

3-199-86

JED, Reel 36/16

March 17, 1986

Mr. James Dyer
Baltimore County Zoning Dept.

Dear Mr. Dyer:

Enclosed are the redrawn and redescribed materials needed for my application for a zoning variance. You will recall that this is Case # 285 from 1985. The enclosed materials ~~are~~ reflect the clarifications that we discussed at our meeting on Tuesday, March 11, 1986. You will recall that the description of the variance requested needed rewording along the line of your understanding of the variance needed for this DR 5.5 zoned residential property. The plan/plot drawings also reflect redraft along the line of our discussion on 3/11.

I trust that these materials will meet with your approval and recollection and that accordingly, we may schedule a zoning hearing on the new petition.

I appreciate your help and personal involvement with my petition.

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SCIENCE AND
TECHNOLOGY
A Division of E.A. Engineering, Science, and Technology, Inc.

James Dyer
Loren Jensen

Baltimore Co.
Advisory Committee
County Office Building
11 West Chesapeake Avenue
Towson, Maryland 21204

Attention: Mr. Dyer and Mr. Commodari

Re: Item 285

Petitioner - Loren Jensen et ux
Variance Petition

Gentlemen:

Reference is made to the above variance petition and your letter of April 17, 1985. As you will recall, you asked me to check with three departments, Traffic Engineering (Mr. Michael Flannigan), Bureau of Public Services (Mr. Pat O'Keefe), and Current Planning (Ms. Sue Carrell) relative to their departments specific concerns for information relative to the petition. To date, I have discussed the concerns with each of the above individuals and am prepared to respond to your letter to the end of securing your agreement to schedule a zoning hearing for the above petition. The following has been completed:

Traffic Engineering was concerned about off-street parking and a turn-around area outside of the proposed garage of the proposed single dwelling residence. The attached revised layout of the structure addresses, I feel, these concerns by way of showing a standard turn-around radius immediately adjacent to the garage entrance and completely off of Burnbrae Road. I have tried several times to reach Mr. Flannigan but to date have failed to reach him. The revised plans do, however, address his concerns as he presented them to me last summer.

I have discussed the public services issues with Mr. Pat O'Keefe, and he has indicated that his department has no further questions or qualifications relative to the water and sewer availability to the proposed structure. I feel, therefore, that the Bureau of Public Services is also satisfied with this proposed variance petition.

Lastly, last spring Sue Carrell indicated her department wanted to be assured that the petition was consistent with flood plain control plans of the Storm Water Management Division of the Bureau of Engineering. You will recall that the subject property does have Towson Run passing along the eastern and lower-most property elevation of

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TECHNOLOGY, INC.

Corporate Headquarters
111 West Chesapeake Avenue
Towson, Maryland 21204
(410) 771-4955

18 July 1985

Mr. Jim Markel
Chief, Bureau of Public Services
County Office Building
Room 319
111 West Chesapeake Avenue
Towson, Maryland 21204

Dear Mr. Markel:

This submittal is to request approval of the rear yard setback from the flood plain on a property owned by Loren D. Jensen on the northeast corner of Burnbrae and Chesapeake Avenue. Model runs using TR-20 and HEC-2 were performed to locate the 100 year flood plain on the tributary to Towson Branch which flows through the property. Due to the slope of the site there is a 3.1 foot vertical distance between the 100 year flood plain and the proposed basement floor level. The horizontal distance is 5 feet instead of the required 20 feet setback. We request that a variance be granted to the 20 foot required setback from the 100-year flood plain because a margin of safety is being maintained in the vertical direction.

John Maple has reviewed the model runs and indicated that the resulting 100-year design flow of 270 cfs is conservatively on the high side. At this flow the water surface over tops a stone foot bridge and fills in a slight depression behind the proposed residence upstream of the bridge. Loren D. Jensen, who has resided on the adjoining property for twenty years has never observed water flowing over the foot bridge including during hurricane Agnes, David, and severe summer thunder storms. It is likely that to date this 100-year design flow has never occurred and that flows of this magnitude are associated with worst case conditions arising from future development of the water shed. With these observations in mind, several remedial actions may be considered.

- Under existing conditions with observed high flows passing through the culvert under the foot bridge (maximum capacity 140-150 cfs) the 20 foot horizontal criteria is met.
- The 372 foot contour between the foot bridge and the residence could be regraded to maintain a 10-15 foot horizontal clearance at the 270 cfs design flow. This would not appreciably alter the cross-sectional water surface elevation.

