

SUBDIVISION REPORT

SUBDIVISION COMMITTEE
METROPOLITAN AREA
PLANNING COMMISSION

S/D No. 82-8 Name Tyler Acres Fifth Addition
Date Application Rec'd. 1-22-82 Preliminary Approval
Scheduled S/D Meeting 2-4-82

DESCRIPTION

General Location North of Central and east of Tyler Road

Owner Ed Neville
Surveyor/Engineer Baughman Company, P.A.
Address 330 Laura, Wichita, Ks. Zip Code 67211 Phone 262-7271

- | | |
|--|---|
| 1. Gross Acreage of Plat <u>32.1 acres</u> | 7. Lineal Feet of New Street |
| 2. Number of Lots : | a. <u>60</u> R/W <u>900</u> ft. |
| Residential _____ | b. _____ R/W _____ ft. |
| Commercial <u>5</u> | c. _____ R/W _____ ft. |
| Industrial _____ | d. _____ R/W _____ ft. |
| Other _____ | e. _____ R/W _____ ft. |
| Total Number of Lots <u>5</u> | TOTAL <u>900</u> ft. |
| 3. Minimum Lot Frontage <u>290 ft</u> | 8. Sidewalk adjacent to all streets <u>X</u> yes _____ no _____ |
| 4. Minimum Lot Area <u>51,700 sq ft</u> | |
| 5. Existing Zoning <u>AA and LC</u> | |
| 6. Proposed Zoning <u>BB and LC (Z-2375 and DP-11)</u> | |
| 9. Is public water available <u>X</u> Yes _____ No, Name <u>City of Wichita</u> | |
| 10. Is sanitary sewer available <u>X</u> Yes _____ No, Name <u>City of Wichita</u> | |
| 11. Has Health Dept. approval been obtained (where applicable) _____ Yes _____ No | |
| 12. City of Wichita <u>X</u> 3-Mile Area _____ Outside of 3-Mile Area _____ | |

STAFF COMMENTS:

NOTE: This plat is associated with amended C.U.P. #DP-11 and Z-2375 (AA and LC to BB and LC) which were approved last November subject to platting.

- A. When Tyler Acres Second Addition (approximately the south 135 feet of proposed Lot 3) was platted in 1966, a 25-foot contingent dedication (in addition to a 50-foot outright dedication) was given for Central and for Tyler. The dedication was contingent upon removal of existing improvements which at that time consisted of a filling station and gasoline pumps. In 1976, these improvements were removed and a Pizza Inn was constructed. Therefore 75 feet of half-street right-of-way already exists at the northeast corner of Central and Tyler. The final plat shall indicate this existing street right-of-way except that the 75 feet may taper down to 65 feet on Central at a point 350 feet east of the section line in Tyler. A minor street privilege has been in effect for this 25 feet since 1976 and it is assumed that the privilege can continue.
- B. The applicant shall guarantee construction of a continuous decel lane on Central and on Tyler north to the existing major entrance. The applicant and the Subdivision Committee shall be prepared to discuss the need for a decel lane adjacent to Lot 2 which is to be permitted ^{yes} 3 access points to Tyler.
- C. In accordance with the C.U.P. requirements, the applicant shall guarantee construction of the east major entrance on Central and the accompanying left turn bay.
- D. If Lot 6 (which coincides with Parcel 6 of the C.U.P.) is to be platted as a separate lot, a minimum 30-foot-wide access easement from Central to the lot shall be shown and granted on the final plat.
- E. The City Engineer's office should be prepared to comment on the applicant's drainage concept and state what drainage improvements are required for development of this property.
- F. The applicant shall guarantee extension of sanitary sewer and City water to serve all lots not already served.

(Over)

- G. The applicant shall guarantee the paving of Socora from Central to the south line of existing Socora pavement.
- H. In accordance with the sidewalk ordinance and subdivision regulations, a sidewalk shall be guaranteed along the west side of Socora adjacent to Lots 4 and 5.
- I. All utilities shall be installed underground.
- J. Several utility easements obtained with the platting of Tyler Acres Second and Fourth Additions are being vacated by this plat. The utility company representatives shall be prepared to state whether any utilities need to be relocated.
- K. The applicant shall install or guarantee the installation of all utilities and facilities which are applicable and described in Article 8 of the MAPC Subdivision Regulations.
- L. Requirements for a final plat (see pages 20-25, Part 4, Article 5 of the MAPC Subdivision Regulations).

