TOWN OF RAYMOND, MAINE S. Wireless Communication Facilities – May 2000

- 1. PURPOSE: These standards are designed and intended to balance the interests of the residents of the Town of Raymond, wireless communications providers and wireless communication customers in the siting of wireless communications facilities within the Town. Beyond the objectives described in Article I, Section C and in other sections of the Town of Raymond Land Use Ordinance, these Wireless Communication Facilities standards are also intended to:
 - a. Implement a municipal policy concerning the provision of wireless telecommunications services, and the siting of their facilities;
 - b. Establish clear guidelines, standards and time frames for the Town to regulate wireless communications facilities;
 - c. Ensure that all entities providing Wireless Communications Facilities within Raymond comply with the ordinances of Raymond;
 - d. Permit the Town of Raymond to continue to fairly and responsibly protect public health, safety and welfare;
 - e. Encourage the siting of Wireless Communications Facilities to co-locate, thus minimizing adverse visual impacts on the community;
 - f. Support the goals and policies of the Comprehensive Plan, especially the orderly development of the Town with minimal impacts on existing residential uses;
 - g. Protect the scenic and visual characteristics of the community, as identified in the Raymond comprehensive plan, to the greatest extent possible;
 - h. Provide for the removal of towers and associated structures that are no longer being used for wireless communications purposes; and
 - i. Minimize any potential adverse effect of a Wireless Communication Facilities on property values.
- 2. DEFINITIONS In addition to those terms defined in Article XII of the Town of Raymond Land Use Ordinance, the following terms are applicable for reviewing an application for wireless communication facility and ensuring that applicable standards are met.
 - a. Alternative Tower Structure (ATS): Clock towers, bell steeples, light poles, water towers, electrical transmission line towers, and similar alternative mounting structures that camouflage or conceal the presence of antennas or towers associated with a Wireless Communication Facility.
 - b. Antenna/Antenna Array: A device used in communication that transmits or receives radio or electromagnetic frequency signals. A system of one or more rods, panels, discs or similar devices used for the transmission or reception of radio frequency (RF) signals through electromagnetic energy. These include, but are not limited to, omnidirectional antennas (whip or rod), directional antennas (panel) and parabolic antennas (dish or disc).

- c. Antenna Support Structure: Any pole, telescoping mast, tower tripod, or other structure that attaches to a tower and supports one or more antenna(s).
- d. Designated Scenic Resource: A specific location, view, or corridor as identified as a scenic resource in Raymond's Comprehensive Plan or by a State or federal agency that consists of (1) a three dimensional area extending out from a particular viewpoint on a public way or within a public recreational area, focusing on a single object such as a mountain, resulting in a narrow corridor or a group of objects such as a mountain range resulting in a panoramic view corridor; or (2) lateral terrain features such as valley sides or woodland as observed to either side of the observer, constraining the view into a narrow or particular field, as seen from a viewpoint on a public way or within a public recreational area.
- e. Equipment Facility: Any structure used to contain ancillary equipment for a wireless communication facility, including cabinets, shelters, a build out of an existing structure, pedestals and other similar structures.
- f. Existing Non-Conforming Wireless Communication Tower (NCWCT): A wireless communication tower existing as of the adoption of these standards (3/20/99) that does not meet the standards contained herein including but not limited to tower height.
- g. Existing Conforming Wireless Communication Tower (CWCT): A wireless communication tower existing as of the adoption of these standards (3/20/99) that meets the standards contained herein including but not limited to tower height.
- h. FAA: Federal Aviation Administration
- i. FCC: Federal Communication Commission
- j. Height, Wireless Communications Facility Tower or Alternative Tower Structure (ATS): The vertical distance measured from the lowest point within twenty-five (25) feet of the base of the structure on the ground to the highest point of the tower or ATS, including the base pad, all antennas and other attachments. When towers are mounted upon buildings or other structures, the total vertical height is measured from the lowest point within twenty-five (25) feet of ground level of the building or structure to the highest point of all appurtenances on the tower.
- k. New Tower: A wireless communication tower that is constructed after the adoption of these standards (3/20/99).
- l. Normal Maintenance: The regular, routine maintenance of a WCF including but not limited to changing light bulbs, plowing and maintaining the existing access road and gate, fence repair and maintenance, maintenance of the buffer, replacing an existing antenna with a functionally equivalent antenna, and changing or repairing electronic components contained within an existing building (not a WCT) to similar electronic components that do not increase the broadcast capacity of the WCF in excess of the exemption standards contained in FCC Office of Engineering and Technology (OET) Bulletin #65. This definition

