

DEPARTMENT OF PUBLIC WORKS
MAINTENANCE DIVISION

Date 6-17-80

To	From	
<input type="checkbox"/> BANDY	<input type="checkbox"/>	<input type="checkbox"/> Please handle
<input type="checkbox"/> BRUGGEMAN	<input type="checkbox"/>	<input type="checkbox"/> Recommendation
<input type="checkbox"/> COLLINS	<input type="checkbox"/>	<input type="checkbox"/> Note & return
<input type="checkbox"/> FISHER	<input type="checkbox"/>	<input type="checkbox"/> Prepare reply for
<input checked="" type="checkbox"/> JOHNSTON	<input checked="" type="checkbox"/>	<input type="checkbox"/> my signature
<input type="checkbox"/> LOVELAND	<input type="checkbox"/>	<input type="checkbox"/> For your information
<input type="checkbox"/> MITCHELL	<input type="checkbox"/>	<input type="checkbox"/> Discuss with me
<input type="checkbox"/> PENNER	<input type="checkbox"/>	<input type="checkbox"/> File
<input type="checkbox"/> WILTON	<input type="checkbox"/>	<input type="checkbox"/> Prepare report

REMARKS

Meeting Th @ 9:30 to
discuss project. Review

6-19-80

Subject Oak Cliff Estates (Drainage)

Attending: Dick Linn Chris ?
 Chris Brennenstuhl Phil Dietrich
 Steve Lackey P. Johnston

Met this morning to discuss several problems which it was felt had not been addressed satisfactory prior to filing of the final plat.

Among the items discussed was:

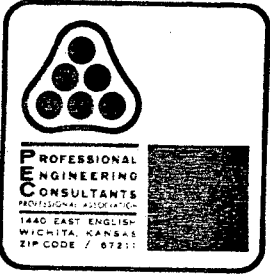
- 1) The available road R/W in Maple was 50' vs 60' called out & required to construct ditch
- 2) Drainage ditch will encroach 10' upon utility easement
- 3) Due to the existing lake at Maple Gardens Retreat construction of a levee would be required essentially separating the water from the water. If this route was followed, provision would be req'd for a 15' access & maint easement in more land. Contact & approval from Dr. Cardagis (Kardatzki) req'd.
- 4) Request copy of revised drainage plan
- 5) Minimum pad requirements at NE & SW corner
- 6) NE corner is a flood hazard area
- 7) A levee is apparently to be constructed along the east side of Westlink Village 18th Addn, same providing no access & maint. — not formerly seen or approved by R
- 8) Documentation req'd that proposed channel leaving the pond in Westlink 18th can also carry the SW discharges from Oak Cliff St.

Oak Cliff Estates (Cont.)

2/2

In response to the previously mentioned items the following occurred:

- 1) Lin discussing the concern expressed by City & County Staff regarding whether the outfall could even be constructed due to previous problems with utilities encountered at subject site, Dick herein felt that with 100' road R/W in Maple some solution could be worked out. Dietrich indicated that it was not the county policy to allow pipes to be placed under the road & parallel to same. To clarify the issue, he was to get a reading this noon.
2. It was felt best by Dick not to contact Dr Cardasicki until the design plans was available, if nec. at all
3. Main pad elev would be set at the N.E. corner. Advised that same was flood hazard. Informed that no problem in flood way could construct nothing in flood plane.
4. Main pad at SW corner will be set 2' higher than Maple (where over flow would occur with design flow) and 1' higher than T. Smith prop
5. Sufficient area exist in floodway at SW corner of plat that if convergence way is 10' bottom 4:1 slope proves inadequate with Oak Cliffs drainage, it could be expanded
6. Addn utility easements & relocation costs involved - telephone poles presently existing in slope of roadside ditch. Ditch improvement could not occur without relocation.
7. Dietrich felt that consideration should be given to increasing the size of the outfall to handle widening of road is loss of ditch.



Date 6-13 Page _____ of _____

Project Dak Cliff Estates

Item _____

The 100 g_p flow from all the area south of Mrs. Dugans driveway that drains east to Maize road can be contained within the street right of way.

See attached calculations.

Also included is a copy of the charges to the drainage plan due to benefit districts.



Date 6-13 Page 1 of

Project Oak Cliff

Item Flow in Gutter of Main Rd

D.A. = 3.78 acres

0.42 ac. (street) COR - 0.8
 0.77 ac. (residential) COR - 0.5
 2.59 ac. (lawn) COR - 0.3

COR =
$$\frac{0.42(0.8) + 0.77(0.5) + 2.59(0.3)}{3.78}$$

COR = 0.40

LSB = 925 ft.

Relief = 7.14'

SLSB = 0.77%

T.O.C =
$$\frac{1.8 (1.1 - 0.40) (\sqrt{925})}{(0.77)^{0.33}} = 42 \text{ min}$$

$INT_2 = 39.6 (42)^{-0.77} = 2.2 \text{ in/hr}$

$INT_{100} = 100 (42)^{-0.79} = 5.2 \text{ in/hr}$

$Q_2 = 0.4 (2.2 \text{ in/hr}) (3.78) = 3.3 \text{ cfs}$

$Q_{100} = 0.4 (5.2) (3.78) = 7.9 \text{ cfs}$

Street Capacity (from nomograph for flow in triangular gutters)

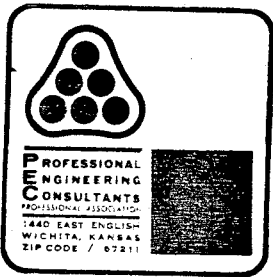
$Q = 3.3 \text{ cfs } S = 0.035 \text{ ft/ft}$