S/D No. 82-8 Name Tyler Acres Fifth Addition
Date Application Rec'd. 1-22-82 Preliminary Approval 2-4-82
Scheduled S/D Meeting 3-4-82

DESCRIPTION

General Location North of Central and east of Tyler Road

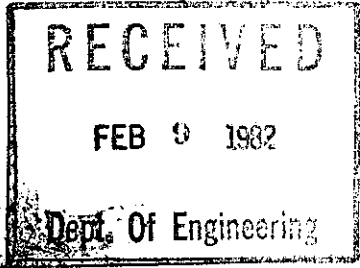
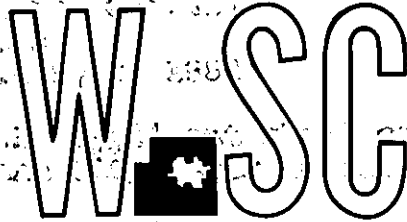
Owner Ed Neville
Surveyor/Engineer Baughman Company, P.A.
Address 330 Laura, Wichita, Ks. Zip Code 67211 Phone 262-7271

- | | |
|--|--|
| <p>1. Gross Acreage of Plat <u>32.1 acres</u></p> <p>2. Number of Lots :
 Residential _____
 Commercial <u>4</u>
 Industrial _____
 Other <u>1</u>
 Total Number of Lots <u>5</u></p> <p>3. Minimum Lot Frontage <u>175 feet</u></p> <p>4. Minimum Lot Area <u>51,325 sq. ft.</u></p> <p>5. Existing Zoning <u>AA and LC</u></p> <p>6. Proposed Zoning <u>BB and LC (Z-2375 and DP-11)</u></p> <p>9. Is public water available <u>X</u> Yes _____ No, Name <u>City of Wichita</u></p> <p>10. Is sanitary sewer available <u>X</u> Yes _____ No, Name <u>City of Wichita</u></p> <p>11. Has Health Dept. approval been obtained (where applicable) <u>Yes</u> No _____</p> <p>12. City of Wichita <u>X</u> 3-Mile Area _____ Outside of 3-Mile Area _____</p> | <p>7. Lineal Feet of New Street
 a. <u>60</u> R/W <u>900</u> ft.
 b. _____ R/W _____ ft.
 c. _____ R/W _____ ft.
 d. _____ R/W _____ ft.
 e. _____ R/W _____ ft.
 TOTAL <u>900</u> ft.</p> <p>8. Sidewalk adjacent to all streets <u>yes</u> <u>X</u> no</p> |
|--|--|

STAFF COMMENTS:

- A. The applicant shall guarantee construction of a continuous decel lane on Central and on Tyler north to the existing major entrance.
- B. In accordance with the C.U.P. requirements, the applicant shall guarantee construction of the east major entrance on Central including the necessary medial reconstruction on Central to provide an adequate left turn bay into the site for eastbound traffic.
- C. The applicant shall guarantee the paving of Socora from Central to the south line of existing Socora pavement.
- D. In accordance with the sidewalk ordinance and subdivision regulations, a sidewalk shall be guaranteed along the west side of Socora adjacent to Lots 4 and 5.
- E. The applicant shall guarantee extension of sanitary sewer to serve all lots not already served.
- F. The applicant shall guarantee extension of City water to serve all lots not already served.
- G. The City Engineer's representative shall be prepared to comment on the applicant's final drainage plan and state whether any drainage improvements need to be guaranteed with the plat.
- H. The applicant's agent shall be prepared to state what arrangements have been made with Southwestern Bell regarding aerial service lines in the vicinity of Lot 3.
- I. All utilities shall be installed underground.
- J. Recording of the plat within 30 days after approval by the Board of City Commissioners.