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Mr. Jim Markel, Chief
Bureau of Public Services

19 July 1985
Page 2

- If future development occurs which increases the high flow runoff toward the 270 cfs design value, the foot bridge could be removed at that time. This would maintain a 15-20 foot horizontal clearance.

During all three of these scenarios a vertical clearance of greater than 3 foot would always be present due to the site slope.

We would appreciate consideration of this variance request in light of the vertical margin of safety and due to the mediating steps discussed above.

If any additional information is needed, please do not hesitate to contact me.

Sincerely,

Jonathan Gost

Jonathan C. Gost
Scientist
Environmental Engineering

JCT/ser

Copy to: Loren D. Jensen

Mr. Pat O'Keefe
Bureau of Public Services
County Office Bldg. - Rm. 321

BALTIMORE COUNTY ZONING PLANS ADVISORY COMMITTEE

April 17, 1985

COUNTY OFFICE BLDG.
111 West Chesapeake Ave.
Towson, Maryland 21204

Mr. & Mrs. Loren Jensen
10 Burnbrae Road
Towson, Maryland 21204

Chairman
Nicholas B. Commodari

MEMBERS
Bureau of Engineering
Department of Traffic Engineering
State House Commission
Bureau of Fire Prevention
Health Department
Project Planning
Building Department
Board of Education
Zoning Administration
Industrial Development

RE: Item No. 285
Petitioner - Loren Jensen, et ux
Variance Petition

Dear Mr. & Mrs. Jensen:

Recently a meeting was held with various members of this Committee in order to discuss the above referenced petition. At that time, it was verbally indicated that revised site plans and/or further information about this proposal would be required from the following departments:

Traffic Engineering - Mr. Michael Flannigan 494-3554
Bureau of Engineering - Mr. Ed. McDonough 494-3754
Current Planning - Ms. Sue Carrell 494-3335

In order to avoid any future delays in processing this petition, you should contact the representative from the above department(s) and discuss the required revisions and/or requested information. When discussing this petition, it should be referred to by the above referenced item number. After discussing this matter with the above representative(s), you should contact me at 494-3391 in order to determine the outcome of said discussion and what your future course of action will be. Until this matter is resolved, the petition will not be scheduled for a hearing.

Very truly yours,
Nicholas B. Commodari, Chairman
NICHOLAS B. COMMODARI, Chairman
Zoning Plans Advisory Committee

NBC:bsc

file

100 YEAR FLOOD PLAIN ON A PROPERTY AT
BURNBRAE AND CHESAPEAKE AVENUE

1. LOCATION

A property proposed for development is situated on the northeast corner of Burnbrae Road and Chesapeake Avenue. The stream flowing through the site is a tributary to Towson Branch. The total drainage area upstream of the culvert under Burnbrae Road is 0.0856 mi² (54.8 acres). The rectangular culvert under Burnbrae Road is 7.5 ft wide, 6 ft high and 26.5 ft long. A 3 ft high drop weir is located 5 ft upstream from the bridge and a natural ledge (3-4 ft high) is located 20 feet downstream. A 6-ft wide stone foot bridge crosses the stream in the middle of the property, 110 ft upstream from the bridge at Burnbrae Road. The culvert under the foot bridge is approximately 7.5 ft wide and 2.5 ft high at the top of the semi-circular arch.

2. PREDICTED RUNOFF FROM A 100-YEAR STORM (TR-20)

The watershed was divided up into three segments. This was deemed desirable because the long narrow shape of the drainage area resulted in considerable channel flow rather than overland runoff to the point of downstream concentration. The drainage area, curve number, and calculation of time to concentration for each segment is illustrated in Table 1. The curve number of 75 reflects a composite quarter acre zoning in the upper two segments (DR 3.5, DR 5.5) for soil type B. In the downstream segment which is zoned DR 3.5, the curve number of 70 (half acre zoning) takes into account a likelihood that the area may not be fully developed due to much of the land being in a ravine. The TR-20 model executed using these parameters and rain Table II for a total accumulation of 7.1 inches resulted in a peak flow of 271 cfs. The 10-year storm (5.2 inches) resulted in 166 cfs. The computer printout for both cases is included in Attachment 1.

