque, NM 87109

REF: CONCEPTUAL DRAINAGE PLAN FOR THE SPRINGS RESTAURANT COMPLEX (J23-D15)
RECEIVED SEPTEMBER 11, 1985

Dear Mr. Bordenave:

The above referenced plan, dated 7-26-85, is approved in concept and will grant site development plan sign-off. Please be advised that for building permit sign-off you will need to submit a detailed drainage plan for review and approval. Coordination with regard to the SAD projects in the area will be required.

If you should have any questions, please contact this office at 766-7644.

Sincerely,

Billy G. Goolsby
C.E./Design Hydrology

BJG/cl

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Darayne Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER

DMJM/Adam, Hamlyn, Anderson

August 28, 1985

MDD/ENGR - Hydrology
City of Albuquerque
P. O. Box 1293
Albuquerque, New Mexico 87103

Attn: Mr. Fred Aguirre, P. E.

Re: The Springs

Dear Sir:

The following narrative and attached drawing and maps are submitted for your review. The plan is being presented at the EPC meeting on September 19, 1985 and it is assumed the plan will then be presented as soon as possible to DRB for signatures.

The parcel is platted as Area 2 of the Sproul Security Subdivision No. 2 as shown on the attached Zone Atlas Map J23. The area is not within the 100 year flood boundary according to the attached Community Panel 35002 0031 dated 10-14-83.

The grading will conform to the attached conceptual grading plan. All onsite runoff will be directed to an onsite catch basin and thence to an existing storm drain in Indian School Road. Flows will be increased from 11 cfs to 23 cfs and from 6 cfs to 12.5 cfs for the 100 year and 10 year storms respectively.

Offsite flows are intercepted by a masonry wall on the north and city streets on the east and south. The area west of the site drains to the west.

The peak discharge is less than the allowable discharge stipulated by the Bohannon Huston firm in their "Hydrology Summary for the Extension of Tramway Channel Drainage Improvements". Stormwater generated onsite is routed to underground systems on the site and no waters are introduced to the adjacent street surfaces.

Sincerely,



J. J. Bordenave

JJB:cs
A Division of
Daniel, Mann, Johnson, & Mendenhall

Suite 280
5700 Harper Drive, N.E.
Albuquerque, New Mexico 87109
Telephone: 505/822-7955

Planning
Engineering
Systems
Economics

DRAINAGE INFORMATION SHEET

PROJECT TITLE: THE SPRINGS ZONE ATLAS/DRNG. FILE #: J23015
LEGAL DESCRIPTION: AREA 2, SPROUL SECURITY SUBD. NO. 2
CITY ADDRESS: UNKNOWN 17805
ENGINEERING FIRM: DMJM CONTACT: J. J. BORDENAVE
ADDRESS: 5700 HARPER DR., N. E. SUITE 280 PHONE: 822-7955
OWNER: SOLCOR DEVELOPMENT CONTACT: ROY SOLOMAN
ADDRESS: 1336 WYOMING BLVD., N. E. PHONE: 299-1135
ARCHITECT: DESIGN COLLABORATIVE S. W. CONTACT: MARK SCHIFF
ADDRESS: 105 4TH S. W. PHONE: 843-9639
SURVEYOR: DMJM CONTACT: J. J. BORDENAVE
ADDRESS: 5700 HARPER DR., N. E. SUITE 280 PHONE: 822-7955
CONTRACTOR: N/A CONTACT: _____
ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☐ YES☒ NO☐ COPY OF CONFERENCE RECAP
SHEET PROVIDED

DRB NO. _____

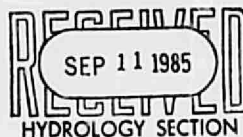
EPC NO. Z-71-178-3 9/19/85

PROJ. NO. _____

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT☐ DRAINAGE PLAN☒ CONCEPTUAL GRADING & DRAINAGE PLAN☐ GRADING PLAN☐ EROSION CONTROL PLAN☐ ENGINEER'S CERTIFICATION

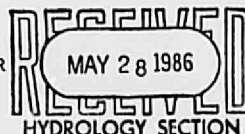
CHECK TYPE OF APPROVAL SOUGHT:

☐ 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: 08-27-85BY: J. J. BORDENAVE

DRAINAGE REPORT

FOR

SKYVIEW CENTER



The site is located in the Northeast quadrant of the City. Located within Zone Atlas Map, Page J-23, the site is bounded on the south by Indian School Road, the east by Cumbres Road, the west by Tramway Boulevard and the north by Pablo Park Subdivision. (See Plate 1). The site does not lie within a designated 100-year flood plain as shown on Panel 31 of the Flood Boundary and Floodway Map for the City of Albuquerque. (See Plate 2).

EXISTING CONDITIONS

The site is protected from offsite flows by the completed improvements of:

1. Tramway Boulevard Channel
2. SAD 204 - Cumbres Road
3. SAD 207 - Indian School Road upstream of
the site

The site was also designated as Basin "E" in the "Hydrology Summary for the Extension of Tramway Channel Drainage Improvements" by Bohannon-Huston 1980. Tramway Channel was sized to accept 32 c.f.s. from Basin "E" in the 100-year event. (See Appendix "A").

DEVELOPED CONDITION

The calculations for the onsite developed 100-year flow of 25.4 c.f.s. is less than the allowable 32 c.f.s. for Basin "E." The onsite flows are directed to catch basins and storm drain system onsite. Discharge is to the Tramway Channel at the Southwest corner of the site by a storm drain connection. Computations for the onsite flows and storm drain flows are included in the calculation section.



LOCAL DESCRIPTION
1. 10. 1
2. 10. 2
3. 10. 3

ADDITIONAL PROPERTY DATA
1. 10. 1
2. 10. 2
3. 10. 3

ADDITIONAL PROPERTY DATA
1. 10. 1
2. 10. 2
3. 10. 3

J-23-Z



100-Year Flood Boundary

100-Year Flood Boundary

FLOODWAY FRINGE

100-Year Flood Boundary

100-Year Flood Boundary

Approximate 100-Year
Flood Boundary



SCALE (FEET)

500

NATIONAL FLOOD INSURANCE PROGRAM

FLOODWAY

FLOOD BOUNDARY AND
FLOODWAY MAP

CITY OF
ALBUQUERQUE,
NEW MEXICO
BERNALILLO COUNTY

PANEL 31 OF 50

COMMUNITY-PANEL NUMBER

350002 0031

EFFECTIVE DATE:

OCTOBER 14, 1983

PLATE 2

**HYDROLOGY SUMMARY
FOR
THE EXTENSION OF
TRAMWAY CHANNEL DRAINAGE IMPROVEMENTS
MARCH, 1980**

SCOPE: The purpose of this summary is to present the hydrology to be used in the design of the Tramway Channel Drainage Improvements Extension.