specifically includes painting provided that the painting is done in accordance with the standards established in Section 7 (b) (1) of this Section S. This definition specifically excludes widening an access road, increasing tower height, replacing light fixtures, and increasing the broadcast capacity of a WCF in excess of the exemption standards contained in FCC OET Bulletin #65.

- m. Wireless Communications: Any personal wireless services as defined in the Federal Telecommunications Act of 1996 which includes FCC licensed commercial wireless telecommunications services including but not limited to telecommunications services, radio or television signals, or any other spectrum-based transmissions/receptions, cellular, personal communications services (PCS), specialized mobile radio (SMR), enhanced specialized mobile radio (ESMR), paging, radio, television and similar services that currently exist or that may in the future be developed.
- n. Wireless Communication Facility (WCF): A facility that transmits, receives, distributes, provides or offers wireless communications together, with the facility's associated antennas, microwave dishes, horns, cables, wires, conduits, ducts, lightning rods, electronics and other types of equipment for the transmission, receipt, distribution or offering of such signals, wireless communication towers, antenna support structures, and other structures supporting said equipment and any attachments to those structures including guy wires and anchors, equipment buildings, generators, parking areas, utility services, driveways and roads and other accessory features.
- o. Wireless Communication Tower- Co-Located: A Wireless Telecommunications Tower or ATS supporting one or more antennas/ antenna array(s) and owned or used by more than one public or private entity. A Co-Located Tower may include two (2) or more antenna array(s) serving the same company provided that the applicant can demonstrate to the Planning Board that separate levels are a practical necessity.
- p. Wireless Communication Tower (WCT): A structure designed and constructed specifically to support an antenna array that provides Wireless Communication. A tower may be a monopole, self-supporting (lattice) tower, guy-wire support tower or other similar structure, and includes all supporting lines, cables, wires, and braces.
- 3. REVIEW and APPROVAL AUTHORITY. No construction, alteration, repair or change shall occur on any Wireless Communication Facility without written approval from the Raymond CEO or Planning Board as follows;
 - a. Normal Maintenance, as defined in this Section S, is allowed without a permit from the CEO or Planning Board.
 - b. No construction, alteration, repair or change shall occur on any Wireless Communication Facility unless all required permits are obtained including but not limited to any federal or state permits.
 - c. Planning Board review and approval is required for the following;
 - 1) Any WCF that does not exist as of the adoption of these standards (3/20/99).

- 2) Any additional antenna or antenna array(s) or increase in broadcast capacity in excess of the exemption standards contained in FCC OETC Bulletin #65 on any WCF not previously and specifically approved by the Planning Board.
- 3) Any alteration to an existing NCWCT that requires Planning Board review as established in Section 9 entitled "Alterations to Existing Facilities".
- 4) Any increase to the tower height not previously and specifically approved by the Planning Board.
- d. A building permit, in accordance with the standards established in Section 4 entitled "Building Permit Requirements", must be obtained from the Raymond CEO for the following;
 - 1) Construction of a WCF that does not exist as of the adoption of these standards (3/20/99).
 - 2) Any alteration to an NCWCT except normal maintenance (see definition).
 - 3) Any WCF application approved by the Planning Board.
- 4. BUILDING PERMIT REQUIREMENTS. The Raymond CEO shall ensure that the following requirements are met prior to the issuance of a Building Permit for a WCF.
 - a. Submission Requirements. The applicant shall submit the following to the CEO;
 - 1) Names, addresses, phone numbers and other means of contacting companies and persons that will function as contacts for the required inspections and monitoring of the WCF.
 - 2) Any applicable plans or information deemed necessary by the CEO to issue a permit for the WCF in accordance with these standards. This may include plans and information from a professional engineer at the applicant's expense.
 - 3) For any permit request to construct a Co-Located WCT in excess of the maximum height permitted for a single use tower, the applicant will submit to the CEO executed agreements documenting commitments to co-locate from the number of co-locators approved by the Planning Board.
 - 4) For any permit request to construct a Co-Located WCT in excess of the maximum height permitted for a single use WCT, the applicant must submit evidence that the Tower can structurally support a minimum of two (2) antenna arrays for each anticipated co-locating entity.
 - 5) For any permit request involving an existing NCWCT, the applicant shall supply information regarding the estimated construction cost of the tower prior to the proposed alterations and the estimated construction cost of the tower after the proposed alterations. For the purposes of determining the estimated construction cost for this section, the cost shall be based on a complete rebuild of the existing tower excluding the cost of any electronic equipment and antenna/ antenna array(s) (see also Section 9 (b) entitled Alterations to Existing Non-Conforming WCT's).
 - b. The Raymond CEO shall not issue a permit for the construction of a new Wireless Communication Facility or any change to an existing Wireless Communication Facility that requires Planning Board review until the Planning Board has approved the facility and all applicable conditions have been met.