6/4/87

It is worth noting that in a small watershed such as the one under study, neither the total accumulation or duration of the 100 year storm is associated with the peak flow. Due to the small time of concentration the water very quickly runs off such that the peak flow is more closely associated with the maximum rate of rainfall. During a 100 year storm (rain Table 11, 7.1 inches total accumulation) there is a 15 minute period during which 1.96 inches of rain accumulates. The accumulation was 0.74 inches during the preceding 15 minutes and only 0.31 inches during the following 15 minutes. The 100 year peak flow is determined by this one cloud burst of 1.96 inches in 15 minutes at the height of the storm.

To illustrate the dependency of the peak flow on the rainfall rate, TS-20 was executed using the same parameters defined above but with the hourly accumulation of rainfall as measured at the Baltimore/Washington Airport during hurricane Agnes in June 1972 (5.24 inches in 22 hour). The resulting peak flow was only 32 cfs as compared to the theoretical 100 year storm of 7.1 inches in 24 hours which resulted in 270 cfs.

3. 100 YEAR FLOOD PLAIN (REC-2)

BEC-2 was executed using the special bridge method starting with a critical depth at the drop weir 5 ft above the culvert under Burnbrae Road. The computer printout for a 100 year peak runoff of 270 cfs and a 200 cfs case is included as Attachment 2. A schematic of the station locations and longitudinal elevations is illustrated in Figure 1. The 100 year flood plain is shown upon a topographical survey of the property in Figure 2.

The weir flow over the foot bridge is at an elevation of 371.7 feet (top of foot bridge = 370.5 ft). This elevation is 3.3 ft below the proposed basement floor level of 375 feet. The horizontal distance between the natural 371.7 foot contour and foundation wall is 5 feet. The natural contour lines form a slight depression behind the house. A regrading to straighten the 372 ft contour would result in maintaining a 15 ft horizontal distance behind the house without noticeably altering the model

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results for the cross-section. Due to the slope of the site the margin of safety with respect to the 100 year flood plain is being maintained in the vertical rather than horizontal direction.

At the design flow of 270 cfs weir flow accounted for 112 cfs and pressure flow for 159 cfs. This implies that the stream flow would probably need to be 140-150 cfs to pass through the culvert under the foot bridge and stay within the channel.

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TABLE 1 DRAINAGE AREA, CURVE NUMBER AND TIME OF CONCENTRATION CALCULATION

Segment	Area (mi ²)	CN	Flow Type	Distance (ft)	Slope (2)	Velocity (fps)	Time (hour)
Upstream	0.0409	75	Lawn	400	1.5	0.8	0.14
			Grassed waterway	900	3.7	2.8	0.09
							0.23
Middle	0.0305	75	Lawn	370	4.6	1.5	0.07
			Grassed waterway	170	5.9	3.5	0.02
			Gully/stream flow	940	4.2	5	0.05
							0.14
Downstream	0.0142	70	Lawn	100	6	1.6	0.017
			Lawn	40	25	3.5	0.003
			Lawn	200	5	1.5	0.037
			Grassed waterway	100	25	7	0.004
			Stream flow	700	3.6	6	0.032
							0.1

