

Oct. 26, 2010

RE: Wireless permit applications on Oct. 26, 2010 Planning and Zoning Commission Agenda

Dear Chair Gardener and Members of the Planning and Zoning Commission:

I am writing with regard to the three cellular antennas permits on the commission's agenda for tomorrow, Oct. 26. Please excuse me for submitting a lengthy letter on the day of the meeting. Unfortunately, some information on these applications was not available until last night (and some key questions still remain unanswered). The gist of my letter is to ask you to do the following, consistent with the goals and requirements of Albany's Wireless Communications Facilities Ordinance:

1) continue the permit request for 423 San Pablo Avenue until current information about what is apparently a new, revised proposal from the carrier is received and provided to the public (all of the documentation in the public packet is for the April 2010 request for 6 antennas; however, the staff report says the applicant is requesting 4 antennas)

2) continue the application at 1035 San Pablo until the applicant (AT&T) performs a thorough analysis of alternatives in higher-preferred districts for antenna sites as well as the preferable alternative of locating the new antennas in the Town Center shopping center sign in the third-choice district.

3) approve a permit for antennas at Golden Gate Fields if this will not set a precedent that would require also approving upgrades at 423 San Pablo, and subject to specific conditions about site safety, permit duration, and the as-yet unexplained microwave dish that is included in the application.

This letter explains the above recommendations for each permit applications in detail below.

423 San Pablo Avenue Monopole

The current staff report for the proposed antenna upgrades at the monopole at 423 San Pablo states that the applicant is apparently now proposing to remove the 4 existing antennas and install 4 new antennas. However, the supporting documentation attached to the staff report, including the professional engineer's report, all describes the applicant's prior proposal from April, 2010 to upgrade the 4 existing antennas and add two more, for a total of 6 antennas. There is no information in the public packet explaining what models of antennas are now proposed for the monopole or what the applicant's purpose is in installing the new antennas, nor is there an engineer's report detailing their power output, the number of channels in each, etc.

Without this information, neither the commission nor the public can make a meaningful determination about whether the proposed project meets the requirements of the wireless ordinance. For example, we do not know whether the 4 antennas now proposed would in fact have the capacity provide the same upgraded and enhanced service that the previously proposed 6 antennas would have provided. This application should be continued until complete information is provided to the commission and the public, as required by the wireless ordinance and wireless application checklist, specifying the technical details of the antennas.

With regard to Verizon's original application in April, 2010, the key issue was whether Verizon's application for new antennas to provide new "long-term evolution" (LTE) service could be approved under the terms of our ordinance, which allows only "routine maintenance" on legal non-conforming sites (Section I3, Existing Uses). Section F1 of the ordinance makes clear that the following activities require a major or minor use permit, design review, and a building permit and therefore would, logically, not constitute "routine maintenance": "all wireless communication facilities and facility modifications that involve any change in the specifications or conditions stipulated in the approved permit, including but not limited to changes in power input or output, number of antennas, antenna type or model, number of channels per antenna above the maximum specified in a use permit, repositioning of antennas, increase in proposed dimensions of tower or support structure, or any other facility upgrades." Verizon's original application stated that the proposed work was an upgrade.

1035 San Pablo

There are a number of problems with AT&T's proposal to locate 9 new antennas:

- It requests a location in the last-preference district for antenna sites under our ordinance, San Pablo/Solano commercial (SPC/SC) but fails to adequately demonstrate that a more preferable location cannot be found in the higher-preference districts or even within the third-preference district.
- It fails to meet the ordinance's stated goal of maximizing setback of antennas from residential uses.
- AT&T has not provided key pieces of information: a map of the coverage that would be achieved if its application for a site at 1760 Solano in Berkeley is approved (that site, if approved, would very likely overlap coverage with the proposed site at 1035 San Pablo and eliminate the need for the San Pablo site) and a clear explanation of whether the new site would close a coverage gap for all customers or only customers who purchase new equipment to take advantage of the new services the site would offer.
- The new antennas would create areas on the rooftop where the Federal Communications Commission (FCC) limits for radiofrequency (RF) radiation exposure would be exceeded, posing a danger to workers and emergency personnel such as firefighters.
- Adding the antennas and equipment cabinets to the rooftop would violate the zoning ordinance's limits on the total percentage of space that rooftop structures can occupy.
- The Code of Federal Regulations (CFR) limits PCS base station radiated emissions to a value that is lower than this installation would emit.