- c. The CEO shall not issue a building permit for a WCF unless all required permits are obtained and filed with the town including but not limited to any applicable federal or state permits or licenses.
- d. In the event that an applicant proposes to add capacity, the Raymond CEO may issue a permit for additional antenna(s), antenna array(s) or broadcast capacity if the facility has been previously and specifically approved by the Planning Board for the requested changes. The Planning Board approval must specifically state that this capacity is allowed and the allowed time period during which CEO may issue a permit for the additional capacity. Any increase in broadcast capacity in excess of the exemption standards contained in FCC OET Bulletin #65 must be previously and specifically approved by the Planning Board.
- e. The CEO shall have the authority to use professional and technical services to review proposed plans and to inspect the construction of an approved project. The applicant shall pay all costs incurred for these review and inspection services.
- f. If inspections and/or proof of insurance is required by the Planning Board, all necessary forms and inspection schedule(s) shall be submitted.
- g. If the Planning Board required a performance guarantee and/ or abandonment/ removal bond for the proposed WCF, the amount and type of the bond(s) as required by the Planning Board shall be received and found acceptable by the CEO prior to the CEO taking action on any building permit application.
- h. For any NCWCT, the CEO shall keep records of the repairs made to each Tower to determine whether or not Planning Board review is required as established in section (9)(b) below entitled "Alterations to existing Non-Conforming WCT's". In order to ensure that the information provided by the applicant for this standard is accurate, the CEO shall have the authority to require third party review of the information submitted by the applicant, as authorized below in Section (5)(d) entitled "Third Party Authority".

5. PLANNING BOARD REVIEW.

- a. In all cases, the burden of proof shall be on the applicant to demonstrate to the Planning Board that the required standard(s) have been met.
- b. Procedure. The applicant shall submit all of the items listed below in Section (5)(f) entitled "Submission Requirements" for all applications to the Raymond CEO. If an applicant proposes a new tower, items 1 through 3 in Section (6)(a) entitled "New Tower Requirements- Submission Requirements" must also be submitted to the CEO. The applicant must submit, in writing, request(s) for any waivers to the submission requirements.

Once the CEO has determined that the application is complete, the Planning Board shall review the submitted materials at the next available regular Planning Board meeting. Once the Planning Board has determined that there is sufficient information to make a determination as to whether or not co-location is a feasible option possible, the Planning Board shall make the determination as outlined below in "Co-Location Determination". When the Planning Board has resolved

the co-location, the applicant shall submit the required submissions to the Planning Board and the Board shall review the application as established in Section (5)(e) below entitled "Planning Board Review Standards".

c. Co-location Determination. In accordance with the purposes stated above, Raymond's Wireless Communication standards strongly encourage co-location on existing tower structures, on ATS's, on new towers on existing tower sites, or modifying an existing WCT to accommodate additional antenna/ antenna array(s) or increased broadcast capacity. Proposals for the siting of WCF's or antennae on existing towers or ATS'; or at locations that presently have WCT's are favored over proposals for construction of new towers on sites where towers do not presently exist.