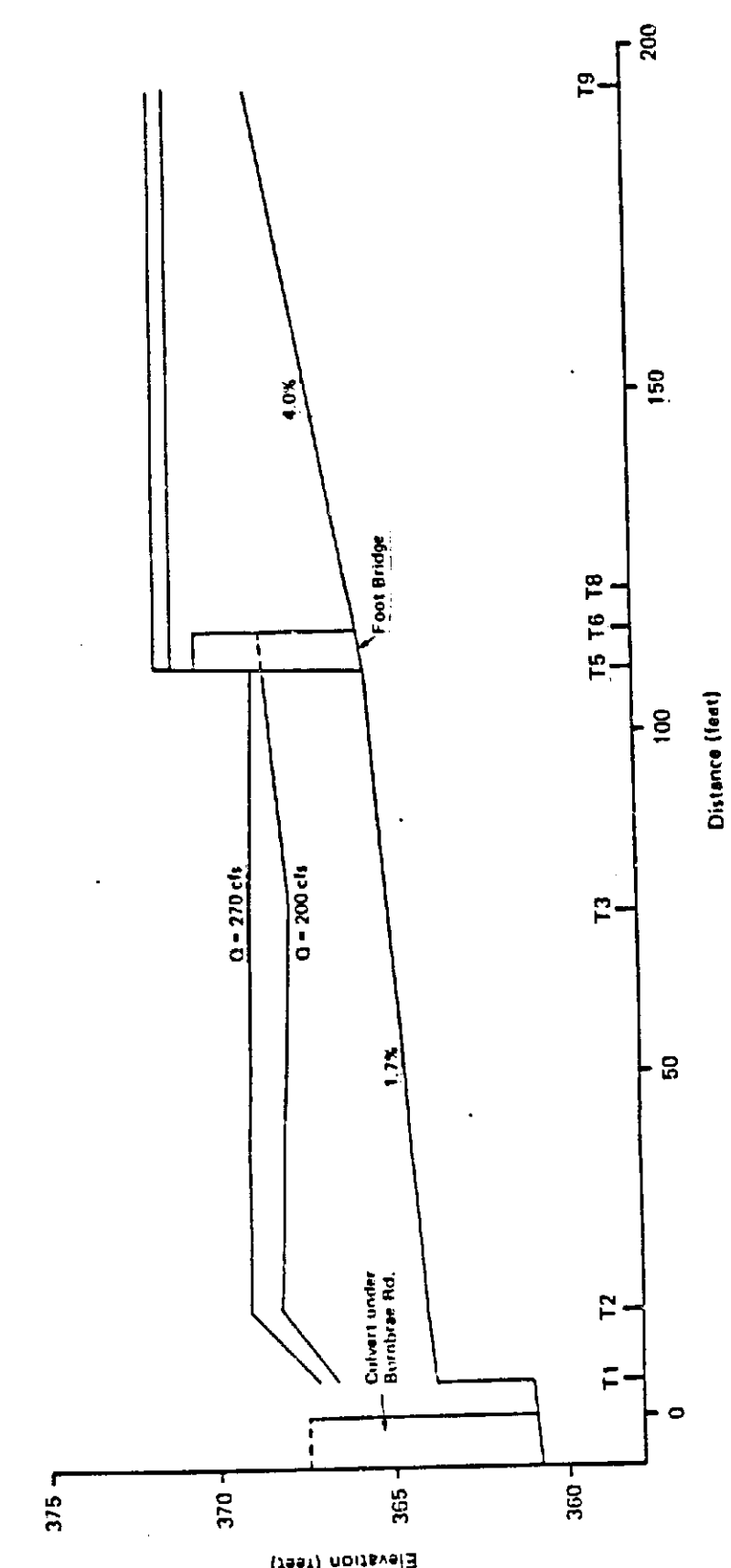
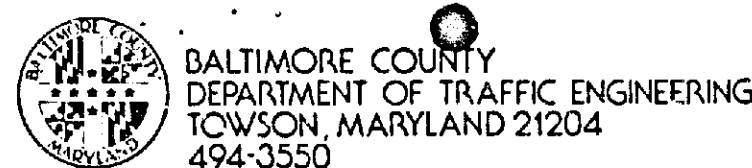


Figure 1. Cross sectional station locations and longitudinal water surface profile.



STEPHEN E. COLLINS
DIRECTOR

April 8, 1985

Mr. Arnold Jablon
Zoning Commissioner
County Office Building
Towson, Maryland 21204

Item No. 285 -ZAC- Meeting of April 9, 1985
Property Owner: Loren D. Jensen, et ux
Location: NW/Cor. Chesapeake Ave. & Burnbrae Road
Existing Zoning: D.R. 3.5
Proposed Zoning: Variance to permit a rear yard of 16' and 8' in lieu of required 30' and 22.5' and a front setback of 0' in lieu of the required 7'.

Acres: 9th
District: 9th

Dear Mr. Jablon:

The property owner must have two on site parking spaces and a turn-around area on site.

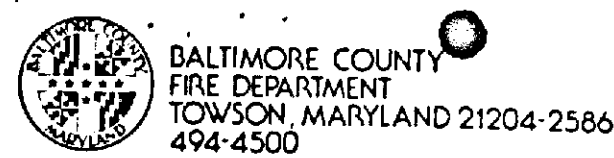
The property owner must provide a grading plan of the driveway and turnaround area and a flood plain study.

Due to the severe vertical, and horizontal curve and the narrow street this site can be expected to cause traffic problems during construction.

The bridge on Burnbrae Road should be checked by the Department of Public Works for a weight limit.