WICHITA - SEDGWICK COUNTY



METROPOLITAN AREA PLANNING COMMISSION

CITY HALL - TENTH FLOOR
455 NORTH MAIN STREET

WICHITA, KANSAS 67202
(316) 268-4561

February 8, 1982

Baughman Company
330 Laura
Wichita, Kansas 67211

Re: S/D 8-28 - Final plat of Tyler Acres Fifth Addition

Gentlemen:

At the regular meeting of the Subdivision Committee of the Metropolitan Area Planning Commission, February 4, 1982, the above-captioned plat was considered. The action of the Committee was to approve the preliminary and authorize preparation of the final plat, subject to the following:

- A. When Tyler Acres Second Addition (approximately the south 135 feet of proposed Lot 3) was platted in 1966, a 25-foot contingent dedication (in addition to a 50-foot outright dedication) was given for Central and for Tyler. The dedication was contingent upon removal of existing improvements which at that time consisted of a filling station and gasoline pumps. In 1976, these improvements were removed and a Pizza Inn was constructed. Therefore 75 feet of half-street right-of-way already exists at the northeast corner of Central and Tyler. The final plat shall indicate this existing street right-of-way except that the 75 feet may taper down to 65 feet on Central at a point 350 feet east of the section line in Tyler. A minor street privilege has been in effect for this 25 feet since 1976 and it is assumed that the privilege can continue.
- B. The applicant shall guarantee construction of a continuous decel lane on Central and on Tyler north to the existing major entrance.
- C. In accordance with the C.U.P. requirements, the applicant shall guarantee construction of the east major entrance on Central and the accompanying left turn bay.
- D. Since Lot 6 is no longer proposed, a 30-foot wide access easement from Central to that lot is no longer required.
- E. A final drainage plan shall be submitted to City Engineering prior to or at the time of submitting a final plat.

Baughman Company

Page 2

February 8, 1982

- F. The applicant shall guarantee extension of sanitary sewer and City water to serve all lots not already served.
- G. The applicant shall guarantee the paving of Socora from Central to the south line of existing Socora pavement.
- H. In accordance with the sidewalk ordinance and subdivision regulations, a sidewalk shall be guaranteed along the west side of Socora adjacent to Lots 4 and 5.
- I. All utilities shall be installed underground.
- J. The applicant shall meet with Southwestern Bell and make satisfactory arrangements for either relocating an existing telephone line or platting an appropriate utility easement.
- K. The applicant shall install or guarantee the installation of all utilities and facilities which are applicable and described in Article 8 of the MAPC. Subdivision Regulations.
- L. Requirements for a final plat (see pages 20-25, Part 4, Article 5 of the MAPC Subdivision Regulations).

Enclosed herewith is the "marked" copy of the preliminary plat for your information and files.

If you should have any questions concerning this matter, please call.

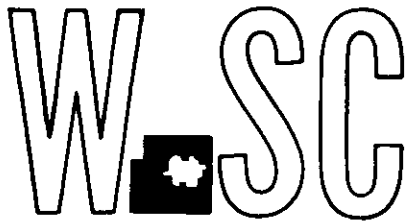
Sincerely,

Forrest L. Nagley
Forrest L. Nagley
Junior Planner

FLN:hh

cc: Ed Neville, 9625 W. Maple, 67209
X Mike Lindebak, City Engineering

WICHITA—SEDGWICK COUNTY



METROPOLITAN AREA PLANNING
DEPARTMENT

CITY HALL — TENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4561

March 5, 1982

Baughman Company, P.A.
330 Laura
Wichita, Ks. 67211

Re: S/D 82-8 - Final plat of Tyler Acres Fifth Addition

Gentlemen:

At the regular meeting of the Subdivision Committee of the Metropolitan Area Planning Commission on March 4, 1982, the above-captioned plat was considered. The action of the Committee was to recommend that this plat be approved, subject to:

- A. The applicant shall guarantee construction of a continuous decel lane on Central and on Tyler north to the existing major entrance.
- B. In accordance with the C.U.P. requirements, the applicant shall guarantee construction of the east major entrance on Central including the necessary medial reconstruction on Central to provide an adequate left turn bay into the site for eastbound traffic.
- C. The applicant shall guarantee the paving of Socora from Central to the south line of existing Socora pavement.
- D. In accordance with the sidewalk ordinance and subdivision regulations, a sidewalk shall be guaranteed along the west side of Socora adjacent to Lots 4 and 5.
- E. The applicant shall guarantee extension of sanitary sewer to serve all lots not already served. The applicant's agent shall meet with City Engineering to determine what sanitary sewer easements are needed.
- F. The applicant shall guarantee extension of City water to serve all lots not already served.
- G. The applicant shall guarantee the construction of storm sewers in Central and in Socora and shall provide for storm water detention areas within the parking lot. Some reconstruction of existing storm sewers at Central and Tyler will be included in the decel lane petition.