LOCATION AND PROJECT DESCRIPTION: The study area includes the upland drainage areas for Tramway Boulevard between Lomas Boulevard and Pablo Heights Subdivision as indicated on Plate 1. This hydrologic summary is patterned after the Drainage Report for Tramway Boulevard, published in December, 1979, by Bohannon-Huston, Inc. The major drainage basins outlined in the Tramway Boulevard Drainage Report have been subdivided in this summary to better determine projected storm runoff flow rates at specific discharge points.

A pipeline storm sewer system was recommended for the Extension of Tramway Channel Drainage Improvements by the Tramway Boulevard Drainage Report. Actual design of the Extension will involve the review of the hydraulic and cost implications of this recommendation.

HYDROLOGY: The drainage basins indicated on Plate 1 were delineated by the use of existing topography maps, field surveys, and drainage reports. Individual Basin Peak Runoff Flow Rates for a storm with return frequency of 100 years were computed for the basins and combinations of basins presented in Table 1 using the rational formula (See Appendix A-1). Results have been coordinated with the Albuquerque Master Drainage Study, currently being developed by Bohannon-Huston, Inc.

In poorly defined basin areas such as Todd 2 Subdivision, flow rates at various discharge points were approximated using the rational formula in conjunction with the assumed basin boundaries and flow splits indicated on Plate 1. In light of these approximations, it is recommended that excess inlet capacity be provided at the junction of Reo Road and Jewett Drive to intercept potential excess flows in upland basins.

The Cumulative Peak Runoff Flow Rates presented in Table 2 were also computed by the rational formula for the total upland basin areas above the discharge point indicated on Plate 1.

Runoff coefficients were taken from the New Mexico State Highway Department Drainage Manual, Rational Coefficients for Urban Areas, Table 7. See Appendix A-2.

Rainfall Intensities were determined from information presented in the Master Plan of Drainage for the City of Albuquerque, New Mexico and Environs, 1976. See Appendix A-3.

TABLE 1
BASIN PEAK RUNOFF FLOW RATES
(100 YR. STORM)

		BASIN													
		A	B	C	D	E*	F*	G*	H	I***	J**	K**	L	M*	N**
VARIABLES	A	7	3	3	23	6	74	4	7	58	12	8	3	5	26
	B	.77	.77	.77	.77	.77	.77	.77	.77	.77	.77	.77	.77	.77	.77
	L	1200	570	570	3400	700	5800	700	1500	5200	5400	5600	600	700	6500
	S	6.1	4.7	5.1	5.1	5.7	7.1	5.1	3.5	4.8	4.8	4.7	4.3	3.1	4.3
	C	.45	.45	.45	.45	1.0	0.536	1.0	.45	.545	.45	.45	.45	1.0	.45
RESULTS	Tc	10.00	10.00	10.00	13.83	10.00	15.91	10.00	10.86	16.48	16.72	17.02	10.00	10.00	18.36
	I	5.40	5.40	5.40	4.87	5.40	4.62	5.40	5.27	4.56	4.53	4.50	5.40	5.40	4.36
	Q	17	7	7	50	32	183	22	17	144	25	16	7	27	51

A = Basin Area, Acres
B = Ground Factor
L = Basin Length, Ft
S = Basin Slope, Percent

C = Runoff Coefficient
Tc = Time of Concentration
I = Rainfall Intensity
Q = Runoff Flow Rate, cfs

*Runoff coefficients in these basins are increased to account for variance from 1972-2 drainage requirements.

**Peak runoff flow rates for these areas are approximate only due to assumptions made in delineating Basin Boundaries and flow splits.
Analysis of these basins has been included to approximate inlet requirements.

July 1, 1985

Mr. Elmer Sproul
Sproul Enterprises
P.O. Box 25485
Albuquerque, NM 87125

Re: Discharge From Your Property on the Northeast Corner of Tramway
Boulevard and Indian School Road Lying West of Cumbres

Dear Mr. Sproul:

The flow from the referenced property is to be discharged into the storm drain that parallels Tramway Boulevard on the west side of your property. In reference to the report prepared by Bohannon-Huston, Inc., dated March 1980, "Hydrology Summary for the Extension of Tramway Channel Drainage Improvements", your property is designated as Basin E. Basin E will discharge a flow of 32 cfs into the storm drain at its southwest corner. If the flow rate does not exceed this rate, a free discharge from the property would be allowed at this point. An extension of the storm sewer for a short distance into the property may be required.

If you have any further questions about this matter, please do not hesitate to call.

Sincerely yours,

Michael M. Emery
Michael M. Emery, P.E.
President

MME/mls
Job No. 5 941 5

PRINCIPALS
JOHN W. BOHANNON, P.E. & A.C.
JAMES W. HUSTON
MICHAEL M. EMERY, P.E.

