



CITY OF SOMERVILLE, MASSACHUSETTS
OFFICE OF STRATEGIC PLANNING & COMMUNITY DEVELOPMENT
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Case #: ZBA 2009-68

Date: May 25, 2010

Recommendation: Conditional Approval

PLANNING STAFF REPORT

Site: 49 Davis Square

Applicant Name: Clearwire

Applicant Address: 5808 Lake Washington Blvd., Kirkland, WA, 98033 c/o Lisa Bera

Property Owner Name: BF Properties

Property Owner Address: PO Box 380286, Cambridge, MA 02238

Agent Name: Lisa Ann Bera, Centerline Comm.

Agent Address: 960 Turnpike St. #28, Canton, MA 02021

Alderman: Rebekah Gewirtz

Legal Notice: Applicant, Clearwire, and Owner, BF Properties, seeks a Special Permit (SZO §5.1) under §7.11.15.3 in order to install wireless communications equipment.

Zoning District/Ward: CBD / 6

Zoning Approval Sought: Special Permit §5.1 & §7.11.15.3

Date of Application: 12/21/09 (complete 5/2010)

Dates of Public Meeting • Hearing: Planning Board 6/3/10 • Zoning Board of Appeals 6/16/10

I. PROJECT DESCRIPTION

1. Subject Property: The property is a 14,032 s.f. parcel located within the Central Business District (CBD) and it is a local historic district. The building is a three story, 50 foot high, brick structure with a fly gallery in the back of the building that extends up to 66 feet in height. The Somerville Theater is located on the property. The site has received special permits in the past for wireless equipment for Sprint. Sprint has equipment in three stealth containers on the roof.

2. Proposal: The proposal is to install new wireless equipment on the roof the building and an



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equipment cabinet within an existing equipment room that is located inside of the building. The equipment consists of the following:

- 2 panel antennas and 2 backhaul antennas attached to an existing brick chimney and screened in a stealth chimney
- GPS antenna attached to an existing pipe mount
- Panel antenna and backhaul dish attached to the top of the fly gallery on the western portion of the building
- Remote radio head (RRH) attached to the base of the fly gallery
- Associated cable on the roof
- A generator receptacle at ground level

The subject property is a historic structure. The Somerville Historic Preservation Commission reviewed this case at their April 20, 2010 meeting. The HPC asked the Applicants to alter their plans to enclose four of the antennas proposed on the chimney to be wrapped with a stealth chimney. The HPC attached a condition related to the sheathing material. This condition can be found in the recommended conditions below. The HPC voted to grant a Certificate of Appropriateness for this altered plan.

The reason for the location of new Clearwire antennas is to service their customer base.



3. Nature of Application: Under SZO §7.11.15.3 establishment of a wireless communications facility requires a Special Permit.

4. Surrounding Neighborhood: The building is located in the heart of the Davis Square central business district. A mix of commercial, retail, office and residential uses are located in the area. The subject property is one of the tallest buildings in the surrounding area.

5. Impacts of Proposal: Staff anticipate few negative impacts from the proposed installation. Four antennas will be screened in a stealth chimney that is located near the center of the building. The two

antennas that will be attached to the fly gallery will be located in the back of the building and painted to match the building.

6. Green Building Practices: None.

7. Comments:

Fire Prevention: Has been contacted but has not provided comments.

Engineering: Has been contacted but has not yet provided comments.

Ward Alderman: Has been contacted but has not provided comments.

Historic Preservation: SHPC issued a Certificate of Appropriateness for the proposed wireless equipment with the following condition, "The paint should contain a range of colors close to the honey colors of the building façade for the chimney, and range of colors for the red brick to match the rear façade. 'Mortar' should not be white but match the existing mortar and that the width of the 'pointing' be appropriate to the location."

II. FINDINGS FOR SPECIAL PERMIT (SZO §5.1 & 14):

In order to grant a special permit, the SPGA must make certain findings and determinations as outlined in §5.1.4 of the SZO. This section of the report goes through §5.1.4 in detail.

1. Information Supplied: The Staff finds that the information provided by the Applicant conforms to the requirements of §5.1.2 of the SZO and allows for a comprehensive analysis of the project with respect to the required Special Permits.

The photo simulations do not show the stealth chimney that would surround the antennas proposed to be attached to the existing chimney. This change should be considered when reviewing the photo simulations.

2. Compliance with Standards: The Applicant must comply "with such criteria or standards as may be set forth in this Ordinance which refer to the granting of the requested special permit."

The Applicant seeks a special permit under §7.11.15.3 of the SZO which requires the applicant to following guidelines and procedures set forth in Article 14 for the, "regulation of wireless telecommunications facilities so as to allow and encourage uses in the City with minimal harm to the public health, safety and general welfare."

