The Twilight Cell Tower Fact Finding Report
February 14, 2014

The Committee identified four issues, beyond economics, associated with a cell tower installation: contract/control matters, historic district status, site location and health concerns. Reports on each accompany this report (with a contact person for questions given below). Some issues of lesser import, but which could impact the matter, such as technology alternatives on the horizon are highlighted below.

Economics

AT&T's agent has proposed the following rent: $2,000/month, a 3% annual escalation and 10% of AT&T's revenue from additional antennas put on the tower. Cell Site Consulting (CSC), a New Jersey-based consultant to landlords on cell tower projects (and used by a committee member on numerous projects) believes higher base rent and up to $1,000 to $2,000/month per additional carrier are possible.

As a counterpoint, in late October 2013, AT&T announced its exit from cell tower ownership by agreeing to lease 9,100 cell towers and sell 600 others to Crown Castle International. It will lease space on those towers for $1,900/month with a 2% annual escalation. It seems likely, therefore, that Crown Castle will become involved in this tower at some point. The disparity between AT&T's rent in that transaction and that proposed to Twilight, suggests that perhaps the revenue potential may be more limited than indicated by historical precedent.

The recurring costs associated with Twilight's role of landlord appear to be relatively modest, with the exception of CSC's fee, if it is engaged to assist in the negotiations:

- Property tax increase, estimated at $2,900, on the road/site improvements
- Plowing costs, estimated at up to $2,500 based on hiring outside help and 10 snowfalls
- Access road maintenance, estimated at up to $1,000 annually.
- CSC's fee is 25% of gross revenues annually.

The property tax estimate is by Mark Hommel (via Nathan). Nathan does all snow plowing. If AT&T access is a priority, then Nathan would use a subcontractor in order to not defer plowing Park Roads. Access road maintenance assumes a high quality gravel road with all appropriate culverts, ditches, etc. so as to minimize erosion. In that case, the annual maintenance estimate assumes one load of gravel ($500 +/-) and an equal amount for labor to apply.

To provide some perspective, the table below shows the net benefit of two pro forma scenarios: "Low" assumes the proposed base rent and two additional antennas at $1,000/month and "High" assumes a 10% ($200) bump to base rent and two additional antennas at $1,500/month (mid-point).

	Low	High
Gross annual revenue	36,000	62,400
Recurring costs, ex CSC	6,500	6,500
CSC	9,000 (99)	15,600 (171)
Net benefit	20,500	40,300
Per cottage (91)	225	443

The net benefit increases by the parenthetical amounts if CSC is not used to assist in the negotiations. The net benefit is before income tax, if any.

Nathan (as does Artie) believes Mossy Glen needs improvement to permit winter use due to poor drainage resulting in icy conditions. Determining what the work entails or might cost was beyond the scope of the committee's focus, but it seems probable AT&T would undertake the project as part of creating access.

AT&T's capital costs for road, site and power installation are likely to be high given the distance, terrain, and probable need for blasting (Nathan's thought). Basic economics suggests that as the costs and expenses borne by AT&T rise, the upside revenue possibilities diminish. The location's attractiveness and the apparent lack of an alternative site given the passage of time, however, suggest Twilight may hold some strong cards. The committee believes that, should Twilight choose to proceed, using a consultant (despite the high recurring fee), may be essential in view of the issues and possible changes the Crown Castle transaction may bring.

Finally, lease income may be deemed Unrelated Business Income and subject to income taxes. Twilight's accounting firm should be consulted on this aspect.

Site

All of the 20 cottages on Squirrel/Squirrel Hill Road are estimated to be at least 1,150 feet from the balloon test site by ground distance and more than 300 feet below it in terms of elevation. It is fairly safe to conclude that its location will be "invisible" - non-intrusive - to all cottages and cottagers who visit the upper reservoir or walk along the dirt "road" just above and parallel to Squirrel Road. In view of the proximity to trees of most buildings and areas within the Park and the vertical sight lines and elevations involved, it is also unlikely that the tower will be visible from anywhere within the Park.

The prospective location for the tower was determined by AT&T in terms of latitude and longitude reference points rather than a site survey. The balloon test was conducted from a "proxy" site – one within a reasonable distance of where an actual tower might be situated due to terrain features affecting sight lines, construction needs, etc. The site was visited by a fairly large group of people (including some committee members), representing nearly 25 cottages from throughout the Park.

The balloon test was conducted in order to determine the visual impact of a tower. A key goal was to obtain photographs of the balloon and impose alternative tower structures/styles over the balloon so as to "see" what a tower might look like. AT&T sent four photographs, all taken from locations within the Park (swimming pool, tennis courts, golf course and Wingate Road) showing no balloon. No photographs from Rte 23A were provided either because the balloon was not visible or high winds prevented it from floating (which was the case in the first attempt at photographs).

The targeted height of the balloon test was 20 feet above the tree line, the minimum based upon a single user (AT&T). The reality, however, is that the tower could be significantly higher since Hunter's Cell Tower Law favors tower sharing over additional towers (height increases by 10 feet/additional antenna).