DMJM ALBUQUERQUE	PROJECT SKYVIEW CENTER	PROJECT NO. 4671-12-02	PAGE 1
		BY: CB	DATE: 5-23-86
SUBJECT DRAINAGE			

Existing Conditions

$$\text{Area} = 5.33 \text{ Acres}$$

$$\text{rainfall} = 2.55" / 6\text{hr} - 100\text{year}$$

$$T_c = 10 \text{ min}$$

$$I = 2.55 \times 6.84 \times 10^{-.51}$$

$$= 5.4" / \text{hr}$$

$$C = 0.35$$

$$Q_{100} = C I A$$

$$= 0.35 \times 5.4 \times 5.33$$

$$= 10.1 \text{ cfs}$$

$$Q_{10} = 0.657 \times Q_{100}$$

$$= 6.6 \text{ cfs}$$

DEVELOPED CONDITIONS

$$\text{Pervious Area} = 25,900 \text{ SF}$$

$$C = 0.35$$

$$\text{Impervious Area} = 206,275 \text{ SF}$$

$$C = 0.95$$

$$T_c = 10 \text{ min}$$

$$I = 5.4" / \text{hr}$$

$$Q_{100} = \frac{(0.35)(25,900) + (0.95)(206,275)(5.4)}{43,560}$$

$$= 25.4 \text{ cfs}$$

DMJM ALBUQUERQUE	PROJECT SKYVIEW CENTER	PROJECT NO. 4671-12-02	PAGE 2
		BY: CB	
SUBJECT DRAINAGE			

$$Q_{10} = .657 \times Q_{100}$$

$$= 16.7 \text{ cfs}$$

STORM DRAIN CALCULATIONS

Subbasin No.	Area	Q_{100}
I	25,380 SF	2.8
II	11,880 SF	1.3
III	34,750 SF	3.8 cfs
IV	160,165 SF	17.5 cfs

DMJM

PROJECT SKYVIEW CENTER

PROJECT NO.

4671-12-02

PAGE

ALBUQUERQUE

BY:

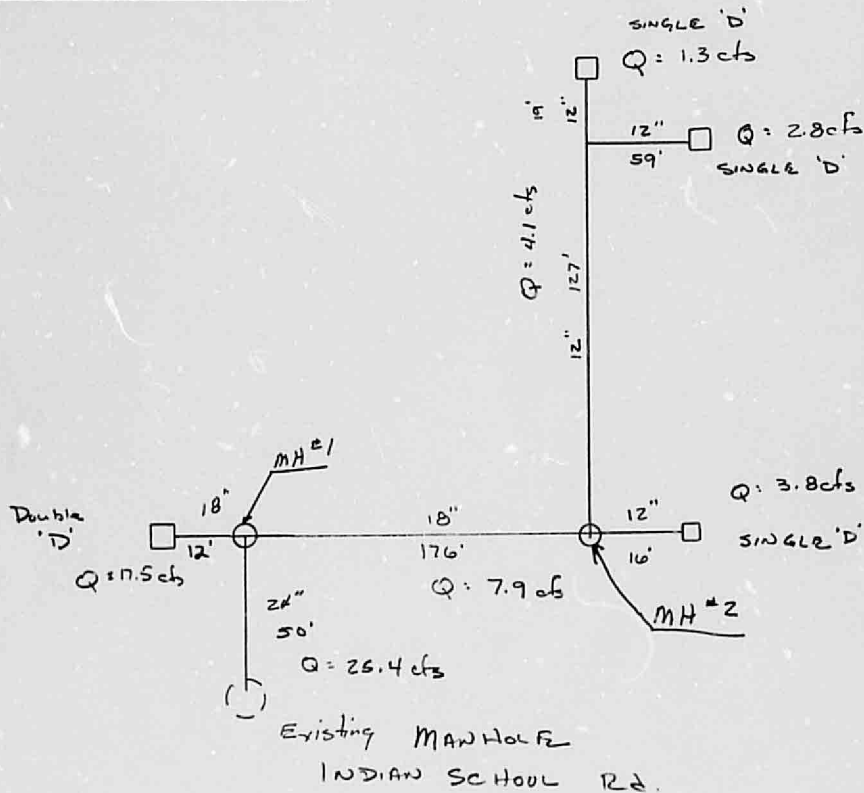
CB

DATE:

5-23-86

3

SUBJECT DRAINAGE

STORM DRAIN LAYOUT

DMM/Adam, Hamlyn, Anderson

PROJECT

SKYVIEW CENTER

PROJECT NO. 4671-12-02

BY: *cf*

SUBJECT

DATE: 5-23-86

SHEET 1 OF

STORM DRAIN CALC'S

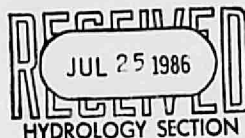
STRUCTURE	STATION	S.D. SIZE	Q	A	V	K	S _f	L	Δ	LOSSES							E.G.	h _v	H.G.
										H _f	H _b	H _j	H _t	H _{mh}	H _{misc}	ΣH _L			
Inv. 34.30	Rim = 43.42																		
Existing MH	0+00																		
		24"	25.4	3.14	8.09	2262	0.01261	50		0.63						0.63	40.42	1.02	39.40
MH #1	0+50	Rim = 44.70	Inv = 35.20		38.80				90			1.90				1.90	41.05	1.02	40.03
		18"	7.9	1.77	1.77	105.04	0.00565	176		1.00						1.00	42.95	0.31	42.64
MH #2	2+26	Rim = 58.03	Inv = 49.60		53.50				90								43.95	0.31	43.60 < 49.60
		Hydraulic Grade line is within the pipe															NOT Flowing full		
MH #2	2+26									Assume pipe flowing full									
		12"	4.1	0.79	5.22	35.63	0.01324	127	-	1.68						1.68	51.02	0.42	50.60
Toe	3+53	Inv = 58.10															52.70	0.42	52.28 < 58.10
		Hydraulic Grade line is within the pipe															NOT Flowing full		
Toe	3+53									Assume pipe flowing full									
		12"	1.3	0.79	1.66	35.63	0.00331	19'		0.03						0.03	59.13	0.03	59.10
Calc. for	3+72	Inv = 59.30															59.16	0.03	59.13 < 59.30
		Hydraulic Grade line is within the pipe															NOT Flowing full		

DRAINAGE CALCULATIONS
FOR
LEFT TURN BAY ON INDIAN SCHOOL
ROAD EAST OF TRAMWAY BLVD.
FOR
SKYVIEW CENTER

DMJM/Adam, Hamlyn, Anderson

January 9, 1986

City of Albuquerque
Engineering Department
P. O. Box 1293
Albuquerque, NM 87103



ATTN: Mr. Jim Fink

RE: High Town Center - DMJM No. 4671-05-02

Dear Sir:

The following is submitted to confirm my understanding of our meeting in December, 1985 relative to the subject project. A print indicating the drainage facilities which are very unusual for the City of Albuquerque, affected by this letter is attached hereto.

Mr. Fosnaugh has given direction regarding a new median opening and left turnbay as shown on the attached sheet. To construct this traffic feature will require modification of the existing drop inlet located in the median and it is this modification that I wish to understand.

