Report on Review of the Zininsky property in Cranbury to determine the traffic implications resulting from the development of this site in accord. when the Mt. Lauren hours, proposa!

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Consulting Engineers • Land Surveyors • Professional Planners

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June 17, 1985 File No. 5236

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> Sterns, Herbert & Weinroth 186 West State Street P.O. Box 1298 Trenton, N.J. 08607

Attn: Mr. Michael J. Herbert

Re: Cranbury Mount Laurel II Litigation

Dear Mr. Herbert:

As requested, I have reviewed the Zirinsky property in Cranbury to determine the traffic implications resulting from the development of this site in accordance with the Mount Laurel housing proposal. It is proposed to develop the subject property at 8 dwelling units per acre for a total of 1,152 dwelling units. The Zirinsky property, also known as Site 6, contains approximately 144.2 acres of land and is located in the northern portion of Cranbury Township, west of U.S. Route 130. Access to the site would be provided from Main Street and Plainsboro-Cranbury Road.

The scope of this study included a review of the roadway conditions in the general site vicinity, a review of existing traffic flow patterns and a determination of the anticipated access locations as they relate to the historic district of Cranbury Township.

A number of documents were reviewed prior to the preparation of this report, including the Mount Laurel II Compliance Program for Cranbury Township, New Jersey, prepared by the Cranbury Township Committee and Cranbury Township Planning Board; the Masters Report, prepared by Philip B. Caton, AICP; and the Cranbury Township Land Use Plan.

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An assessment was conducted of existing and proposed developments in an effort to establish existing and future travel desire lines from the subject property. Estimates of traffic to be generated by the 1,152 dwelling units were developed based on studies published nationally by the Institute of Transportation Engineers and from research data compiled by this firm at similar developments. Based on the anticipated travel desire lines, site traffic was distributed to the adjacent street system and an assessment made of the impact on the historic district in downtown Cranbury Township.

The anticipated access locations for the subject property were assessed to determine the impact said locations would have on traffic movements through the historic district. The accessibility to the Village area and the commercial facilities provided therein was reviewed with respect to pedestrian and vehicle access.

Upon a review of the foregoing information, a final conclusion was reached as to the overall impacts anticipated to occur within the historic district of Cranbury Township, should the development of Site 6 for 1,152 dwelling units receive approval.

The roadway system in the general Cranbury Township area consists of principal arterial highways, major and minor collector roadways and local roadways. The principal arterial roadways in the general site vicinity are U.S. Route 130 located east of Site 6 and U.S. Route 1 located to the west of the subject property. These roadways are multi-lane, divided arterials, providing region wide service. The New Jersey Turnpike, also located to the east of the site, is a multi-lane, north-south limited access arterial providing interchange location from New Jersey Route 32 in Monroe Township and New Jersey Route 33 in Hightstown.

The New Jersey Department of Transportation is presently studying the location and construction of Route 92 which has been proposed as an east-west connector roadway in the general area. Several alternative alignments for Route 92 are presently under consideration. Although the westerly terminus is anticipated to occur at Route 206 in Montgomery Township, the location of the easterly terminus is still in question. The primary locations for the easterly terminus include New Jersey Route 33 in Hightstown and New Jersey Route 32 near the turnpike interchange in Monroe.

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The major collector roads in the general site vicinity include County Route 535, Dey Road, Station Road, and Main Road. Plainsboro-Cranbury Road is also a collector type roadway, providing a direct connection from County Route 535 west to U.S. Route 1.

A review was conducted of the anticipated development in the region as outlined in the "Mount Laurel II Compliance Program for Cranbury Township, New Jersey". The major developments presently proposed or under construction are oriented primarily to the U.S. Route 1 corridor located west of the subject development. The following figure depicts the location of the major developments located proximate to Cranbury Township.

