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File 1993-0075 Name: Drainage Fee Revision Proposal

Present	Scanned	A few items are denoted with an asterisk (*), which means they are to be scanned for permanent record on the ISYS retrieval system. In some instances, items are found on the list but are not present in the scanned electronic development file because they are already scanned elsewhere on the system. These scanned documents are denoted with (**) and will be found on the ISYS query system in their designated categories. Documents specific to certain files, not found in the standard checklist materials, are listed at the bottom of the page. Remaining items, (not selected for scanning), will be listed and marked present. This index can serve as a quick guide for the contents of each file.
X	X	**Table of Contents**
		***Review Sheet Summary**
X	X	***Application form**
X		Review Sheets
		Receipts for fees paid for anything
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		Reduced copy of final plans or drawings
		Reduction of assessor's map.
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		Public notice cards
		Record of certified mail
		Legal description
		Appraisal of raw land
		Reduction of any maps – final copy
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		Other bound or non-bound reports
		Traffic studies
		***Review Comments**
		***Petitioner's response to comments**
X		***Staff Reports**
		***Planning Commission staff report and exhibits**
		***City Council staff report and exhibits**
		***Summary sheet of final conditions**

DOCUMENT DESCRIPTION:

X	X	Proposed Revision fee calculation sheet			
X	X	Correspondence			
X	X	Cost Comparison			
X	X	Planning Commission Minutes/Agenda - 7/6/93 - **			

CIAVONNE & ASSOCIATES, INC.
SITE PLANNING · LANDSCAPE ARCHITECTURE
336 MAIN ST., #206, GRAND JUNCTION, CO.
303-241-0745 81501

May 26, 1993

Mr. Mark Relph
City of Grand Junction Engineering
250 N. 5th
Grand Junction CO 81501-2668

Re: Proposed Drainage Fee

Dear Mark:

The concept of a drainage fee in lieu of detailed drainage design and construction of drainage facilities is progressive, innovative, and flexible. The option of such a fee is in the best interests of the City and the private clients we often represent. With your consideration to the following suggestions, we agree with the proposed ordinance:

- Where a project has direct access to a significant natural drainage, particularly projects adjacent to the Colorado River or one of the named washes, drainage facilities and fees may be an unnecessary burden. Where the cumulative impacts of projects along a natural drainage would not exceed the flood level of that drainage, the project should be eligible to directly discharge into that drainage without fees or structures (the Jarvis Property and the Colorado river for example).

- I would like to see some provision for certain projects in excess of the five acre size to be given consideration for the 'fee in lieu of facility'. I believe the five acre limit might be aimed at larger businesses (like Sam's Club) yet a drainage fee may be appropriate for projects like Phase 2 of Indian Wash Subdivision (setting aside the previous comment and that project's direct link to Indian Wash).

- I support your mathematical formula which increases the drainage fee relative to the increase in developed runoff, however, the 5000 constant in your formula (or maybe it's the .5 power) seems a little excessive. If I have a four acre parking lot with a .95 runoff factor, the fee is $9750.00; if I have a four acre, 1/4 acre residential lot subdivision with a .425 runoff factor, the fee is $6520.00; if I have a four acre bed and breakfast with a .25 runoff factor, the fee is $5000.00. Based on gut feeling, the parking lot fee seems about right; the resi. sub. seems a little high; the bed and breakfast seems real high.

Thanks for the opportunity to provide feedback. Let me know if any of these suggestions make any sense!

Sincerely,

Ted Ciavonne, President

PROPOSED REVISION

TO THE

PROPOSED DRAINAGE FEE ORDINANCE

Current drainage policy pertains to prevention of an increase in runoff, which requires a comparison of surface runoff characteristics for developed and undeveloped conditions. In order to incorporate this concept, the proposed drainage fee should be revised so that paragraph (5) reads as follows:

5) The drainage fee shall be determined by application of the following formula:

$$\text{Drainage Fee (\$)} = 10{,}000(C_{100d} - C_{100h})A^{.7}$$

where C_{100} = 100 year Rational Method composite runoff coefficient per the City Stormwater Management Manual, with subscripts "d" and "h" pertaining to the proposed developed and current existing or historic conditions, respectively; and

A = Area to be developed in acres.