RECEIVED

MAR 8 1982

Dept. Of Engineering

Baughman Company
Page 2
March 5, 1982


- H. The applicant shall make satisfactory arrangements with Southwestern Bell for the granting of an easement to cover an existing aerial line in the vicinity of Lot 3.
- I. All new utilities brought into the site shall be installed underground.
- J. Recording of the plat within 30 days after approval by the Board of City Commissioners.

Enclosed with the applicant's copy of this letter is a list of the five methods which have been adopted as being acceptable for guaranteeing improvements required in the approval of plats. The certificate will be required if petitions are submitted. Forms for the bond and irrevocable letter of credit are available from this office.

The enclosed "marked" copy of the final plat is for your information and files.

This matter will be forwarded to the Planning Commission for its consideration on March 11, 1982, at 1:30 p.m. If you have any questions concerning this matter please call.

Sincerely,


Louise Olivarez
Senior Planner

LO:bh

cc: Ed Neville, 9625 W. Maple, 67209
X Mike Lindebak, City Engineering

Palmer

REQUEST FOR PETITION

DATE: 3-25-82

I. NAME: TYLER ACRES 5th PHONE _____

ADDRESS: _____

II (2) PAVEMENT

Street SOCORA From N.L. CENTRAL
(SEE LAYOUT AREA) To S. EDGE EXISTING PUMP. 30' BACKWARDS

Street DECEL LANE From SOCORA (CENTRAL)
To S.L. Lot 2 (TYLER)

(2) SANITARY SEWER
SEE LAYOUT
(1) Lot(s)

(1) STORM WATER SEWER
SEE DRAINAGE PLAN & ESTIMATE
Block(s) Addition

(2) Address _____

(3) Other _____

III. COMPLETED PETITION:

Mail

Name _____

Address _____

Phone

Name N. BRENT WOOTEN

Number 262-7271

IV. ADDITIONAL INFORMATION:

Let's review with Lackey prior to preparing the petition

TYLER ACRES 5TH
ADDITION

DRAINAGE PLAN

BAUGHMAN COMPANY, P.A.
N. BRENT WOOTEN, P.E.

INDEX

- I. EXISTING STORM SEWERS AND CAPACITIES
- II. DRAINAGE AREAS
- III. PROPOSED S.W.S. SYSTEMS
- IV. AREA C, STORAGE AND FLOOD ROUTING
- V. CONCLUSION
- VI. PLAN EXHIBIT

I. Existing Storm Sewers and Capacities

Two storm sewer systems now serve the Tyler-Central area, in particular the NE Sector, which is the area being platted. The first S.W.S. #84, discharges into Westlink Drainage Ditch, extends east to Tyler and north on Tyler to Bekemeyer. This system is inadequate to provide proper drainage for the contributing areas today. The Tyler Acres 5th development will further compound the Tyler-Central problem providing the need for possible reconstruction or altering the existing major storm sewer.

The second, an incidental storm sewer which charges into a drainage easement on the south side of Central, extends west on Central and north across Central to serve Central and the major interior portion of this plat north of Central, now a maize field.

S.W.S. #84 is undersized for the developed areas draining to the system. Flo capacity in the pipe of the Tyler-Central intersection is approximately 23 CFS. There are a total of 14 inlets discharging into the pipe above this point. This indicates inlet capacity for the existing system is not a problem.

The incidental drainage across Central has a capacity to discharge approximately 45 CFS through two pipes. This system will be utilized to drain the majority of this plat and areas to the east, thereby creating the need for on site detention.

II. Drainage Areas

Drainage areas are indicated on the Exhibit Plan by Letters A-E. All areas within the Tyler Acres 5th Plat will be commercially developed with a high runoff factor of 0.85. (Refer to Tyler Acres C.U.P.). Time of concentration for all areas is short, so 15 min. will be used. Intensity results in 5.21 in./hr. for the five year frequency.

Area A (6.5 AC.) will drain west to Tyler. $Q = 0.85 (5.21) (6.5) = 28.8$ CFS runoff will be conveyed to S.W.S. 84 in Tyler via any of 6 drives or additional flumes should the site grading require it. Approximately runoff per drive opening would be 4.5 CFS. Tyler drains south to Central.

Area B (2.4 AC.) will drain south to Central. $Q = (0.85) (5.21) (2.4) = 10.6$ CFS runoff will be conveyed to the street via anyone of 4 drive openings. Approximate runoff per drive opening would be 2.5 CFS. Central drains west to Tyler.