Michael S. Flanagan
Traffic Engineering Assoc. II

MSF/ccm



PAUL H. REINCKE
CHIEF

April 15, 1985

Mr. Arnold Jablon
Zoning Commissioner
Office of Planning and Zoning
Baltimore County Office Building
Towson, MD 21204

Attention: Nick Comodari, Chairman
Zoning Plans Advisory Committee

RE: Property Owner: Loren D. Jensen, et ux

Location: NW/Cor. Chesapeake Ave. and Burnbrae Road

Item No.: 285 Zoning Agenda: Meeting of 4/9/85

Gentlemen:

Pursuant to your request, the referenced property has been surveyed by this Bureau and the comments below marked with an "X" are applicable and required to be corrected or incorporated into the final plans for the property.

() 1. Fire hydrants for the referenced property are required and shall be located at intervals of _____ feet along an approved road in accordance with Baltimore County Standards as published by the Department of Public Works.

() 2. A second means of vehicle access is required for the site.

() 3. The vehicle dead end condition shown at _____

EXCEEDS the maximum allowed by the Fire Department.

() 4. The site shall be made to comply with all applicable parts of the Fire Prevention Code prior to occupancy or beginning of operation.

(X) 5. The buildings and structures existing or proposed on the site shall comply with all applicable requirements of the National Fire Protection Association Standard No. 101 "Life Safety Code", 1976 Edition prior to occupancy.

() 6. Site plans are approved, as drawn.

() 7. The Fire Prevention Bureau has no comments at this time.

REVIEWED: [Signature] Noted and Approved: [Signature]
Fire Prevention Bureau
Special Inspection Division

/mb



April 15, 1985

TED ZALESKI JR.
DIRECTOR
Mr. Arnold Jablon, Zoning Commissioner
Office of Planning and Zoning
County Office Building
Towson, Maryland 21204

Dear Mr. Jablon:

Comments on Item # 285 Zoning Advisory Committee Meeting are as follows:

Property Owner: Loren D. Jensen, et ux
Location: NW/Cor. Chesapeake Avenue & Burnbrae Road
Existing Zoning: D.R. 3.5
Proposed Zoning: Variance to permit a rear yard of 16' and 8' in lieu of the required 30' and 22.5' and a front setback of 0' in lieu of the required 7'.

Acres: 9th
District: 9th

The items checked below are applicable:

(A) All structures shall conform to the Baltimore County Building Code 1981/Council Bill L-82 State of Maryland Code for the Handicapped and Aged; and other applicable codes.

(B) A building/ & other /miscellaneous permit shall be required before beginning construction.

(C) Residential: Three sets of construction drawings are required to file a permit application. Architect/Engineer seal is/ is not required. Non-reproduced seals and signatures are required on Plans and Technical Data.

D. Commercial: Three sets of construction drawings with a Maryland Registered Architect or Engineer shall be required to file a permit application.

E. An exterior wall erected within 6'0" for Commercial uses or 3'0" for One & Two Family use group of an adjacent lot line shall be of one hour fire resistive construction, no openings permitted within 3'0" of lot lines. A firewell is required if construction is on the lot line, see Table 401, line 2, Section 1407 and Table 1402, also Section 2012.

F. Requested variance appears to conflict with the Baltimore County Building Code, Section/s _____

G. A change of occupancy shall be applied for, along with an alteration permit application, and three required sets of drawings indicating how the structure will meet the Code requirements for the proposed change. Drawings may require a professional seal.

H. Before this office can comment on the above structure, please have the owner, thru the services of a Registered in Maryland Architect or Engineer certify to this office, that, the structure for which a proposed change in use is proposed can comply with the height/area requirements of Table 505 and the required construction classification of Table 401.

I. Comments

NOTE: These comments reflect only on the information provided by the drawings submitted to the office of Planning and Zoning and are not intended to be construed as the full extent of any permit. If desired, additional information may be obtained by visiting Room 122 (Plans Review) at 111 W. Chesapeake Ave., Towson.

Very truly yours,

[Signature]
Charles E. Burnham, Chief
Plans Review

CFR:--

6/4/87

1. Elevation of lowest floor no lower than 378.0 ft.
2. No construction, grading or filling will occur within the 100 year flood plain elevation as shown on this plan.
3. If in the future flooding occurs as a result of stream diversion by a levee, rising from bridge, rising from bridge, the property owner will be held liable for any damage.
4. Potential problems may be solved, prior to the sale of the property, of potential problems from flooding if improvements of any type are made within the area bounded by the 100 year flood plain.
5. Owner will hold Ramsey County harmless from any future flooding within the 100 year elevation due to upstream development.