My understanding of our conversation is as follows:

1. You are receptive to the idea of altering the existing structure,
2. The alterations shall be designed such that the new structure shall have a capacity equal to or greater than the smaller of either the existing structure or the 100-year storm flow in the street at this location,
3. Cost of the design and construction of the modification shall be borne by the developer, and
4. The modified structure must meet the approval of the Traffic Engineer.

PAGE 2 - JIM FINK - DMJM 4671-05-02

If you are in agreement with this understanding, please signify by signing in the space provided below.

Sincerely,

Jean J. Bordenave

Jean J. Bordenave, P. E.

Attachments

AGREED: *Jim Fink*

Mr. Jim Fink

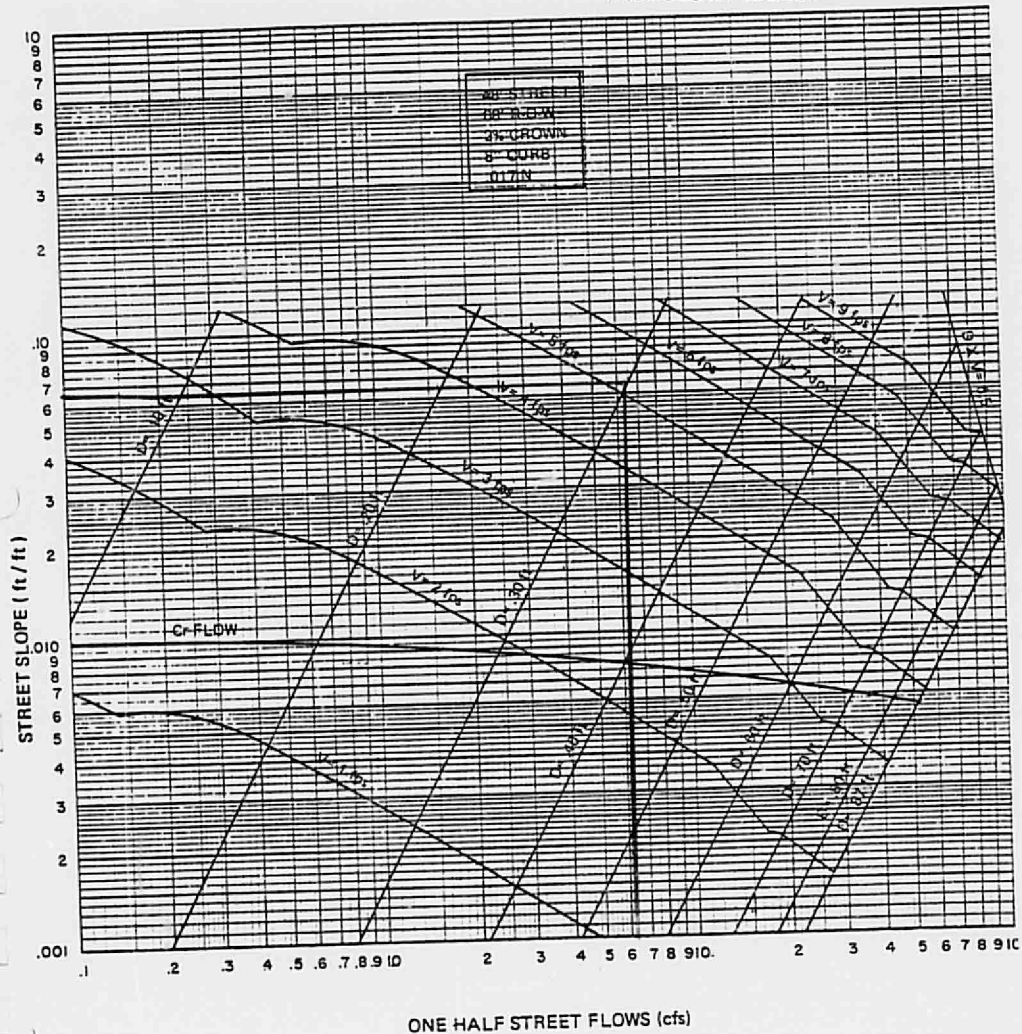
Subject to: The City Engineer's Approval

JJB/dt

DMJM Adam Hamlyn Anderson

STREET CAPACITY

RECEIVED
JUL 25 1986
HYDROLOGY SECTION



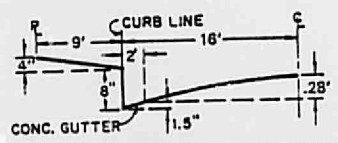
12

22.3

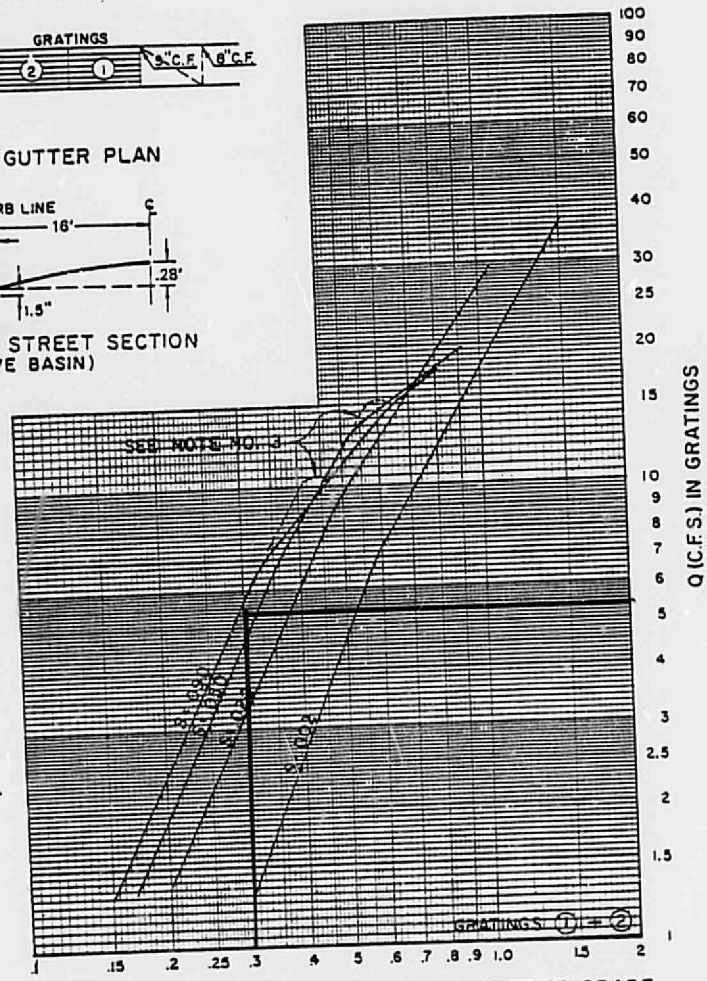
GRATING CAPACITIES FOR TYPE DOUBLE "C," AND "D"