Staff find that minimal harm would be imposed upon the health, safety and welfare of the surrounding neighborhood. Clearwire is a FCC licensed company that is required to comply with all state and federal regulations.

Review Criteria for Telecommunications Facilities:

- a) *Height of proposed facility:* The base of the building is fifty feet tall and the fly gallery is 66 feet tall. This building is one of the tallest in the surrounding area and there are no buildings in the immediate area that are taller than it.
- b) *Proximity of facility to residential structures and residential zoning districts:* The property is located in the Central Business District and there are other properties between this building and the residence B zoning districts to the north and south.

- c) *Nature of uses on adjacent and nearby properties:* The surrounding properties are commercial in nature.
- d) *Surrounding topography and prominence of proposed facility:* The surrounding area is flat and the building is relatively tall for the area. The height regulation in the central business district is fifty feet and the building is at this height.
- e) *Surrounding tree cover and foliage:* The few trees to the north of the property and across the street to the east are lower in height than the proposed antennas and will be unaffected by this proposal.
- f) *Design of tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness, as specified in Section 14.3:* Guidelines of Article 14 of the SZO state that antennas should not be located more than 10 feet above the roofline, should be located at a minimum of 10 feet from the roof edge and below a forty-five degree plane beginning at the cornice of the building. The stealth chimney complies with these guidelines as it would be 3'-6" above the top of the fly gallery and would be more than 10 feet from the roof edge. The side-mounted antennas do not project above the fly gallery portion of the building. The antennas will be painted to match the building.
- g) *Location of tower, with particular reference to the existence of more suitable locations, as specified in Section 14.3:* The guidelines in Article 14 state that service providers should co-locate, which Clearwire would be following with Sprint. The use of the building is commercial and the antennas are side-mounted and painted to match the surrounding materials and colors or enclosed in a stealth chimney, which are other recommendations that will be adhered to.
- h) *Proposed ingress and egress:* There is access to the roof through a penthouse. The ingress and egress to the site would not be impacted by the proposal.
- i) *Distance from existing facilities:* Clearwire is establishing several sites in Somerville. The accompanying map shows the proposed locations of Clearwire antennas.
- j) *Availability of suitable existing towers, poles, other structures, or alternative technologies, as discussed in Section 14.5.2:* The site is an existing wireless site for Sprint. Clearwire and Sprint have a relationship where Clearwire is able to use Sprint's equipment. This relationship minimizes the impact that this new company's equipment has on the appearance of the building.

3. Consistency with Purposes: The Applicant has to ensure that the project "is consistent with (1) the general purposes of this Ordinance as set forth in Article 1, and (2) the purposes, provisions, and specific objectives applicable to the requested special permit which may be set forth elsewhere in this Ordinance, such as, but not limited to, those purposes at the beginning of the various Articles."

Staff find that the proposal, as conditioned, is consistent with the purposes of the SZO, specifically "to facilitate the adequate provisions of...other public requirements; to...increase the amenities of the municipality" (SZO §1.2), and with the specific purposes of Article 14 as noted below:

- a) *Protect residential areas and land uses from potential adverse impacts of towers and antennas;*

- b) Encourage the location of telecommunications facilities in non-residential areas;*
- c) Minimize the total number of towers and antennas throughout the community;*
- d) Strongly encourage the joint use of new and existing tower sites as a primary option rather than construction of additional single-use towers;*
- e) Encourage users of towers and antennas to locate them in areas where the adverse impact on the community is minimal;*
- f) Encourage users of towers and antennas to configure them in ways that minimize the adverse visual impact of the towers and antennas through careful design, siting, landscape screening, and innovative camouflaging techniques;*
- g) Enhance the ability of the providers of telecommunications services to provide such services to the community quickly, effectively, and efficiently;*
- h) Consider the public health and safety of communications facilities; and*
- i) Avoid potential damage to adjacent properties from tower and antenna failure through sound engineering and careful siting of structures.*

4. Site and Area Compatibility: The Applicant has to ensure that the project "(i)s designed in a manner that is compatible with the characteristics of the built and unbuilt surrounding area, including land uses."

Staff find the project to be compatible with the surrounding area and land uses. The antennas proposed are either in a stealth chimney that is located near the middle of the building or façade mounted and painted to match the building. The backhaul dishes are 15 inches in diameter, the panel antenna is 42 inches tall and 11.8 inches wide, the RRH is 16 inches tall and 11 inches wide and all are at a height of 50 to 64 feet above street level. A condition that the antennas be camouflaged will reduce their impacts on the site and surrounding area.

III. RECOMMENDATION**Special Permit under §5.1 & §14**

Based on the above findings and subject to the following conditions, the Planning Staff recommends **CONDITIONAL APPROVAL** of the requested **SPECIAL PERMIT**.