Area C (20.3 AC.) will drain south, but will not be conveyed onto Central. All runoff from this area will be detained on-site to be discharged at a slow rate thru means of a proposed storm sewer (System I) extension. Calculations to derive the necessary storage are presented in Part IV. Storage is provided in the parking lot area adjacent to Central Avenue.

Area D (2.3 AC.) will drain to Socora and Central via several drive openings. Socora will drain south to Central.

Area E (14.8 AC.) will drain when platted and developed to Socora to Central and to Tyler. A proposed storm sewer (System II) will extend to the Socora and Central intersection. The proposed sewer will remove a good portion of the minor storm runoff from entering Central. The sewer is limited to a 24" pipe by the fact that the existing incidental drainage system across Central is discharging into a controlled system downstream and there is lack of head room. $Q = 0.30 (4.06) (14.8) = 18$ CFS.

Note: Approximately 12.4 AC. to the east presently drain or will drain to Woodchuck and west on Central.

III. Proposed S.W.S. Systems

System I - Referenced on Exhibit plan.

This includes removing the 2 existing inlets and replacing them with 3 type 1-A inlets with the new pavement alignment. At two separate locations, both sides of the major entrance, drop inlets in the parking lot will drain to the relocated inlets on Central. The pipe extension to the east will be a 30" as indicated. System I will be a necessary item for the plat drainage at the time of any development.

System II - Referenced on Exhibit Plan.

This includes extending from System I east to the Socora intersection with a 24" pipe to a series of inlets to remove a good portion of the minor storm from areas east when developed. System II can be assessed to a broken down portion of area E and should probably be constructed to coincide with System I and the Central widening project.

Incidental Drainage Items - Referenced to Exhibit Plat.

It is assumed S.W.S. #84 should be studied and reconstructed or improved at this time to avoid a permanent detrimental problem at Tyler and Central both by flooding and pavement damage. Till further studies or design provide detailed information, only the best possible S.W.S. improvements are indicated on Tyler with this particular drainage plan. These improvements on Tyler involve simply removing existing single inlets, extending 15" pipe and constructing two inlets at the new pavement alignments at the two locations.

IV. Area C, Storage and Flood Routing

AREA C (20.3 AC.) DRAINS TO THE LOCATION, AS INDICATED ON EXHIBIT TO BE DETAINED FOR A SHORT PERIOD OF TIME. STORAGE WITHIN THE PARKING LOT IS POSSIBLE TO ACCOMMODATE THE MAJOR STORM RUNOFF FOR THE AREA.

INFLOW HYDROGRAPH -

$$A = 20.3 \text{ AC}$$

$$C = 0.85 \text{ (PARKING LOT \& ROOFS)}$$

$$I_{100} = 8.98 \text{ IN/HR} \quad C \quad t_c = 15 \text{ MIN.}$$

$$I_2 = 4.06 \text{ "}$$

$$Q_{100} = 0.85 (8.98) 20.3 = 155 \text{ CFS}$$

$$Q_2 = 0.85 (4.06) 20.3 = 70 \text{ CFS}$$

BASIN DESIGN -

DESIGN Q_0 FROM BASIN (SYSTEM I)

$$Q_0 = 25 \text{ CFS.}$$

MAJOR STORM BASIN

$$S = (155 - 25)(15) = 1950 \text{ CFS-MIN}$$

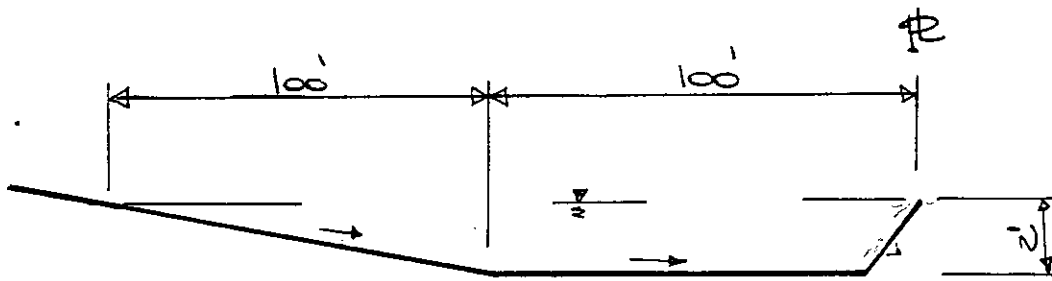
$$S = 2.7 \text{ AC FT} = 117,000 \text{ CF.}$$

MINOR S.B.

$$S = (70 - 25)(15) = 675 \text{ CFS-MIN}$$

$$S = 0.9 \text{ AC FT} = 40,000 \text{ CF.}$$

TENTATIVE PARKING LOT DESIGN



FLOOD ROUTE. THE MAJOR STORM THRU THE BASIN TO VERIFY THE DESIGN STORAGE.