GRATING & GUTTER PLAN



TYPICAL HALF STREET SECTION (ABOVE BASIN)



D = DEPTH OF FLOW (FT.) ABOVE NORMAL GUTTER GRADE

DMJM		PROJECT SKYVIEW CENTER LEFT TURN BAY								PROJECT NO. 4671-12-01											
SUBJECT		HGL for Indian School Rd. for Q ₁₀₀								BY: C. Burm											
										DATE: 7-18-86											
										SHEET 2 OF											
STRUCTURE	STATION	S.D. SIZE	Q	A	V	K	S _f	L	Δ	LOSSES							E.G.	h _v	H.G.		
										H _f	H _B	H _J	H _T	H _{MH}	H _{MISC}	H _L					
Assume full flow at sta 10+37 for 30"																					
Line 100 = 45.25 + 7.5 = 47.75																					
MH	11+37																	50.65	2.90	47.75	
		30"	67	4.91	13.65	410.2	0.026682	8.5		0.23							0.23	50.84	2.90	47.90	
'Y'	11+455											0.41					0.41	51.29	2.39	49.90 ⑥	
		30"	60.9	4.91	12.41	410.2	0.022045	8		0.18							0.18	51.47	2.39	49.08	
'Y'	11+535											0.33					0.33	51.80	1.99	49.81 ⑤	
		30"	55.6	4.91	11.33	410.2	0.018375	15.5		0.28							0.28	52.08	1.99	50.09	
'Y'	11+69											0.37					0.37	52.45	1.47	50.98 ④	
		30"	47.8	4.91	9.74	410.2	0.013581	8		0.11							0.11	52.56	1.47	51.09	
'Y'	11+77											0.29					0.29	52.85	1.03	51.82 ③	
		30"	40	4.91	8.15	410.2	0.009510	23		0.22							0.22	53.07	1.03	52.04	
MH	12+00											0.73					0.73	53.80	0.63	53.17	
		24"	20	3.14	6.37	226.2	0.007816	8		0.06							0.06	53.86	0.63	53.23	
CB	12+05.5											0.70					0.70	54.62	0.50	54.12 ②	
		18"	10	1.77	5.16	105	0.009063	17		0.15							0.15	54.77	0.50	54.27	
CB	12+29.5											0.5					0.5	55.27	0.50	54.77 ①	

- ① R @ Catch Basin = 57.67
 ② R @ Catch Basin = 55.80
 ③ R @ Catch Basin = 54.19

- ④ R @ Catch Basin = 53.60
 ⑤ R @ Catch Basin = 52.38
 ⑥ R @ Catch Basin = 51.74

DMJM

PROJECT SAYVIEW CENTER
LEFT TURN BAY

PROJECT NO. 4671-12-01

BY: C. Burn

SUBJECT

connector Pipe HGL

for Q₁₀₀

DATE: 7-18-86

SHEET 3 OF

STRUCTURE	STATION	SD. SIZE	Q	A	V	K	S _p	L	Δ	LOSSES							E.G.	h _v	H.G.
										H _f	H _B	H _J	H _T	H _{MH}	H _{MISC}	H _L			
'Y'	11+45.5																		
		18	6.1	1.77	3.45	105	0.003372	8	-	0.03						0.03	49.09	0.19	48.90
CB	11+50.5		Grade = 61.74									0.5	CB Friction		0.50		49.12	0.19	48.93
																	49.62	0.19	49.43 OK
'Y'	11+53.5																		
		18	5.8	1.77	3.28	105	0.003249	8		0.02						0.02	49.98	0.17	49.81
CB	11+58.5		Grade = 52.38									0.50	CB Friction		0.5		50.00	0.17	49.83
																	50.50	0.17	50.33 OK
'Y'	11+69																		
		18	7.8	1.77	4.41	105	0.005514	8		0.04						0.04	51.28	0.30	50.98
CB	11+74		Grade = 53.60									0.50	CB Friction		0.50		51.32	0.30	51.02
																	51.82	0.30	51.52 OK
'Y'	11+75																		
		18	7.8	1.77	4.41	105	0.005514	8		0.04						0.04	52.12	0.30	51.82
CB	11+79		Grade = 54.19									0.50	CB Friction		0.50		52.16	0.30	51.86
																	52.66	0.30	52.36 OK

DMJM	PROJECT	PROJECT NO.	PAGE
		4671-12-01	1
ALBUQUERQUE	SKYVIEW CENTER	BY: CB	DATE: 5-29-86
SUBJECT INDIAN SCHOOL DRAINAGE STRUCTURE			

HISTORY:

The existing DRAINAGE STRUCTURE WAS
INSTALLED AS PART OF THE TRAMWAY
BLVD IMPROVEMENTS. DESIGN Q FOR THE
STRUCTURE WAS 180 cfs.

The subdivision at the SW corner
of Indian School Rd + Monte LARGO
INSTALLED 2 NON-STANDARD CATCH
BASINS EAST OF MONTE LARGO ON
Indian School. With a storm Drain Outlet.
THIS REMOVED APPROXIMATELY 90 cfs.

SAD 207 INSTALLED ADDITIONAL CATCH BASINS
and STORM DRAINS EAST OF MONTE LARGO
AND HAS AGAIN REDUCED THE FLOW WEST
OF MONTE LARGO.

DMJM ALBUQUERQUE SUBJECT	PROJECT	PROJECT NO. 4671-12-01	PAGE 2
		BY: CS	

EXISTING CONDITION: SEE PLATE I.