Priority order of zoning districts for antennas; this application does not meet key elements of the ordinance's purpose and intent

The "Purpose and Intent" section of the wireless ordinance emphasizes that three goals of the ordinance are to locate wireless facilities according to a preferential order of zoning districts, to encourage the leasing of municipally owned properties. In addition, Section D3 of the ordinance states as follows (emphasis added):

3. In all districts where wireless communication facilities are permitted, any such facility shall be located on a site that provides for, in order of priority,
 - a. the maximum achievable setback from any permitted child care facility or school; and
 - b. **the maximum achievable setback from any property line abutting a residential district.**

The proposed AT&T site does not meet any of the above goals and criteria. It has not thoroughly examined the options for locating in the first-choice district, commercial mixed-use (CMX) or the second-choice district, public facilities (PF), and the city has also not encouraged leasing of municipally owned properties for this site (City Hall, one block from the currently proposed site, has not even been considered as a site). Within the SPC district, AT&T did not propose to co-locate at the existing site it previously owned at the Town Center shopping center, which provides a significantly greater setback from residential property lines. (This site is, however, discussed in AT&T's alternatives analysis and appears to be acceptable to the carrier).

With regard to CMX, the city should request that its consultant or another independent wireless telecommunications engineer determine what type of facility would be needed in CMX (i.e., what height would be required) to reach AT&T's target coverage area. No information is given in the current consultant's report regarding the assumptions made about height or other details of the hypothetical CMX site that AT&T analyzed. The consultant's report states only that "AT&T provided a coverage map for an alternative site located in the CMX zone" and that the consultant determined that the coverage map did not provide service to the target area AT&T wishes to reach. No independent analysis was performed regarding whether it would be technically feasible for a site in CMX to reach the target area, and what the characteristics of that site would have to be.

With regard to the public facilities district, AT&T investigated locating the site at the fire station but not City Hall next door to the fire station, and also did not consider the USDA research facility on Buchanan Street, which is less than 0.5 miles from the fire station, four stories tall (taller than 1035 San Pablo), with antennas already on the roof and a large buffer of green space from Ocean View Park. In addition, if the city wishes to "encourage" wireless sites on municipal property, as stated in the ordinance, the city should make a thorough assessment of the feasibility of locating the site at the City Hall/fire station complex. Given the city's anticipated deficit next year, the

significant income – potentially \$25,000 or more per year – from leasing space for a cell site should be taken into account in this assessment.

Preferable location in SPC – Town Center. Finally, if after a more thorough analysis by AT&T and an independent consultant, it is determined that coverage to fill a demonstrated coverage gap is only feasible from within the SPC/SC district, AT&T should propose to co-locate at the Town Center shopping center sign. That location fulfills the ordinance's requirement to find a site that provides the maximum achievable setback from residential. Moreover, the original permit for that site was issued to Cingular, which is now AT&T. Cingular/AT&T divested those antennas to T-Mobile and is now seeking a replacement site; it seems only logical that AT&T should "relocate" to the site where its antennas were originally approved. This would require either an exemption to allow the sign height to increase, or redesign of the sign as a more aesthetically pleasing and taller architectural feature to house both the AT&T and T-Mobile antennas; the shopping center could, in this case, be permitted to construct an alternative sign on the property. This location would also satisfy the ordinance's preference for co-location of antennas.

Information is (still) missing from this application

Before elaborating on the points listed in the previous paragraph, I would like to note that there are some important pieces of information missing from AT&T's application. First, AT&T should provide a map showing what coverage would be if their proposed site at 1760 Solano Ave., Berkeley were approved. And, second, as noted in the staff report, AT&T says this site is necessary to fill a coverage gap, but it is not clear whether all existing customers would receive improved coverage from this site or whether customers would have to purchase new technology in order to benefit from the service that would be provided by this site.

This application violates rooftop coverage limits

With regard to the AT&T site violating the zoning ordinance's limits on percentage of rooftop that can be occupied by structures such as elevator penthouses and similar structures, I cannot take credit for this point, which will be explained at the meeting by resident Maureen Crowley.

This application appears to violate Code of Federal Regulations limits on PCS base station radiated power

The Code of Federal Regulations (47CFR24.232) says, for broadband PCS: "Base stations are limited to 1,640 watts peak equivalent isotropically radiated power (EIRP)...." The proposed AT&T PCS power of 1,440W ERP exceeds that value. $EIRP = 1.64 \times ERP$. Multiplying the AT&T PC stated ERP of 1,440W by 1.64 = 2,361.6, which exceeds the limit of 1,640. Therefore, this federal regulation, if it applies to this site, would prevent the installation of the AT&T antennas. The city needs to determine whether and how this federal regulation applies to this application.

The fact that AT&T may have poor coverage does not mean they should put antennas at a poorly chosen site

There is much anecdotal evidence that AT&T's coverage is poor in some areas of Albany and has been so for many years. However, if one compares the coverage maps submitted in support of this application with the ones on AT&T's website for prospective customers, one sees two very different pictures. The on-line coverage maps for prospective purchasers indicate much better coverage, including in the area that is the subject of this application. With regard to Albany customers' experience of poor coverage, one could argue that AT&T has made some poor business decisions, contracting to provide service that it did not have the network to provide, and divesting itself of large parts of the former Cingular network to T-Mobile. As a result, the company is now coming back asking for new antennas to replace those that it gave away. The fact that AT&T may well have poor coverage in some areas does not mean the company should be given a permit for a poor location for antennas.