STAGE - STORAGE

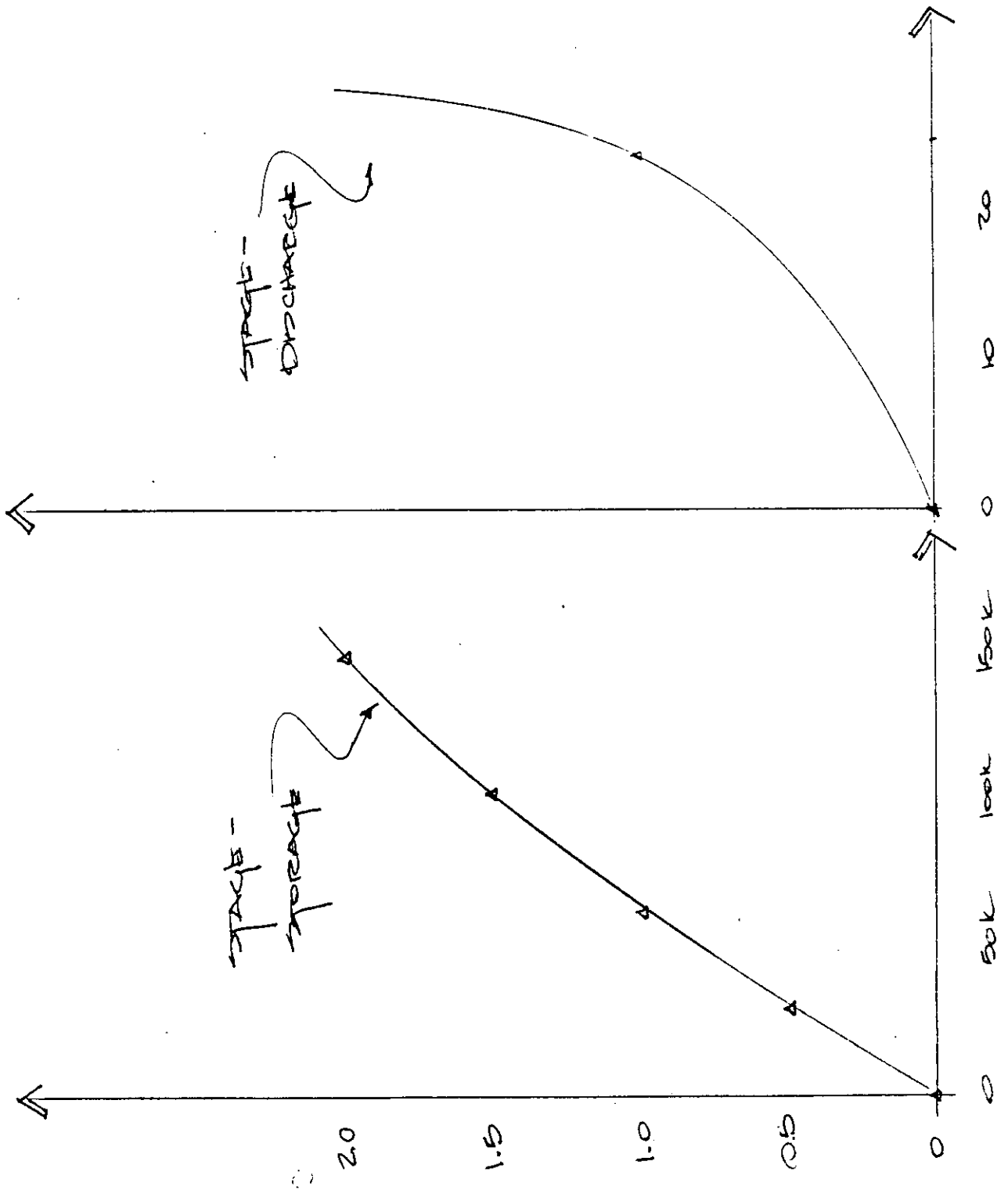
WATER LEVEL	SA	INC VOL	TOTAL VOL.
FT	SF	CF	CF
0	50K	28125	0
0.5	62.5K	34375	28125
1.0	75.0K	40625	62500
1.5	87.5K	46875	103125
2.0	100K		150000