#	Condition	Timeframe for Compliance	Verified (initial)	Notes						
1	Approval is for the installation of 2 panel antennas and 2 backhaul antennas attached to an existing brick chimney and screened in a stealth chimney, a GPS antenna attached to an existing pipe mount, a panel antenna and backhaul dish attached to the top of the fly gallery on the western portion of the building, a remote radio head (RRH) attached to the base of the fly gallery, associated cable on the roof, a generator receptacle at ground level and an equipment cabinet located inside of the building. This approval is based upon the following application materials and the plans submitted by the Applicant:	BP/CO	Plng.							
	<table><tr><th>Date (Stamp Date)</th><th>Submission</th></tr><tr><td>12/21/09 (complete 5/2010)</td><td>Initial application submitted to the City Clerk's Office</td></tr><tr><td>5/7/10</td><td>Modified plans submitted to OSPCD (A1: roof top plan & equipment room layout, A-2: west elevation, A-3: east & south elevation, A-4 construction details, A-5: cabinet details, S-1-3: structural details)</td></tr></table>				Date (Stamp Date)	Submission	12/21/09 (complete 5/2010)	Initial application submitted to the City Clerk's Office	5/7/10	Modified plans submitted to OSPCD (A1: roof top plan & equipment room layout, A-2: west elevation, A-3: east & south elevation, A-4 construction details, A-5: cabinet details, S-1-3: structural details)
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Any changes to the approved plans that are not <i>de minimis</i> must receive SPGA approval.										
2	The façade-mounted antennas shall be painted with a range of colors to match the brick color of the exterior façade. ‘Mortar’ should not be white but match the existing mortar and the width of the ‘pointing’ shall be appropriate to the location.	Final Inspection	Plng.							

3	A stealth chimney shall conceal the antennas on the chimney (as indicated on the plan) and be constructed of fiberglass. The paint on the chimney should contain a range of colors close to the honey colors of the building façade. 'Mortar' should not be white but match the existing mortar and that the width of the 'pointing' shall be appropriate to the location.	Final Inspection	Plng.	
4	The Applicant or Owner shall meet the Fire Prevention Bureau's requirements.	BP	FP	
5	The Applicant shall at his expense replace any existing equipment (including, but not limited to street sign poles, signs, traffic signal poles, traffic signal equipment, wheel chair ramps, granite curbing, etc) and the entire sidewalk immediately abutting the subject property if damaged as a result of construction activity. All new sidewalks and driveways must be constructed to DPW standard.	Final inspection	DPW	
6	All construction materials and equipment must be stored onsite. If occupancy of the street layout is required, such occupancy must be in conformance with the requirements of the Manual on Uniform Traffic Control Devices and the prior approval of the Traffic and Parking Department must be obtained.	During Construction	T&P	
7	<i>Compliance with Noise Control Ordinance.</i> Prior to the issuance of a Certificate of Use and Occupancy Permit for the installation of the wireless telecommunications facility, the Applicant shall submit to the Inspectional Services Division, with a copy to the Zoning Board of Appeals, a sound level measurement certified as accurate by a professional acoustician and shall perform such sound level measurements six months after issuance of the certificate of occupancy, with subsequent sound level measurements annually on or before the anniversary date of the original six month measurement to document that all of the Applicant's installed equipment complies and continues to comply with the decibel level standards established by the City of Somerville, Noise Control Ordinance. The Applicant shall provide the results of such measurements and certify that the facility complies with the decibel level standards established by the City of Somerville, Noise Control Ordinance, with a copy to the Zoning Board of Appeals.	CO and annually	ISD / Plng.	

8	Compliance with Federal Communications Commission Guidelines for Human Exposure to Electromagnetic Fields. To ensure compliance with the standards established by the Federal Communications Commission Office of Engineering and Technology ("FCC") in OET Bulletin 65 as adopted by Massachusetts Department of Public Health under 105 CMR 122.021, the Applicant shall perform measurements, within two (2) months of the date that the Applicant's wireless telecommunications facility commences operation and at intervals of twelve (12) months thereafter, to establish that the Applicant's wireless telecommunications facility complies and continues to comply with the FCC guidelines and applicable state regulations for human exposure to radio frequency electromagnetic fields for human exposure to radio frequency electromagnetic fields. The Applicant shall provide the results of such measurements with certification of compliance to the City of Somerville Health Department, with a copy to the Zoning Board of Appeals.	Annually	BOH	
9	Any antenna that is not operated continuously for a period of twelve (12) months shall be considered abandoned, and the owner of such antenna shall remove the same. Failure to remove may result in a fine or penalty.	Perpetual	ISD	
10	The Applicant shall contact Planning Staff at least five working days in advance of a request for a final inspection by Inspectional Services to ensure the proposal was constructed in accordance with the plans and information submitted and the conditions attached to this approval.	Final sign off	Plng.	