Jensen residence
is on approximately
2.0 acres.

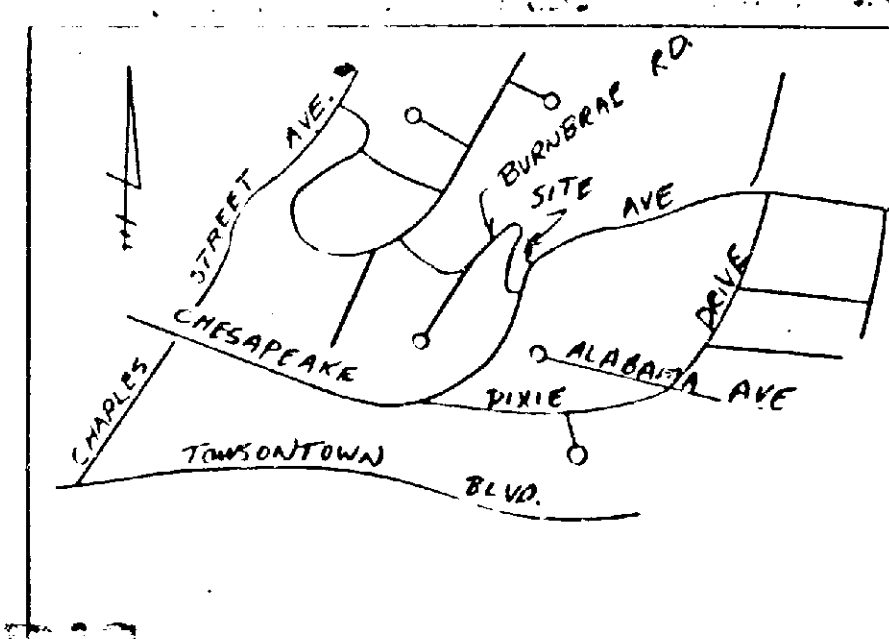
NOTE:
COORDINATES SHOWN HEREON
ARE NOT TIED INTO STATE SYSTEM
1' CONTIGUOUS INTERVALS SHOWN.

	<u>TOPOGRAPHICAL SURVEY</u> <u>OF JENSEN PROPERTY</u>	
	<u>BALTIMORE COUNTY, MARYLAND</u>	
	DESIGN J. YOST	DATE OCTOBER, 1958
	DRAWN NRK	SCALE 1" = 20'
	CHECKED C.F.	PROJECT NO. ONE 300
PROJECT ENGINEER DAVID S. GANTZ	EAST 100 TECHCENTER DRIVE SUITE 218 MILFORD, OHIO 48180 (813) 248-0830	EAST BALTIMORE CHICAGO CINCINNATI LINCOLN NEW YORK SAN FRANCISCO
		SHEET NO. 1 OF 1