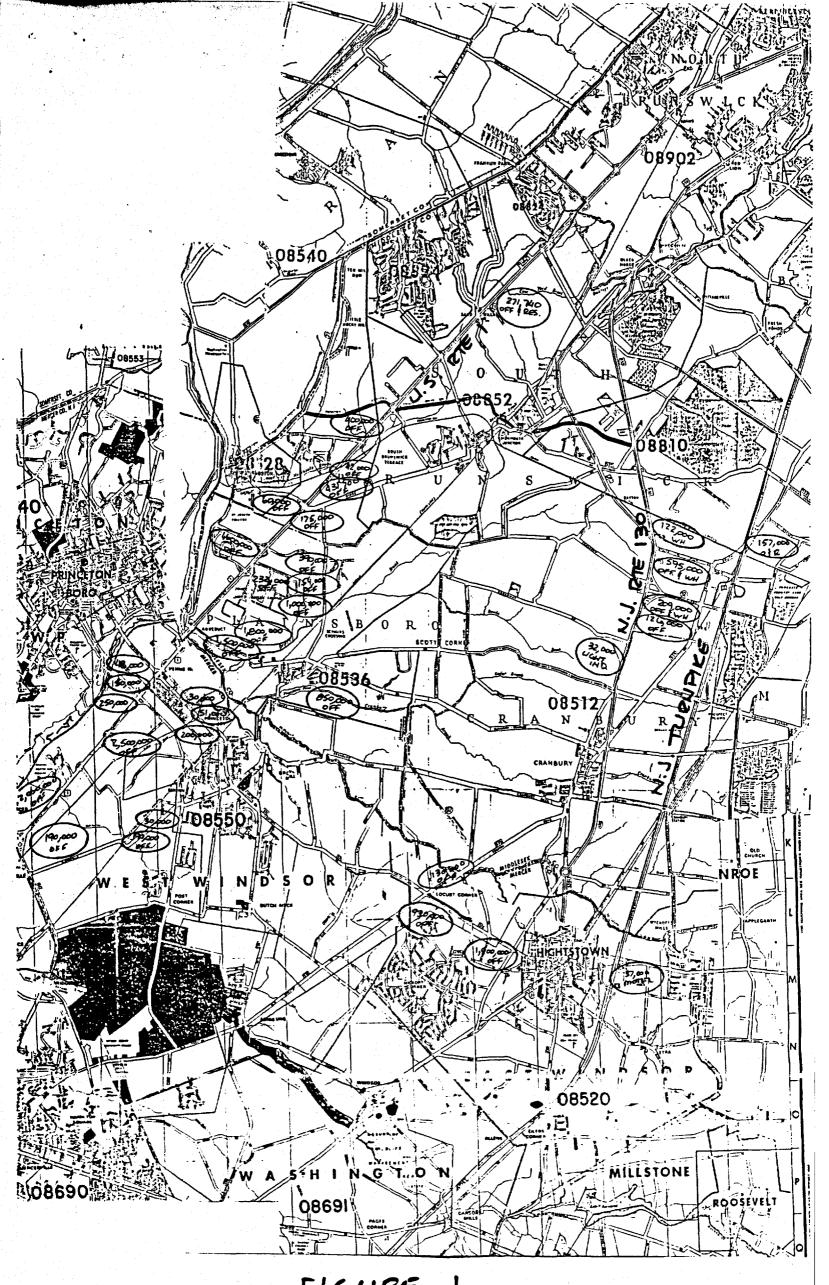


FIGURE I AREA DEVELOPMENT

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As can be seen from Figure 1, the Route 1 corridor represents the substantial growth area from the standpoint of industrial and commercial activity. With respect to Site 6, Plainsboro-Cranbury Road provides direct access to the Route 1 corridor without the need to traverse the Historic Village area of Cranbury Township. It is this firm's judgment that the majority of site generated traffic will be drawn in a westerly direction as a result of the extensive Route 1 corridor development. It is estimated that approximately 50% of site generated traffic will be oriented toward the Route 1 corridor. Twenty-five (25%) percent of site generated traffic is anticipated to be oriented toward the New Jersey Turnpike and Monroe Township area, with 10% oriented toward East Windsor Township, and the remaining 15% oriented to the south and west toward the West Windsor area. With respect to the impact on the Historic Village of Cranbury, it is anticipated that only the 10% of site generated traffic oriented toward the East Windsor Township area would require the use of roadways traversing the Historic Village area.