The Planning Board review process guides WCF applicants towards co-location and requires the applicant to prove, among other factors, that their proposed antennas or facilities can not be accommodated by existing tower structures. The Planning Board shall have the authority to determine whether or not co-location is a reasonable, practical and feasible option based on the following;

- 1) Required submissions stated below in Section (5)(f) entitled "Submission Requirements" for all applications;
- 2) The purposes for these WCF standards stated above in Section 1 entitled "Purpose";
- 3) The Planning Board's interpretation of the information provided by the applicant in submissions 1 through 3 required below in Section (6)(a) entitled "New Tower Requirements- Submission Requirements".

The Planning Board shall determine, by a vote, whether or not co-location will be required. If the Planning Board determines that co-location will not be required, the application can be considered under Section 6 entitled "New Tower Requirements".

d. Third Party Authority. The Planning Board shall have the authority to require that information and documentation relating to the required submissions, review guidelines, and performance standards be provided to the Planning Board by a third-party professional at the expense of the applicant to ensure that the requirements of this section and the zoning ordinance are met and maintained. The qualified third party shall, at the request of the Planning Board, verify the accuracy of the information presented by the applicant to the Board. This third party authority shall specifically include verification of the information, facts, and costs associated with determining whether or not co-location is a feasible option.

The Planning Board shall have the authority to choose the third party or parties deemed necessary by the Planning Board to review the application. The Planning Board may require a peer review. If the Planning Board determines that such peer review is insufficient, the Planning Board shall have the authority to require a more comprehensive and independent review. The cost of the peer review or independent review shall be borne by the applicant.

e. Planning Board Review Guidelines. The Planning Board may require that the applicant submit documentation, in writing, that the guidelines established below

will be met and maintained. The Planning Board will be guided in its consideration of a WCF application by the following parameters:

- 1) All standards contained in Article X of this Ordinance entitled Site Plan Review including but not limited to "Criteria and Standards" and "Performance Standards".
- 2) All standards contained in Section 7 of these WCF standards entitled "Performance Standards".
- 3) The height of the proposed tower, alteration or other necessary structure does not exceed that which is essential for its intended use.
- 4) The proximity of the tower and impact to residential development or zoning districts shall be minimized.
- 5) The nature of uses on adjacent and nearby properties shall be reviewed and the impact of the WCF minimized.
- 6) The WCF shall minimize changes to the existing natural topography to the maximum extent feasible and shall take into consideration the surrounding topography.
- 7) The WCF shall utilize the surrounding tree coverage and foliage as a buffer. Removal of mature trees shall be strongly discouraged.
- 8) The design of the WCF including the tower, antenna, antenna array(s) and any functionally dependent structures shall have the effect of reducing or eliminating visual obtrusiveness.
- 9) The WCF shall minimize visual impacts on view sheds, ridge lines, and other impacts by means of tower location, tree and foliage clearing and placement of incidental structures.
- 10) The proposed WCF facility will not unreasonably interfere with the view from any public park, natural scenic vista, historical building, major view corridor or Designated Scenic Resource
- 11) The proposed facility is not constructed is such a manner as to result in unnecessary height, mass, and guy-wire supports, with documentation having been provided and reviewed regarding the design capacity and/ or the remaining co-location capacity of the tower/ facility.
- 12) The time period that the applicant is permitted to complete the project shall be determined by the Planning Board.
- 13) Based on information submitted by the applicant, the Planning Board shall ensure that mitigation measures have been utilized to screen antennas and towers from view from public rights-of-way or scenic vistas, either via landscaping, fencing or other architectural screening.
- 14) Based on information submitted by the applicant, the Planning Board shall ensure that creative design measures have been employed to camouflage facilities by integrating them with existing buildings and among other uses.
- 15) Based on information submitted by the applicant, the Planning Board shall ensure that other technically feasible sites have been investigated and, if available, the proposed facility has been relocated in order to minimize the effect of the location on visually sensitive areas such as residential communities, historical areas and open space areas.
- 16) An inspection schedule acceptable to the Planning Board shall be established.

- 17) A performance guarantee and/or removal guarantee in accordance with Section 8 entitled "Additional Standards & Criteria" may be required by the Planning Board.
- 18) The WCF will not unreasonably or significantly affect or de-value neighboring property(s).
- 19) The Planning Board shall consider the vantage points chosen by the applicant as part of the visual analysis required in Section 6 entitled New Tower Requirements. If the Planning Board determines that additional vantage points should be considered, the applicant shall complete the visual analyses for these locations for the Boards consideration.

f. Submission Requirements For All Applications.