**House Proposed Location
Jensen Property
Liber 9
Folio 111**

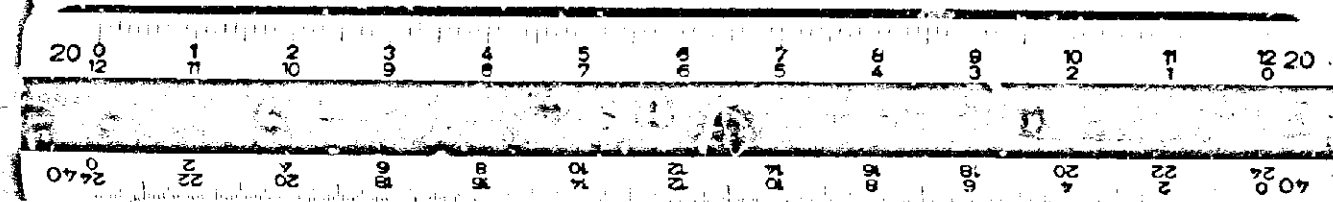
**Burnbrae &
Chesapeake Ave.**

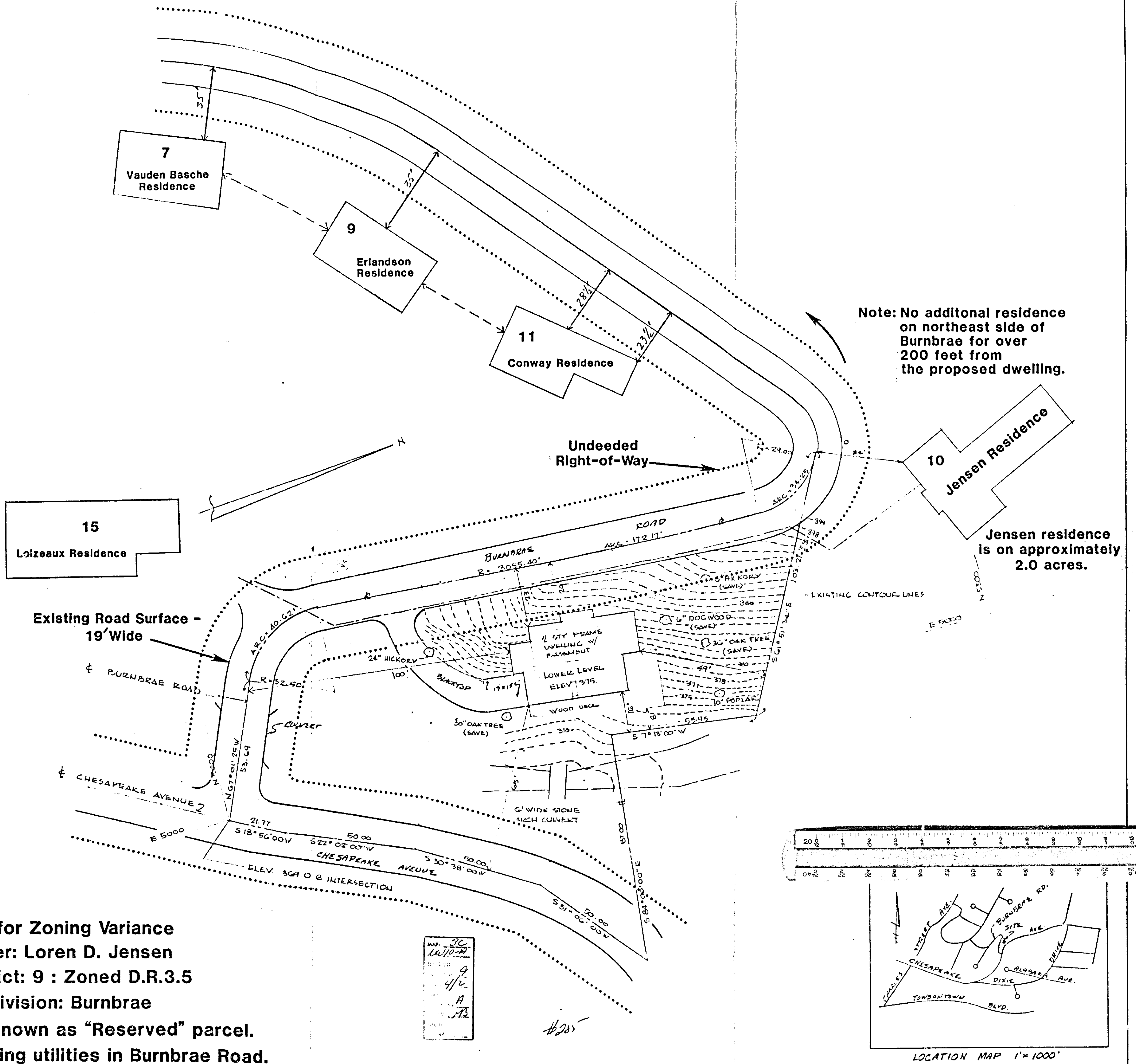
Plat for Zoning Variance
Owner: Loren D. Jersen
District: 9 : Zoned D.R.3.5
Subdivision: Burnbrae
Lot known as "Reserved" parcel.
Existing utilities in Burnbrae Road.



PETITIONER'S
EXHIBIT 1

LOCATION MAP 1"=1000'





RESIDENT BUILDERS INC.
17 W PENNSYLVANIA AVE.
TOWSON, MARYLAND

NOTES:
HOUSE PROPOSED LOCATION
JENSEN PROPERTY
Liber 9
Folio 111

LOCATION
BURNBRAE + CHESAPEAKE AVE.
drawn by:
date 11-4-61
scale. 1" = 20' - 0"
SHEET NO
ONE OF ONE