

COMMUNITY & ENVIRONMENTAL DEFENSE SERVICES

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April 22, 2004

Jane Doe
Main Street Citizens Association
123 Main Street
Anywhere, Washington 98765

RE: Initial Strategy Analysis Results

Dear Ms. Doe:

Following is a summary of the results my research into the Jones Property. During this research I focused on the issues of greatest concern to you and other Association members:

- inadequate sight-distance at the proposed intersection with West Road;
- the excessive number of lots;
- the stormwater facility proposed for construction next to Mrs. White's home;
- the proposed relocation of Mrs. White's driveway;
- impacts to existing wells; and
- environmental impact.

The summary begins with the most significant unresolved issues. The cost estimates you requested are provided at the end of each issue summary.

SIGHT-DISTANCE

An existing driveway off of West Road provides access to both Mrs. White's home and that of Mr. Jones who, of course, owns the "Jones Property." The applicant proposes to construct a new road intersecting West Road at this same point. The new road, identified as Road X on the enclosed development plan, would provide access to ten new homes plus the Jones house and Mrs. White's home.

On January 14th our I visited this intersection. My initial layman's opinion was that sight-distance was marginal to the north and deficient to the south. I discussed my findings with a traffic engineer in our network who agreed that sight-distance was deficient. However, our traffic engineer needs to do his own study to confirm this. The study will probably be completed next Monday or Tuesday.

In a letter dated January 6, 2004 (see Attachment A) the State Roads Commission (SRC) stated that the proposed entrance was acceptable. The SRC letter cited a *Sight Distance Investigation Report* (see Attachment B) prepared by the applicant's consultant as the basis for their determination.

A copy of the SRC letter and the applicant's report was forwarded to our traffic engineer who determined that the minimum required sight-distance computed by the report does not conform to generally accepted procedures. Specifically, the applicant failed to allow for driver reaction time which resulted in an underestimate of required sight-distance.

Our traffic engineer is communicating with SRC to learn how they compute sight-distance and to make them aware of the discrepancy. He will also have a similar conversation with the County traffic engineering reviewer.

We should know by next Tuesday, January 27th what conclusions our traffic engineer has reached.

Should you wish our traffic engineer to testify then he prefers the morning of Tuesday, July 30th.

The applicant has proposed another eight houses on the southern half of the Jones Property. These homes would be served by an extension of Jonesville Road. Our traffic engineer believes sight-distance is marginal to the east of where Jonesville intersects Doe Street. He will make measurements at this location to more accurately assess sight-distance.

Our traffic engineer's fee after completing the additional study and his testimony will likely total \$1,500.

EXCESSIVE NUMBER OF LOTS

The community feels the number of lots proposed for the Jones Property is out of character with the area. In fact, the site is part of County Planning Staff Issue 04-005 and 04-006, of the Comprehensive Zoning Map Process, which calls for downzoning the RA-5 portion of the site to RA-6. As you know, this would reduce the allowable density from one house per acre to one per five acres.

At this point the issue most likely to affect density is that of Mrs. White's driveway. The development plan shows that the existing driveway would be removed and access to Mrs. White's home would be provided via the new Road X. Our attorney feels that language in Mrs. White's deed might prevent the driveway from being altered without her approval. To confirm this I asked a title attorney to take a look at the deed. I met with the attorney on Tuesday and his initial opinion was that the applicant does, in fact, need Mrs. White's permission. The title attorney will need to do a bit of research to confirm this. At this point he is available to testify. His fee by the time he completes the research and his testimony may total \$1,500.

Should the applicant be forced to keep Mrs. White's driveway in its present form, then the number of lots may be significantly altered.

STORMWATER FACILITY

The development plan shows two stormwater management facilities; one to serve the northern portion of the site and the other would serve Lots 12-19 off Jonesville Road. Both facilities will be sand filters preceded by small settling ponds.

In both the Brown and Black Property cases we argued that proposed stormwater facilities posed a thermal impact threat to downstream trout waters. In both cases the applicants were proposing to construct ponds to manage stormwater. Scientific research shows that stormwater may heat to 87°F while it sits in a pond. If discharged into a small, headwater trout stream then the stormwater can cause the stream to heat well above the 68°F safe temperature for trout.

As stated above, the applicant is proposing sand filters; not ponds. While there may be some heating in the settling ponds the effluent should cool considerably as it percolates through the sand filters. The potential impact is further negated by the fact that the sand filter effluent will discharge into Pecks Run at a point where the water volume is relatively large. It is unlikely we could prove a significant increase in stream temperature given these conditions. However, there is another stormwater issue which is very significant.

The northern facility will be built along Mrs. White's property line and would occupy much of the view from her front window. Obviously, Mrs. White is quite disturbed by this. She believes that the facility will detract from her view and that it will lower the value of her property. She is also concerned about the facility breeding mosquitos and the health implications of this.