$d = 0.35'$

$Q = 7.9 \text{ cfs } d = 0.49'$ from Mrs Dujan property

Q_{100} from median 230-215

D.A. = 11.5 ac. } from storm sewer run
 TOC = 31.6



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Project Oak Cliff

Item Flow in Gutter of Moize Road

$$INT_{100} = 100.0 (31.6)^{0.79} = 6.5 \text{ in/hr}$$

$$Q_{100} = (11.5)(6.5)(0.7) = 52.3 \text{ cfs}$$

$$Q_s = 25.2 \text{ cfs (from storm run)}$$

$$Q_{street} = 52.3 - 25.2 = 27.1 \text{ cfs} + 7.9 \text{ cfs} = 35 \text{ cfs}$$

$$d = 0.85'$$

Q_{100} from 310, 210 and 205

$$D.A. = 5.3 \text{ ac}$$

$$C.O.R. = 0.8$$

$$L.S.B. = 750'$$

$$\text{Fall} = 27.5 - 20.0 = 7.5$$

$$S.L.S.B. = 1.0\%$$

$$T.O.C. = \frac{1.8(0.3)(\sqrt{750})}{(1.0)^{0.33}} = 14.8 \text{ min}$$

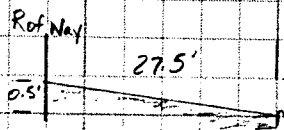
$$INT_{100} = 25.8(14.8)^{0.39} = 9.02 \text{ in/hr}$$

$$Q_{100} = 0.8(9.02)(5.3) = 38.2$$

$$Q_s = 9.2 + 6.9 + 2.5 = 18 \text{ cfs (flow in pipe)}$$

$$Q_{street} = 38.2 - 18.0 = 20.2 + 35.0 = 55.2$$

$$d = 1.0'$$



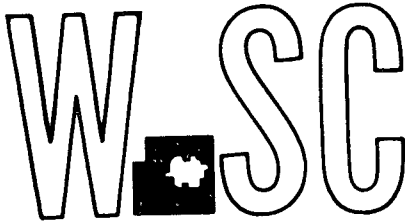
Depth from gutter to Right of Way = 1.13 ft

$1.0 < 1.13$ therefore street will carry Q_{100} .

OAK CLIFF ESTATES

1. EX. OF CHANNEL - S.W. PORTION OF
CHANNEL FLOODWAY LIMITS
2. N.E. AREA
100 year routing
3. S.E. Area
Location of drainage east of Waize Rd.
5 yr. freq. on commercial site

WICHITA—SEDGWICK COUNTY



METROPOLITAN AREA PLANNING
DEPARTMENT

CITY HALL — TENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202

June 26, 1980 (218) 268-1553

Gary Wiley
Professional Engineering Consultants
1440 E. English
Wichita, Ks. 67211

Re: S/D 80-1 - Final plat of Oak Cliff Estates

Dear Mr. Wiley:

At the regular meeting of the Subdivision Committee of the Metropolitan Area Planning Commission, June 26, 1980, 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 all drainage improvements required by the platting of this property including on-site storm sewers as well as a large storm sewer from this site to the Cowskin Creek.
- B. Approval of this final plat shall be subject to approval of the applicant's associated zone case (Z-2228) requesting "AA" and "LC" to "R-6", "A" and "LC".
- C. The applicant shall guarantee the extension of sanitary sewer to serve all lots being platted.
- D. The applicant shall guarantee the extension of City water to serve all lots being platted.
- E. The applicant shall submit an avigational easement covering all of Block 20 and a restrictive covenant assuring that adequate construction methods will be used to minimize the effects of noise pollution in any habitable structure constructed on subject property.
- F. The applicant shall guarantee the following roadway improvements:
 1. Paving of all interior streets;
 2. Construction of a continuous deceleration lane adjacent to the proposed light commercial development on both Maize Road and Maple;

3. Construction of four major entrances to serve the proposed multiple-family and commercial development.
- G. For the proposed multiple-family development on Lot 4, Block 20, if it is proposed that each dwelling unit will be individually owned, a Homeowners Association Agreement shall be submitted which provides for the maintenance of non-public common areas, parking areas, private drives, community facilities, etc.
- H. In accordance with the City sidewalk ordinance, sidewalks shall be guaranteed at the following locations:
 1. Both sides of Douglas/1st Street (collector);
 2. Both sides of Parkdale north of 1st Street (collector);
 3. East side of Lark between Douglas and Maple (multi-family)
- I. The diagonal street connecting Douglas and First shall be labeled as Karren.
- J. The final plat tracing shall indicate a 35-foot building setback from Maple and from Maize on Lot 1, Block 20.
- K. The applicant shall submit a covenant which provides for four off-street parking spaces per dwelling unit on each lot which abuts a 58-foot street.
- L. The plattors' text shall be revised to state that maintenance of the floodway shall be the responsibility of the owners of the lots on which the floodway is located, not the responsibility of all lot owners in the subdivision.
- M. A 10-foot utility easement shall be added between Lots 8 & 9, Block 20.
- N. The applicant shall make satisfactory arrangements with K.G.&E. for removal of an existing overhead electric line in Block 20.
- O. 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. 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 Thursday, July 3, 1980, at 1:30 p.m. If you should have any questions concerning this matter, please call.

Gary Wiley, P.E.
June 27, 1980
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Sincerely,

LO
Louise Olivarez
Senior Planner

LO:bh

cc: Inland Inv. Co., Inc. 200 Douglas Bldg., 104 S. Broadway, 67202
Dean Sellers, Acting City Engineer
X Paul Johnston, Flood Control