FROM THE FINAL DRAINAGE REPORT FOR
SAD 207 THE PEAK 100 year Q 's
AT MONTE LARGO ARE SHOWN ON
PLATE I. TOTAL FLOW WEST OF
MONTE LARGO ON INDIAN SCHOOL
RD IS $Q_{100} = 27.6 \text{ cfs}$. THERE IS
NO SIGNIFICANT FLOW FROM THE SOUTH
DUE TO THE DRAINAGE DIVIDES JUST
SOUTH OF INDIAN SCHOOL RD

PROPOSED APARTMENT COMPLEX BETWEEN CUMBRES
AND MONTE LARGO NORTH OF INDIAN
SCHOOL ROAD. $Q_{100} = 32 \text{ cfs}$ FROM DRAINAGE
FILE J23-D13.

INDIAN SCHOOL R.O.W BETWEEN CUMBRES
AND MONTE LARGO $Q_{100} = 4.8 \text{ cfs}$. ($\frac{585 \times 100}{43500} = 1.35$)

CUMBRES ROAD R.O.W NORTH OF INDIAN
SCHOOL ROAD $Q_{100} = 3 \text{ cfs}$ ($\frac{51000 \times 100}{43500} = 1.17$)

TOTAL FLOW WEST ON INDIAN SCHOOL ROAD
FROM CUMBRES RD $Q_{100} = 66.5 \text{ cfs}$

DUE TO THE UNCROWNED INTERSECTIONS
AT MONTE LARGO AND CUMBRES IT IS
ASSUMED THAT THE FLOW IS EQUALLY
DIVIDED IN EACH HALF OF INDIAN SCHOOL
ROAD.

DMJM

ALBUQUERQUE

PROJECT SKYVIEW CENTER

PROJECT NO.

4671-12-01

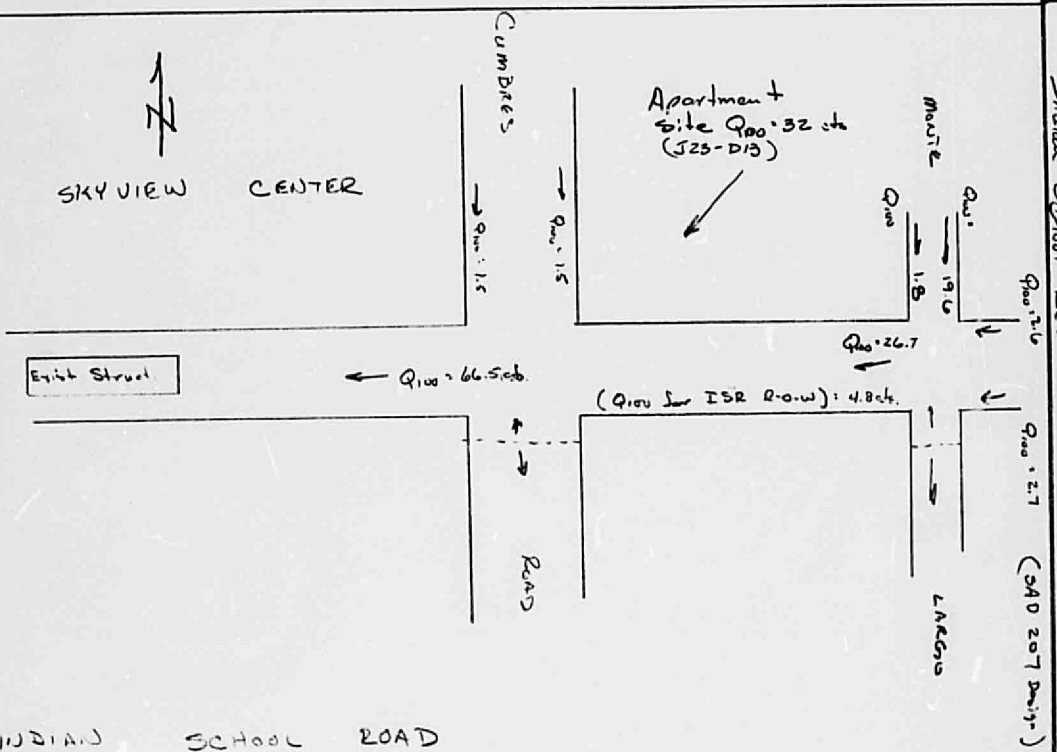
PAGE

3

BY: C.B. DATE: 5-29-80

SUBJECT

Indian School Rd - Drainage Structure



DMJM

ALBUQUERQUE

SUBJECT

PROJECT

PROJECT NO.

4671-12-01

BY:

CB

DATE:

5-29-86

PAGE

4

DESIGN FLOW = $66.5/2 = 34 \text{ cfs. / street side}$

USING 48' street width = 24' $\frac{1}{2}$ street width chert

street slope ≈ 6.5 to 7.5%

cross slope = 2%

1st Basin: Depth of flow = 0.5 ft. see page 5.

INTERCEPTED FLOW = 10 cfs (Type 'A' Basin)
see page 6

$Q = 24 \text{ cfs} \quad (34 - 10)$

2nd Basin: Depth of flow $\approx 0.44'$ (see page 7)

INTERCEPTED FLOW = 10 cfs (Type Double 'D')
see page 8

$Q = 14 \text{ cfs} \quad (24 - 10)$

3rd Basin: Depth of flow = 0.38' (see page 9)