We need to ensure RF exposure protection for workers and emergency personnel

If the 1035 San Pablo installation ends up being approved, an emergency shutoff such as is required at all gas stations for gas pumps should be required as a condition of the antennas permit, so that firefighters who might have to access the roof in an emergency can shut off the antennas to protect themselves from RF radiation exposure exceeding the FCC limit.

A few notes on the 1035 San Pablo staff report

The staff report says the city is preempted from regulating health implications of RF emissions. This is not strictly true. The city is only preempted, under federal law, from regulating health effects of RF emissions beyond what the FCC RF exposure limits require. The city is free to require that a site meet the FCC limits for protection of public and worker health.

The staff report says that exemption from CEQA is recommended because this is an alteration to an existing facility. However, this application is for a new facility.

Golden Gate Fields

The Golden Gate Fields (GGF) location where Verizon proposes new antennas and a microwave dish is a very suitable location for cell antennas in the city, similar in location and land use to the highest-preference CMX zone and very effectively meeting the ordinance's requirements for maximum setback from residential and school sites. For these reasons, I believe the commission should approve the antennas (but not the microwave dish until more information is provided about it) at this site, subject to the following caveats and conditions:

- This application should not be approved if doing so would set a precedent requiring approval of the abovementioned application at 423 San Pablo as the 423 San Pablo tower also predates our wireless ordinance (but does not meet any of the ordinance's criteria for antenna sites).
- The permit duration for the GGF antenna site should be tied to the land use; that is, the right to operate a wireless facility at this location should terminate when the current commercial use (the racetrack) ends or changes.
- Verizon or an independent consultant must demonstrate that persons climbing or occupying the tower are not subject to RF radiation exposures exceeding the FCC's limits for the general public. The tower appears to have an observation box at the top, and anyone accessing that box (including a curious teenager) would pass very close to the antennas. It is therefore imperative that the safety of persons accessing this location be verified.
- The microwave dish proposed at the GGF location should not be approved until its purpose is clarified and it is determined to meet the wireless ordinance's requirements. In particular, because this application is submitted by the property owner, Pacific Racing, it is not clear whether the microwave is for Verizon's use or GGF's use. If it is for Verizon's use, we need to understand its purpose and confirm that it meets the requirements of our ordinance, including serving Albany residents.

A Note about the Consultants' Report

I would like to underscore the importance of the city obtaining the services of an independent engineer, as provided for in our wireless ordinance, to evaluate cell antenna applications in a thorough and meaningful way with the city's interest as the primary focus. The word "independent" in the ordinance is critical; it means a consultant who does not work for the industry, who will proactively analyze the application with the city's concerns foremost, and whose task is to ask the technical questions that the city staff and commissioners cannot reasonably be expected to have the background to pose.

I am concerned that the RCC report on the 1035 San Pablo Ave. application does not achieve what the wireless ordinance intends by independent review. Among the ways that the RCC report falls short:

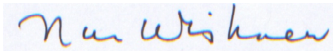
RCC states up front that its analysis is based on "wireless industry standards" not on the city's requirements or what is in the best interest of the city. RCC did not conduct independent testing or analysis but simply observed AT&T's drive-by coverage test and examined AT&T's coverage maps against AT&T's own stated objectives without questioning any of AT&T's assumptions. An independent coverage test would have used the consultant's own calibrated equipment and compared the results with AT&T's, for example, to ensure that AT&T's results were accurate. RCC did not analyze or question AT&T's objectives from either an engineering perspective or from the perspective of the ordinance's requirements. In addition, RCC did not perform proactive analysis in the city's interest, such as modeling what characteristics a site in CMX would need to have to provide coverage to AT&T's target area.

I urge the city staff to do further research to identify consultants who work for municipalities and similar clients and do not also work for industry. The number of such consultants is small, so this likely will mean retaining consultants who are located elsewhere, possibly out of state. I urge the city to choose the best consultant to represent the city's interests even if the consultant is not local and the wireless applicant might prefer another choice.

Conclusion

Thank you for your thoughtful consideration of these issues and for rigorously enforcing our wireless ordinance to honor the community's wishes for an orderly, aesthetically acceptable deployment of wireless facilities that meets the residents' desire for wireless service and limits their impact by maintaining a maximum setback from residences and schools.

Sincerely,

A handwritten signature in blue ink that reads "Nan Wishner". The signature is written in a cursive style and is placed on a light blue rectangular background.

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