PLOT

STAGE - DISCHARGE

WATER LEVEL	Q ₀
FT	CFS
0	0
0.5	?
1.0	25
1.5	"
2.0	"

PLOT



INFLOW HYDROGRAPH - $t_p = 15 \text{ min}$, $Q_p = 155 \text{ cfs}$


By DIMENSIONLESS HYDRO. COORD.

t/t_p	Q/Q_p	t	Q
		MIN	CFS
0	0	0	0
0.5	0.4	7.5	62
1.0	1.0	15.0	155
1.5	0.6	22.5	93
2.0	0.3	30	46
3.0	0.07	45	11
4.0	0	60	0

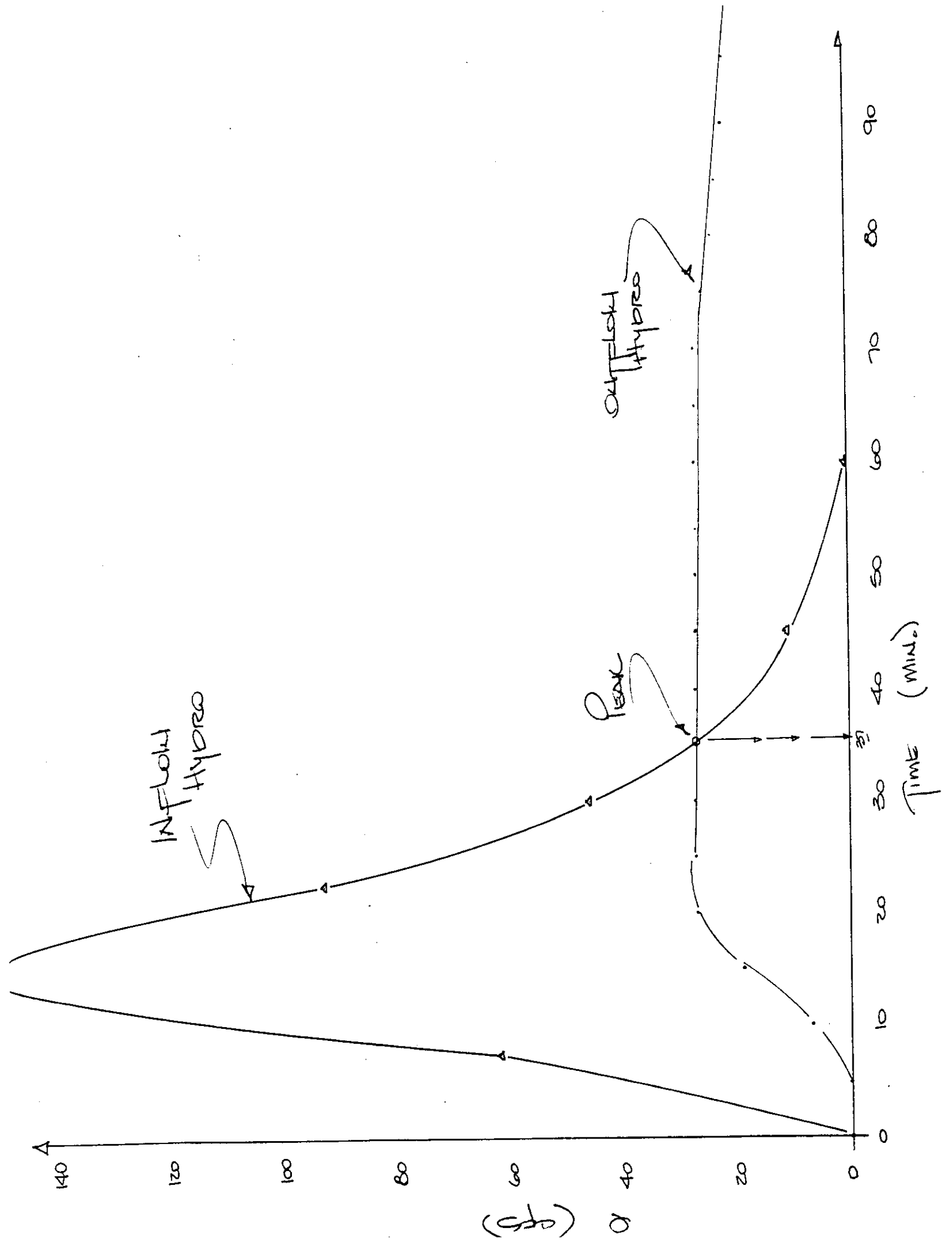
Plot INFLOW

ROUTING TABLE -

TIME MIN.	INFLOW CFS	STOR. 10^3 CF	OUTFLO CFS
0	0	0	0
5	37	0	0
10	104	11.1	7
15	155	21.1	19
20	118	40.2	25
25	72	49.8	25
30	46	81.0	25
35	26	27.9	25
40	16	108.9	25
45	10	14.1	25
50	6	123.0	25
55	3	6.3	25
60	0	129.3	25
65	0	0.3	25
70		129.6	25
75		-2.7	25
80		126.9	25
85		-4.5	25
90		122.4	25
95		-5.2	25
100		116.7	25
105		-6.6	25
110		110.1	25
115		-7.5	25
120		102.6	25
125		-7.5	25
130		95.1	24
135		-7.5	24
140		87.6	24
145		-7.2	23
150		80.4	23
155		-7.2	23
160		73.2	22
165		-6.9	22
170		66.3	22
175		-6.9	21
180		59.4	21
185		-6.6	21
190		52.8	21
195		-6.3	20
200		46.5	20
205		-6.0	20
210		40.5	20
215		-6.0	19
220		34.5	19
225		-11.4	13
230		23.1	13
235		-7.8	10
240		15.3	10
245		-6.0	4
250		9.3	4
255		-2.4	2
260		6.9	2
265			


 PEAK
 @ 40 MIN.
 S = 129,600 CF

Prof Qo



RESULTS - 100 YEAR DESIGN FLOOD.

	<u>DESIGN</u>	<u>ROUTED</u>
OUTFLOW PEAK	25 cfs	SAME
STORAGE REQ'D	2.7 AC·FT	3.0 AC·FT.
WATER LEVEL	1.6 FT.	1.8 FT.

EFFECTS - THE 1.8 FOOT MAJOR FLOOD LEVEL DOES NOT ENDANGER LIVES OR EVEN BUILDINGS. TOTAL DETENTION CAPACITY FOR THE BASIN IS REGAINED IN ABOUT 3 HOURS.