Intercepted flow = 7.8 cfs. (Double 'D')
see page 10

$Q = 6.2 \text{ cfs} \quad (14 - 7.8)$

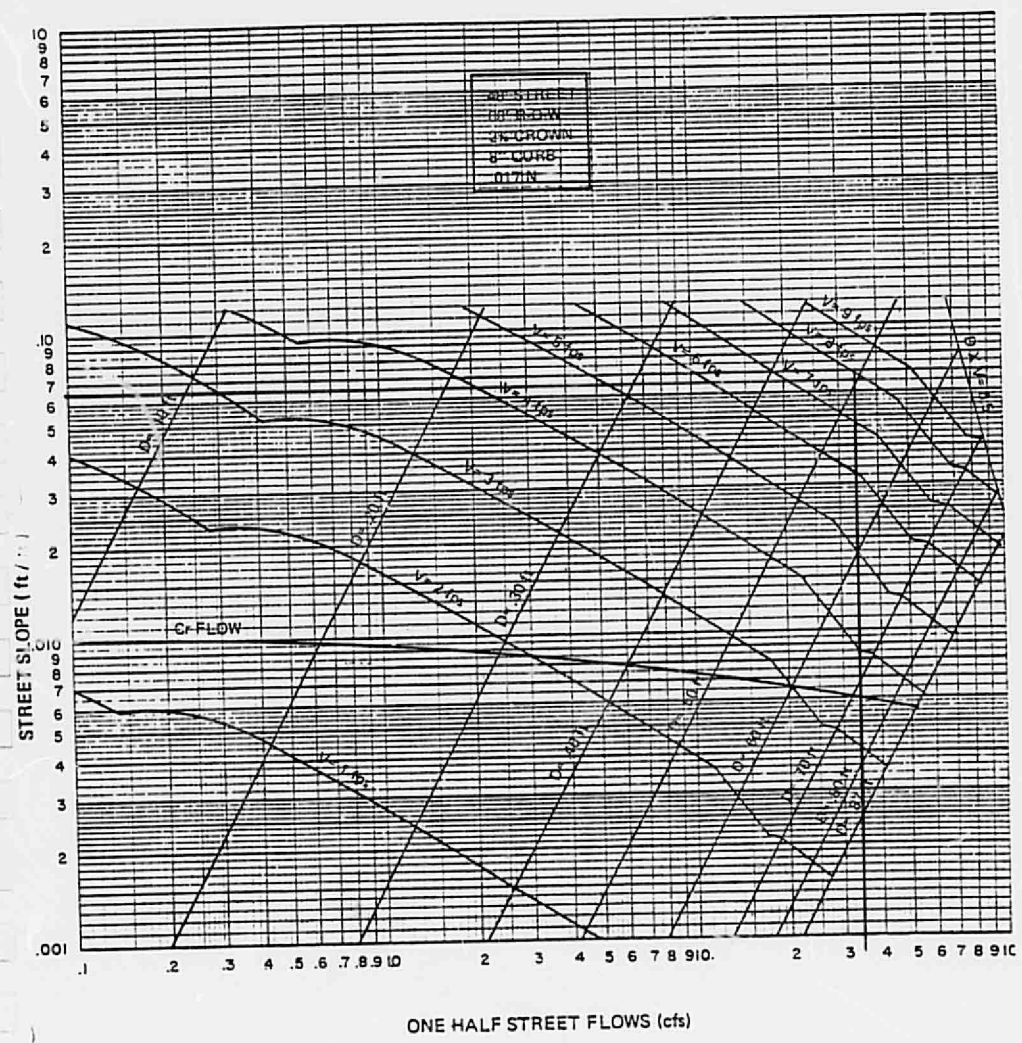
4th Basin: Depth of flow = 0.30' (see page 11)

Intercepted flow = 5.3 cfs Double 'D'
see page 12

Remainder = 0.8 cfs.

install 1 Line 'A'

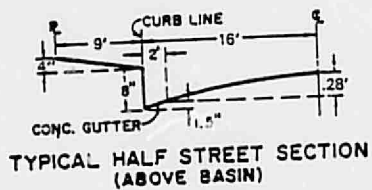
STREET CAPACITY



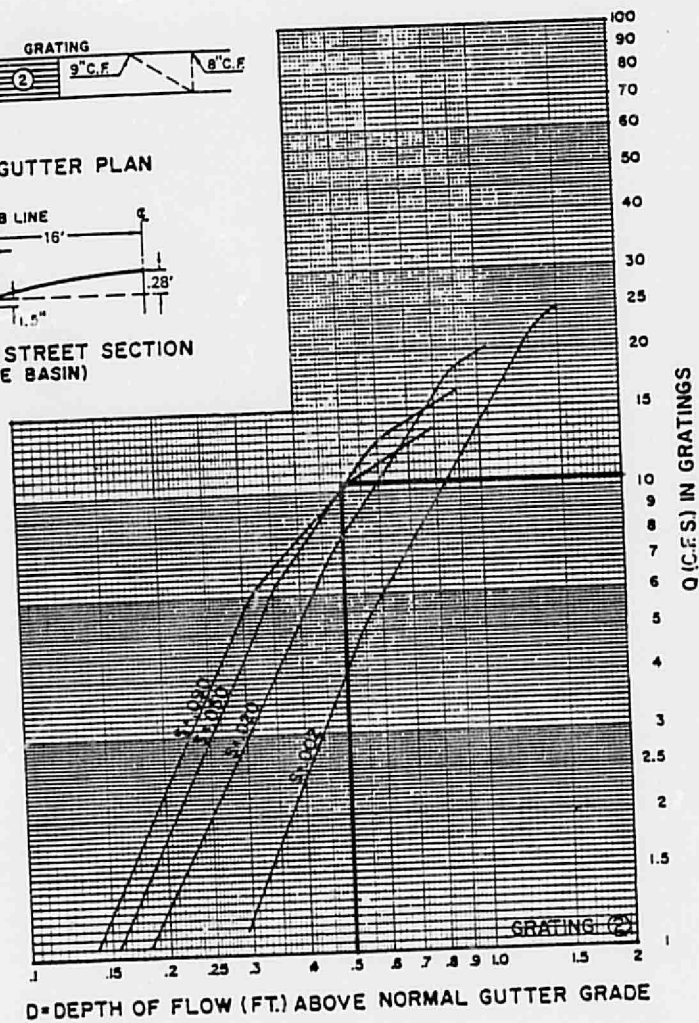
GRATING CAPACITIES FOR TYPE "A", "C" and "D"



GRATING & GUTTER PLAN



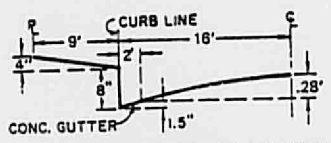
TYPICAL HALF STREET SECTION
(ABOVE BASIN)