- 1) All relevant submissions, as determined by the Planning Board, contained in Article X of this Ordinance entitled Site Plan Review.
- 2) A proposal to construct or modify a wireless communication tower must include evidence of a commitment from a duly licensed entity to utilize the tower to provide wireless communication services. All wireless communication entities that are contracted to locate on the tower must join as applicants.
- 3) Written approval by all applicable state and federal agencies, including but not limited to the FAA and FCC, including a description of any conditions or criteria for the approval, or a statement from the agency that no approval is required.
- 4) An inventory of all of the provider's existing and approved towers, antennas or sites within the Town of Raymond and locations in surrounding communities where wireless telecommunications are proposed to be utilized in conjunction with the facility proposed in the application.
- 5) Service area maps or network maps of the applicant's existing and proposed facilities in Cumberland, Androscoggin, and Oxford Counties.
- 6) Identify any other telecommunication facilities existing or proposed on the site.
- 7) Details of all existing or proposed accessory structures including buildings, parking areas, utilities, gates, access roads, etc.

6. NEW TOWER REQUIREMENTS.

- a. Submission Requirements.
 - 1) Evidence that written notice was sent, by pre-paid first class United States mail, to all other such tower and alternative tower structure owners and licensed wireless communication providers in the Town utilizing exiting towers and ATS's and to owners of such towers and ATS's within a 1 mile search radius of the proposed tower. This notice shall state the applicant's siting needs and request information the co-location capabilities of the existing or previously-approved facilities. Evidence that this notice requirement has been fulfilled shall include a name and address list, copy of the notice that was sent, and a statement, under oath, that the notices were sent as required.

- 2) Evidence that existing or previously approved towers and alternative tower structures within the Town and search area cannot accommodate the communications equipment (antennas, cables, etc.) planned for the proposed tower. Such evidence should be documentation from a qualified and licensed professional engineer that:
 - a) Planned necessary equipment would exceed the structural capacity of existing and approved towers and alternative tower structures, considering the existing and planned use of those towers and alternative tower structures, and the existing and approved towers cannot be reinforced or enlarged to accommodate planned or equivalent equipment at a reasonable cost;
 - b) Planned equipment will cause electromagnetic frequency interference with other existing or planned equipment for that tower or alternative tower structure, and the interference cannot be prevented at a reasonable cost;
 - c) Existing or approved towers and alternative tower structures do not have space on which planned equipment can be placed so it can function effectively and at least in parity with other similar equipment in place or approved; or
 - d) Other documented reasons that make it technically or financially unfeasible to place the equipment planned by the applicant on existing and approved towers and alternative tower structures.
- 3) Evidence that the proposed tower cannot be co-located on existing or previously approved tower sites. Evidence should include an assessment of whether such tower sites could be changed to accommodate the proposed tower, and a general description of the means and projected cost of shared use of the existing or approved tower site.
- 4) A report from a Registered Professional Engineer in the State of Maine that describes the tower, the technical reasons for the tower design and the capacity of the tower, including the number(s), type(s), and volume(s) of antenna(s) that it can accommodate and the basis for the calculation of capacity.
- 5) A letter of intent that commits the tower owner and his or her successors in interest to:
 - a) respond in a timely, comprehensive manner to a request for information from a potential co-location applicant;
 - b) negotiate in good faith for shared use by third parties that have received an FCC license or permits; and,
 - c) allow shared use if an applicant agrees in writing to pay reasonable charges.
- 6) Proof of financial capacity to build, maintain, and remove the proposed tower must be submitted.
- 7) Photos showing site vegetation, existing and adjacent structures, views of and from the proposed site, topography, and land uses on the proposed parcel and on abutting properties.