THE MINOR FLOOD LEVEL (EXPECTED ONCE EVERY OTHER YEAR) WOULD FILL A 100 FT. PARKING LOT WIDTH TO A HEIGHT OF ABOUT 0.6 FT. THIS LEVEL DOES NOT RESTRICT MOVEMENT, EVEN BY VEHICLES.

SUMMARY - THE PROPOSED DETENTION BASIN IS ADEQUATE (SEE EXHIBIT) TO PROVIDE STORAGE DICTATED BY THE FLOOD ROUTING PROCESS. BASIN DESIGN PARAMETERS WILL BE IMPLEMENTED THROUGH MEANS OF THE SITE-GRADING PLAN TO COINCIDE WITH DEVELOPMENT.

V. Conclusions

The Tyler Acres 5th Plat will contribute approximately 11.2 AC. of commercial developed area runoff directly onto Central and Tyler streets, while approximately 20.3 AC. is detained on site in form of parking lot detention. 5 acres of the 11.2 AC. are already developed, leaving only 6.2 acres to contribute to the Tyler-Central drainage problem. Direct increased runoff due to this plat to Tyler and Central streets would be $Q = (.85-.20) (5.21) (6.2) = 21$ CFS.

Additional drainage improvements proposed to be constructed by this plat will include 3 additional inlets, which should increase the Hydraulics somewhat.

Proposed Storm Systems I and II will provide removal of portions of the minor storm runoff for developments east of Socora, to be in the near future.

Since detention is being utilized for the Tyler Acres 5th Plat, flooding problems at the Tyler-Central intersection should not be greatly affected by the development of this plat. However, when the unplatted area between Socora and Woodchuck is developed there could be significant flooding problems arise at Tyler and Central.