I reviewed the applicant's plans with our stormwater engineer. This the same engineer who helped our clients in the Brown Property case. It did not make any sense to him why the applicant located the facility so close to Mrs. White's home. Furthermore, he believes other locations exist where the facility would function properly without intruding upon Mrs. White's view. One location would be just upslope of the existing pond shown on the development plan.

If you wish our stormwater engineer to testify on this point on either July 29th or July 30th. His total fee by the time his testimony ends would be approximately \$400 to \$500.

IMPACTS TO EXISTING WELLS

Development of the Jones Property could impact existing wells in two ways. First, if new septic systems were located too close then downslope wells could become contaminated. Second, withdrawing more ground water via new wells may affect the amount available to existing users. My opinion, though, is that it will be challenging to convince the Zoning Commissioner that either impact is likely. Following are the considerations which led me to this opinion.

Septic Systems

As you know from our prior cases, an existing well may be vulnerable to contamination if a septic system drainfield is located less than 200 feet upslope and the well casing has a length of sixty feet or less. Only one existing well arguably meets both criteria. This is the well serving the home adjoining proposed Jones Property Lots 18 and 19. The Peterson home is served by three wells, one of which abuts their common boundary with Lot 18. This well is 150 feet downslope of the Septic Reserve Area (SRA) for proposed Lot 19. County and State law requires that SRAs be a *minimum* of 100 feet from a well. Again, the Peterson well is 150-foot downslope. While there is research showing contamination can occur out to 200 feet, the Zoning Commissioner has been satisfied in the past if the 100-foot minimum is met. The other complication is that the well in question is not presently used. Instead the Petersons rely on the other two wells.

Well Yield

The site is located within the Jonesville Schist formation which has been designated a critical well yield area by the County. Additional groundwater withdrawals could threaten the amount of water available to existing users. However, wells are generally considered vulnerable only if they are less than 150 feet in depth and have a low yield.

I took two steps to gather information on the existing wells adjoining the Jones Property. First, I requested a printout from the State Department of the Environment (SDE) of all wells in the immediate area. This request generated a listing of about a thousand wells. I skimmed the listing for adjoining wells. I then asked SDE to provide me with a completion report for these wells. Each report shows well depth, yield and other useful information. Second, I mailed a postcard to all those with adjoining wells. On the postcard I asked about well depth and any history of problems.

From this research I obtained information on most of the wells adjoining the site. All the wells except one is deeper than 200 feet and some exceed 500 feet. A well located on Jonesville is 150 feet deep and had a yield of 5 gallons per minute (gpm). This well is located a couple of hundred feet upslope of proposed Jones Property wells. I think it would be challenging to convince the Zoning Commissioner that this well is likely to be impacted.

There is one other well issue. County policy calls for keeping new wells at least 100 feet from existing wells. The well area shown for proposed Lot 20 is 90 feet from the existing well serving the home off Pine Court.

Should you wish to pursue this issue then I would suggest using hydrogeology professor Dr. Paul Artesian. I would anticipate his fee would total \$1,000 with preparation time and testimony.

OTHER STREAM-WETLAND PROTECTION ISSUES

Last October our wetland ecologist surveyed the Jones Property at your request. In his report (see Attachment C) a number of possible issues were identified. Since he completed his report

the applicant produced a revised development plan. I forwarded a copy of the plan to our wetland ecologist and asked if he could look it over to see if his concerns were satisfied.

I anticipate he will charge \$120 to review the development plan. If he finds cause for concern then I assume you'd want him to testify, which would increase his fee to possibly \$500.

FOREST CONSERVANCY ISSUES

In comments dated January 8, 2004 (see Attachment D) the County raised three issues regarding the applicant's proposed forest conservancy. When I spoke with County officials earlier this week I learned the applicant was submitting redline revisions to address all three issues.

COMPLIANCE WITH REQUIREMENTS FOR SPLIT-ZONED LOTS

County Zoning Regulation §7B00.5 sets forth requirements for proposed lots straddling two or more Residential-Agricultural (RA) zones. These requirements are expanded upon in the out-of-print *County Policy Manual*, though the relevant pages will be found in Attachment E accompanying this letter. A number of the proposed Jones Property lots lie in both the RA-4 and RA-5 zone. Among other requirements, §7B00.5 requires locating the house, well and septic system entirely within either the RA-4 or RA-5 zone. Two proposed lots do not comply with this requirement: 7 and 20. This conflict was noted in the January 7th County planning comments contained in Attachment E. I understand a Special Hearing is required to resolve the conflict. A number of the lots will be served by a stormwater management facility known as a level spreader. The development plan shows that the Lot 20 level spreader is in the RA-4 zone while the house and well are on RA-5 zoned land.

Sincerely,



Richard D. Klein