EXAMPLES OF DRAINAGE FEE

LAND USE	AREA (ACRES)	TYPICAL C_{100d}	THEORETICAL C_{100h} (1)	FEE COST	CURRENT COST(2)
Restaurant	0.38	0.89	0.35	$ 2,743	$ 3,060
			0.89	0	
Commercial	0.5	0.85	0.35	$ 3,078	
Commercial	0.7	0.85	0.35	$ 3,895	
Mini Storage	0.81	0.93	0.35	$ 5,004	$ 5,900
Commercial	1.0	0.80	0.35	$ 4,500	
			0.65	$ 1,500	
Warehouse	1.4	0.86	0.35	$ 6,454	$ 7,680
Commercial	2.0	0.80	0.35	$ 7,310	
Commercial	5.0	0.80	0.35	$13,883	
Residential	5.0	0.65	0.35	$ 9,256	$12,720

(1) Assumed that the undeveloped C_{100h} value was 0.35, and arbitrarily used for two examples higher values which would reflect some existing development on-site.

(2) Current cost is the estimated cost expended on actual projects for a Drainage Report and detention/retention and outlet facilities, including raw land costs for the basin in the residential subdivision.

Cost Comparison

Example	CURRENT COST	IMPACT FEE
TCBY	$3,060	$2,743
Gardian Warehouse	$5,400	$4,185
Carpet Warehouse	$7,680	$5,091
5 AC subdivision	12,720	7,267

IMPACT FEE = $5000 CA^{.5}$

A = area in average

C = 100 year rational method runoff coefficient for area of development to be directly discharged

EXAMPLE # 1 JCBY

Area to be developed — 0.38 Acres

100 year runoff coefficient — 0.94

Current addl Drainage Costs

Drainage Report	$1,300
146' LF high curb @ $10 / foot	$1,460
outlet weir	300
	3,060

EXAMPLE #2 Guardian Warehouse

area to be developed - 0.81 AC

100 year runoff coefficient - 0.93

Current add'l Drainage costs

Drainage Report	$1500
(2) Catch basin inlets/outlets @ 1200 each	2400
25 LF 12" pipe @ 20'/L	$500
Connections to MH	500
Site regrading/excavation/extra surveying	1000
	$5,900

EXAMPLE # 3 CARPET WAREHOUSE

Area to be developed – 1.4 acres

100 years runoff coefficient – 0.86

Current Add'l Drainage costs *

Drainage report	$1,500
16 LF Detention Wall (curb & gutter) @ $15/LF	$ 240
Retention wall along detention basin, 70 LF @ $50	$3,500
30' LF 3" Pipe @ $3	90
3 weirs @ $300 each	$900
2 sidewalk drains at $250 each	500
excavation L.S.	500
Drain channel (extra) 15 LF @ $30/LF	450
	$7,680

* Those required beyond normal site grading and drainage; That is, items related to drainage calculations, metering, etc.

EXAMPLE # 4 5 AC Subdivision

area to be developed - 5 Acres

100 year runoff coefficient - 0.65

current addl drainage costs

Drainage Report	$1500
2 inlets @ $1200 each	2400
12" PVC, 30 LF @ $20	600
18" RCP, 30 LF @ $40	720
excavation, riprap	1000
land (5 AC x .03 = 0.15 AC, and raw land is $10,000 per acre	1,500
outlet facility (inlet, metering, pipe)	5000
	$12,720

(AT 20,000 per o. lot, lost value is $

STAFF REVIEW

FILE: #75-93

DATE: June 21, 1993

STAFF: Gerald Williams

REQUEST: Drainage Fee Ordinance

APPLICANT: City of Grand Junction

STAFF ANALYSIS:

During the development of the Submittal Standards for Improvements and Development (SSID), many individuals commented on the concept of having a drainage fee in lieu of providing a Drainage Report and constructing on-site detention or retention basins and outlet facilities. There may be projects where this may be acceptable, and funds may be obtained and used to provide more effective regional public drainage facilities. The proposed ordinance would allow the developer, when permitted by City staff, the option of either paying the fee or preparing a report and providing facilities as is currently done.

STAFF RECOMMENDATION:

Staff recommends approval.