While the time to complete site preparation and tower construction is estimated to be one month, the time required for road construction and power line installation remains unknown until completion of a site survey. In view of the time needed for negotiations, a site survey, and securing the various required approvals, it is unlikely that any construction work could begin until October.

Contract/Control

The Committee was given a generic contract to review. Even in a less one-sided document, there would be much to negotiate. The "degree of difficulty" of several points, however, is thought to be moderate – meaning doable. Briefly, the "big picture" points include:

- In the areas of permitted use, termination and access, the tenant has carte blanche as long as the tenant is current on rent. Failure to pay rent is the only default event, leaving few remedies if things don't go as expected. Twilight needs to define the protections it wants and can achieve.
- Twilight is responsible for providing 24/7 access and maintenance of the road.

- The "loss of control" issues associated with AT&T's leeway on site expansions, equipment upgrades/additions, etc. in providing a "public good or service" warrants additional study.

Unless there is an emergency, the facility will be maintained monthly or every other month. In emergency situations, AT&T would respond within 24 hours and would not notify the Park unless that is a requirement of the lease.

Historic District

Twilight Park was listed in the National Register in 2007. New York State's Bureau of Historic Sites is the agency that receives notification of projects sponsored by a federal or state agency and conducts impact studies on behalf of historic sites and districts to insure that project's compliance with relevant historical preservation policies. BHS sees its studies as a service to the project sponsor and conducts them without notification to the historic district/site.

There is no BHS review process for private developments no matter how "offensive."

Ironically, being a National Historic District imposes no subsequent restrictions on private owners of properties within the district. They can be altered or sold without limitation. The designation and register listing are recognition by the applicant and government, however, that historic places and their preservation are important - that Twilight is a special place to be preserved. Among the reasons for seeking historic district status was to protect Twilight from cell towers.

There is a measure of potentially strong protection in the Town of Hunter Cell Tower Law. Section 4 of 2002 Local Law #1 prohibits approval of a telecommunication facility "...within the view shed of a site listed on the State or National Register of Historic Places if the proposed tower will result in a significant impairment of the view from the historic location, as determined by the Planning Board."

Health

RF radiation has a two dimensional exposure risk. Thermal effects involve energy intensity or density, and the levels below which there is no risk of heating human tissue. Non-thermal effects concern biological or molecular changes (independent of temperature) that may arise from prolonged RF radiation exposure.

Thermal effects are addressed by U.S. and global safe exposure guidelines in place and unchanged since 1998/2000. Many countries and municipalities have adopted standards well below (more protective) U.S. and global guideline levels. There seems to be widespread acceptance that *actual* RF radiation exposure levels are generally far below even "less protective" guidelines (the U.S. being among them). Most experts, therefore, seem to agree that there is little health risk from thermal effects even at the base of a tower. The committee is of a similar opinion, particularly in view of the distance the proposed site would be from homes in the Park.

Non-thermal effects seem to be the focus of most of the RF radiation safety debate. There are no guidelines and no authoritative determination, as of yet, has been made that any are needed or that non-thermal effects constitute a health risk. There is an enormous body of "research" on non-thermal effects with results that are inconclusive, if not contradictory. Many studies assert that low levels of RF radiation, particularly for prolonged periods, can, over time, damage cell tissue and DNA, cause brain tumors and cancer, and can be linked to suppressed immune function, depression, miscarriage, Alzheimer's disease, and numerous other illnesses. The scientific community, however, recognizes that the RF radiation energy levels used in communication applications are "non-ionizing" - insufficient to strip electrons from human cells (which x-rays, for example, can do).

The lack of suitable long term data (proliferation of cell towers is a recent phenomenon) pertaining to "prolonged" exposure impedes the ability of any authoritative body to make a conclusive determination. This issue is beyond the abilities of the committee to reach any conclusions, but the debate is a fact and persists. The notes at the end of the health report provide links to some of the material reviewed by the committee as well as reference points for those interested in the subject.

The committee notes the existence of "Safe Absorption Rates" stamped on every cell phone. Their batteries generate RF radiation when the phone is in use. This reflects a concern regarding that radiation's ability to induce electric currents in brain cells when the phone is in use and in proximity to the head. This subject is beyond the scope of the committee's mandate.

Other Matters: No alternative to cell phones – landlines become extinct

The discontinuation of landline telephone service in rural areas, if not elsewhere, is not inevitable, despite cell phone proliferation and service capability improvements. But whether Century Link, Frontier and other second tier carriers that purchase such landline networks can succeed remains an open question. The timetable is uncertain and may be years from now.

Voice over Internet Protocol (VoIP) technology is improving rapidly and is available on many smartphones, personal computers, and internet access devices. Whether high speed broadband becomes widely available in rural areas so as to make VoIP a practical solution to landlines also remains an open question. But, a lot of effort is being made to make VoIP better and a strong alternative.

Wireless network extenders are available to Cottagers who have home broadband networks. The homeowner must subscribe to an Internet provider. These devices have a one-time cost of approximately $250-400 and are connected to routers or modems. Each telephone provider, e.g., Verizon or AT&T, has its own extender (i.e., no universal extender exists at this time). The signal is restricted to an area of the home, not beyond. Verizon's network extender is reported to work well in the Park.