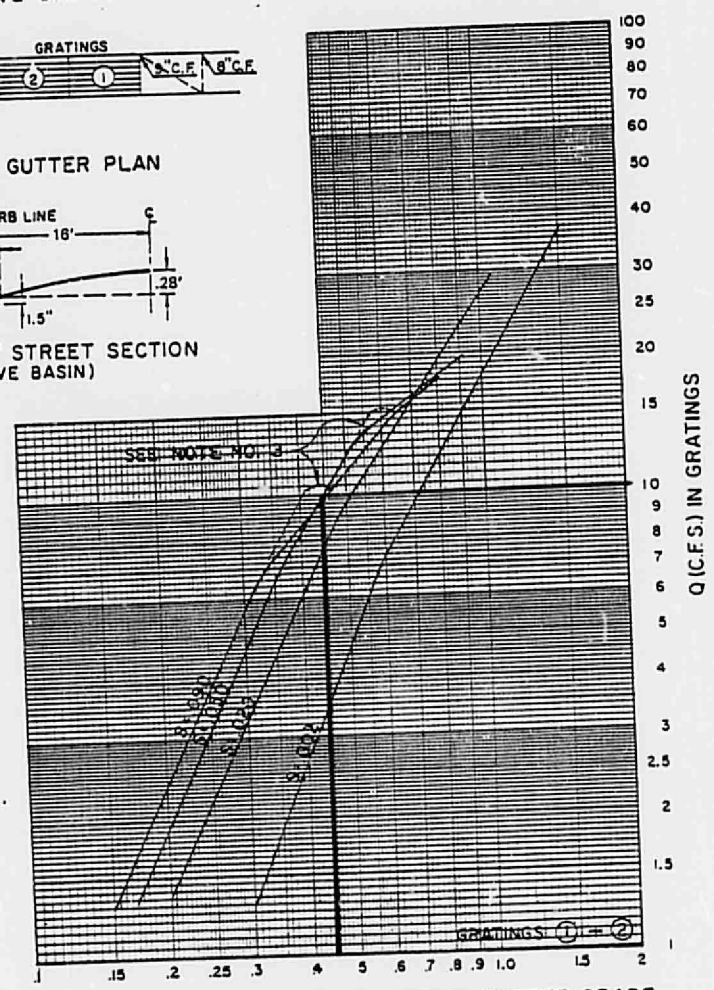
GRATING CAPACITIES FOR TYPE DOUBLE "C," AND "D"



GRATING & GUTTER PLAN

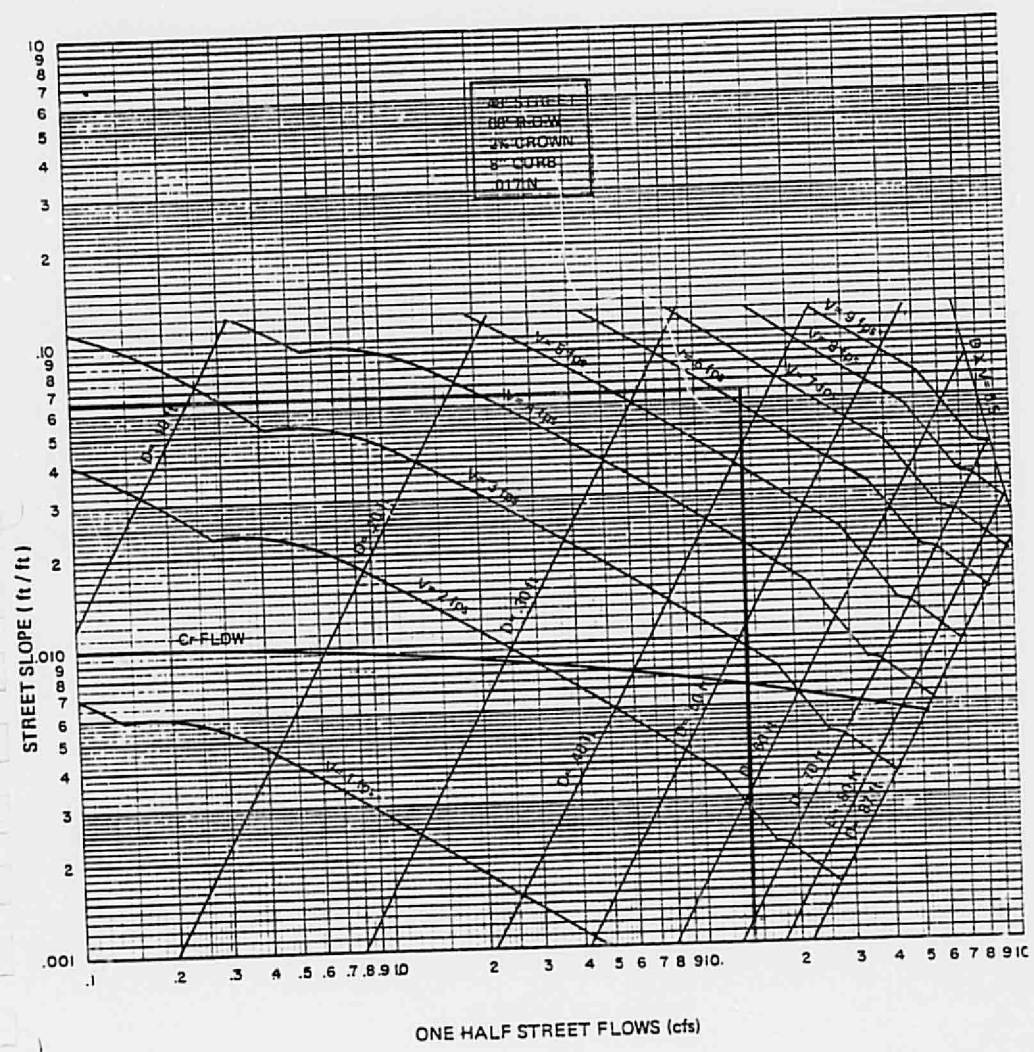


TYPICAL HALF STREET SECTION (ABOVE BASIN)



D = DEPTH OF FLOW (FT.) ABOVE NORMAL GUTTER GRADE

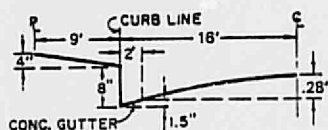
STREET CAPACITY



GRATING CAPACITIES FOR TYPE DOUBLE "C," AND "D"



GRATING & GUTTER PLAN

TYPICAL HALF STREET SECTION
(ABOVE BASIN)