Based on studies published nationally by the Institute of Transportation Engineers, as well as research data compiled by this firm, trip generation estimates have been developed for the 1,152 multi-family units proposed. Table I has been prepared to outline this anticipated trip generation.

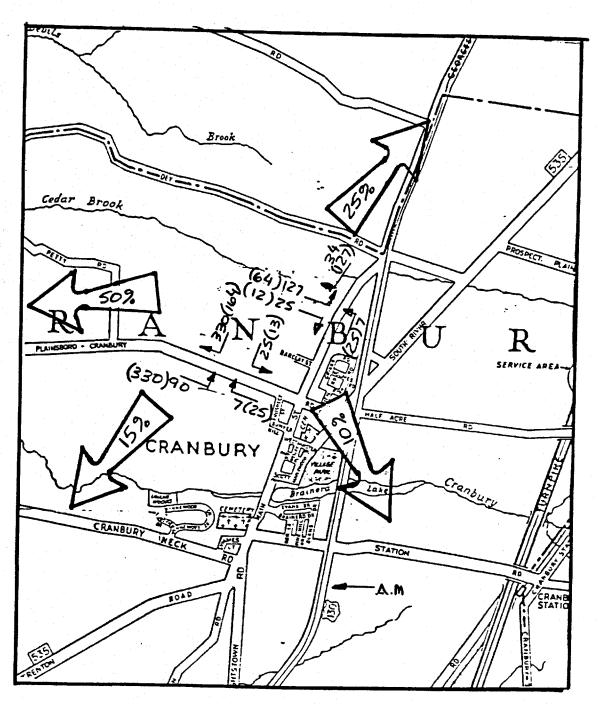
TABLE I

Trip Generation

A.M. Peak Street Hour			P.M.	P.M. Peak Street Hour		
In	Out	Total	<u>I n</u>	<u>Ou t</u>	Total	
138	507	645	507	253	660	

As can be seen from Table I, and as is typical of residential developments, the primary movements will occur as outbound movements during the A.M. Peak Street Hour and inbound movements during the P.M. Peak Street Hour. Based on the site traffic distribution outlined above, the following figure depicts the traffic volumes anticipated to be generated by the proposed development and the orientation of said volumes.

Figure 2
TRAFFIC DISTRIBUTION



Δ.M. PS.H. (P.M. P.S.H.)

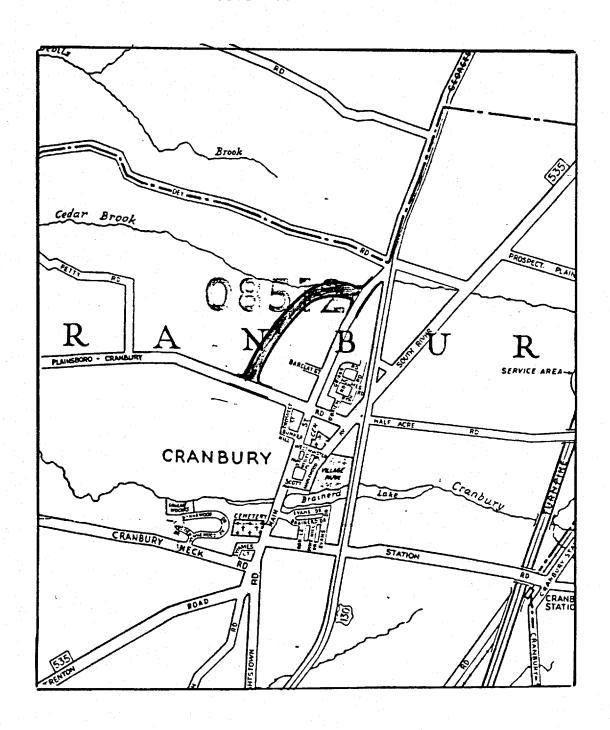
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In comparison with other sites considered for Mount Laurel development, particularly those to the east of U.S. Route 130, it is evident that the development along the U.S. Route 1 corridor will tend to pull this traffic to the west and require crossing through the Historic Village of Cranbury Township. It is anticipated that the development of tracts to the east of Route 130 will have a more significant impact on the Historic Village than development of Site 6.