Summary

The goal of this report is to enable readers to ~~thoughtfully~~ evaluate and weigh the facts presented in this report and arrive at a carefully considered conclusion. The Committee views several matters to be beyond the subject of "fact finding": the convenience of having cell service available within the mountaintop community, safety enhancements to emergency service providers and significant cultural/preservationist interests, and concerns with community turmoil and dissension. ~~to be matters not subject to "fact" finding~~.

Finally it is unclear what alternative sites AT&T might pursue should Twilight decide not to approve the building of the cell tower. But there is adequate protection in local law from it being an eyesore.

Committee Members:
Rob Hersey, Ron Peters, Judy Sheridan, Dave Wilson, Tom Zedlovich, and Lisa Zabel

Attachments:

Site Report (contact: Peters)
Contract/Control Report (contact: Wilson)
Historic District Report (contact: Peters)
Health Report (contact: Zabel)

Contract/Control Report

The starting point for any negotiation is the lease agreement. A generic version was reviewed and the comments below reflect that limitation – it's not specific to Twilight's situation. The most relevant business points are highlighted below:

Lease term: 25 years (structured as a 5 year lease with four automatic 5 year extensions at Tenant's option) plus automatic one year extensions which either party can cancel.

Rent: The current proposal is $2,000 per month plus a 3% annual escalation. The generic lease is silent on the rent amount, but stipulates a less favorable 7.5% escalation at the beginning of each of the four 5 year automatic extensions. It is also silent on the matter of compensation for additional antennas, which AT&T cannot necessarily prevent if the other carrier obtains approval through the Town of Hunter. Cell Site Consulting (CSC), a New Jersey-based consultant to landlords negotiating cell tower projects (and used by a committee member on numerous projects) believes a higher base rent is possible and if additional carriers are added (involving a taller tower), then $1,000 to $2,000 more per month per carrier is possible. If CSC were engaged to assist Twilight, its fee is 25% of Twilight's income from the project.

Permitted Use: Tenant has the right to modify, supplement, replace, upgrade, expand the equipment, increase the number of antennas or relocate the Communication Facility within the Premises at any time during the term of this Agreement (in order to comply with all applicable federal, state or local laws, rules or regulations). In the event Tenant's modification or upgrade requires additional land, Landlord agrees to lease such additional land under the existing terms and conditions.

Termination: Once the tower is operating, Twilight can terminate the lease only if a default exists. Non-payment of rent is essentially the only default condition. Tenant may cancel for any reason or no reason if it pays a termination fee equal to three months rent. Upon termination of the lease, Tenant may remove any of its property on the leased site but is not obligated to do so. It may abandon any of its property thereby transferring its ownership to Twilight (unless we negotiate to require removal - typically not an issue).

Access: Twilight must provide 24/7 access to the site at no cost to the Tenant. It must give the Tenant an easement for such access and record it if requested. It must maintain and repair its property (including any landscaping installed by Tenant) and the improved road providing access thereto so as to permit Tenant to access its premises. Although the generic contract is silent on the matter of building a road, maintenance of that road is Twilight's obligation as part of ensuring 24/7 access. AT&T's agent has indicated that this provision is negotiable.

Taxes: Tenant is responsible for property taxes assessed on its leasehold improvements on the premises; Landlord responsible for taxes on land and improvements (includes access road).

Sharing Infrastructure – from Wikipedia

The sharing of telecom infrastructure among service providers is increasingly common as competitors cooperate in order to lower the rising investment cost of infrastructure. The basis for this as an industry practice appears to be the Telecommunications Act of 1996, which terminated the monopoly landline market by introducing competition. The law introduced landline infrastructure sharing requirements and reciprocal compensation arrangements. Its extension into the wireless industry was inevitable.

The FCC regulates all non-federal government use of the radio spectrum (including radio and television) and all interstate telecommunications (broadband, wireless and satellite) as well as all international communications that originate or terminate in the U.S. The policy of encouraging infrastructure sharing

facilitates competition, which is in the public interest. This, in turn, seems likely to limit a landlord's influence over tower sharing arrangements, which result in taller towers and/or larger sites.

The Town of Hunter Cell Law (§2) explicitly states a preference for tower sharing over new towers. It also, however, imposes restrictions on towers (via location and approval criteria) intended to minimize their adverse visual effects, which, as a practical matter, may serve to limit their height.

Conclusion

The bottom line is that the generic contract is too one-sided to provide insight into what can be achieved through negotiation.

Non-payment of rent is the only default. If the relationship deteriorates for whatever reason, the triggers or mechanisms to effect change seem limited, in part, due to cellular service's status as a regulated utility and, in part, due to the implications of the "permitted use" section of the lease.

Twilight does not have much "control" over its property via the contractual relationship. For example, Twilight may not be able to say "no" to something the FCC mandates or that AT&T determines it needs, e.g., site expansion for additional carriers' equipment, new and noisy equipment, upgraded power transmission, etc.

Obviously, experts, be they attorneys or consultants, will be necessary. CSC, a consultant, is likely to provide the most value-added, but at a cost of 25% of the lease income.