As previously mentioned, access to the subject property is anticipated to be provided in the northeasterly corner of the site on Main Street and in the southerly portion of the site, on Plainsboro-Cranbury Road. This interconnected access system will enable much of site generated traffic to circulate through the site and onto the adjacent street system of Cranbury Township, at the same time minimizing the use of Main Street south of the site access location. Figure 3 has been provided to depict the anticipated location of the proposed site access.

Figure 3
SITE ACCESS LOCATIONS



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As can be seen from the foregoing, access to Site 6 is such that impacts on the Historic Village area can be minimized. The link provided between Plainsboro-Cranbury Road and North Main Street provides in effect a diversion route enabling a bypass of the downtown area. Although it is not predicted that vast numbers of motorists presently using the downtown area intersections will utilize this diversion route, it is anticipated that some diversions will occur, further reducing overall impacts on the downtown village area.

It is also important to consider that although the Department of Transportation has not finalized the Route 92 location, all of the locations presently under consideration would result in accessibility to Route 92 from Site 6, occurring primarily to the west of the site. Although an interchange for Route 92 has been proposed at Cranbury Road, westbound traffic from Site 6 would have more efficient access to Route 1 from Plainsboro-Cranbury Road and would in all probability not use the Cranbury Road interchange. Westbound traffic from sites east of Route 130 would utilize the Cranbury Road interchange with Route 92. Again, the anticipated locations for Route 92 and the development of the Route 1 corridor, as well as the proposed access concept, combine to reduce overall impacts from this site on the Historic Village of Cranbury Township.

The downtown area of Cranbury Township provides commercial activity, police and fire services and elementary school services. Of all of the sites under consideration, Site 6 is the only site with significant proximity to the downtown area to foster pedestrian use of the facilities provided. Access to the village area would range from one-half to three-quarters of a mile from the subject property, well within reasonable walking distance for minor shopping trips. The result of this proximity would be decreased automobile usage from the subject property to the downtown area than could be anticipated from the development of many of the other properties under consideration. It is certain that some additional vehicle movements will be generated through the village area as a result of shopping trips, however, the development of Site 6 lends itself well to minimizing these additional traffic movements. Referring to the Masters Report, "Site 6 is clearly the superior location among the four plaintiff sites" as it relates to pedestrian access. The Masters Report further states that "...this proximity would diminish the residents' reliance on the automobile and act to ease the traffic congestion which has been discussed previously."

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In conclusion, the development of Site 6 for 1,152 multi-family units is, in my judgment, a development scheme that will have minimal impacts on the downtown Historic Village of Cranbury Township. My conclusions are summarized as follows:

Site generated traffic will be oriented primarily toward the Route 1 corridor, with a secondary impact north of the site toward Monroe, resulting in no impact to the village area. It is estimated that some 10% of site generated traffic may utilize the downtown area to gain access to locations southeast of the site, primarily the East Windsor Township area. This additional traffic volume generated is minor in comparison to the anticipated impact generated by developments east of Route 130 which, in light of the Route 1 corridor distribution, will traverse the village area.

The site development plan calls for a connector road from Plainsboro-Cranbury Road to North Main Street, creating a bypass of the village area. This connector will provide a diversion for some percentage of traffic presently utilizing the village street system to gain access to the Turnpike and points north. The North Main Street access, as proposed, will service traffic oriented to Monroe and the New Jersey Turnpike from the site without the need to traverse the downtown village area.

- The construction of Route 92 is oriented primarily west of the site, further accommodating a westerly distribution from Site 6.
- A review of the location of Site 6 as it relates to the village area indicates said site to be particularly suited for pedestrian access to the village area. This should result in a reduced impact on the village from the standpoint of commercial trips. The advantage of this pedestrian access is further supported in the Masters Report.

It is therefore my conclusion that Site 6 represents a feasible location for the proposed Mount Laurel units and the development of same will not have a detrimental impact on the Historic Village area of Cranbury Township.

Very truly yours,

Henry Ney, P.E.

HJN: KPM: ms