- 8) Landscaping plan reflecting location of proposed screening and fencing, planting areas, proposed plantings, existing plant materials to be retained and trees or shrubs to be removed.
- 9) Elevation drawings, cross-sectional area or silhouette, of the facility, drawn to scale, and showing all measurements, both linear and volumetric, showing front, sides and rear of the proposed facility including all fencing, supporting system for transmission cables running between the tower and accessory structures, control panels, antennas, and existing structures and trees. Reference any design characteristics that have the effect of reducing or eliminating visual obtrusiveness.
- 10) Detail of the tower base or method of attachment to a structure. If the facility will be attached to an existing building or structure, provide measurements and elevations of the structure.
- 11) A visual analysis, which may include photo montage, field mock up, or other techniques, that identifies the potential visual impacts, at design capacity, of the proposed facility. This visual analysis shall include sufficient information for the Planning Board to determine how the proposed site will visually change. The analyses should include before and after analyses of the site from adjacent public views and roads as well as from adjacent vantage points. Consideration shall be given to views from public areas as well as from private residences and from archaeological and historic resources including historic districts, areas and structures, specifically those listed in the National Register of Historic Places or those that are eligible for such listing. The analysis of the impact on historical and archaeological resources shall meet the requirements of the Maine State Historic Preservation Officer in his/her review capacity for the FCC. The overall analysis shall assess the cumulative impacts of the proposed facility and other existing and foreseeable communication facilities in the area, and shall identify and include all feasible mitigation measures consistent with the technological requirements of the proposed Wireless Communication Service.
- b. Location- Any Wireless Communication Tower not existing as of the date of adoption of this Ordinance (3/20/99) shall conform to the following standards.
 - 1) Wireless communication facilities shall not be sited in areas of high visibility unless the Planning Board finds that no other location is technically feasible. If the facility is to be sited above the ridge line, it must be designed to minimize its profile by blending with the surrounding existing natural and man-made environment to the maximum extent possible using available materials, natural buffers, and the Tower location site.
 - 2) No facility shall be located so as to create a significant threat to the health or survival of rare, threatened or endangered plant or animal species.
 - 3) Towers are allowed in the Rural(R), Village Residential (VR-I), and Village Residential-II (VR-II) zoning districts provided that the tower base shall not be located at or above six-hundred (600) feet above mean sea level on the following hills identified in the Raymond Comprehensive Plan adopted in

1991; Ledge Hill, Pismire Mountain, Raymond Hill, Tarklin Hill, Tenny Hill, and the foothills of Rattlesnake Mountain. The Planning Board shall not have the authority to waive this standard.

- 4) Towers are specifically prohibited from the following zoning districts; Commercial, Industrial, Rural Residential, Limited Residential I and II, and any Shoreland Zone. The Planning Board shall not have the authority to waive this standard.
- c. Tower Height. Any Wireless Communication Tower not existing as of the date of adoption of this Ordinance (3/20/99) shall conform to the following standards.
 - 1) Towers shall not exceed thirty (30) feet above the existing mature tree line immediately adjacent to the tower. The Planning Board shall have the authority to determine the height of the existing mature tree line based on information provided to the Board by the applicant and, if deemed necessary, verified by the Planning Board.
 - 2) Only the minimum height necessary to accomplish the technical needs of the applicant shall be approved by the Planning Board.
 - 3) Towers shall not exceed a height of seventy-five (75) feet, except that where evidence of acceptable design and co-location is provided, the Planning Board may approve an additional twenty-five (25) feet of tower height per each additional wireless communication service co-locator, not to exceed a maximum tower height of one hundred and twenty-five (125) feet. The Planning Board shall not have the authority to waive this standard.
 - 4) Installing antennas on alternative tower structures is permitted provided that the resulting ATS height does not exceed a maximum height of one hundred and twenty-five (125) feet and that the tower does not extend more than thirty-five (35) feet higher than the present highest point of the building or structure. The Planning Board shall not have the authority to waive this standard.
 - 5) Notwithstanding the height and setback limitations within a zoning district, in order to accommodate the co-location of an additional antenna, a tower, existing as of the adoption of these standards (3/20/99), may be modified or rebuilt to a taller height, not to exceed a total maximum of thirty (30) feet more than the tower's height as of the date of adoption of these standards, but only if that additional height will not result in a requirement for any new lighting or obstruction painting.
- d. Space and Bulk_Requirements. Any Wireless Communication Facility not existing as of the date of adoption of these standards (3/20/99) shall conform to the following standards.
 - 1) Mounting and Dimensions The mass and dimensions of antennas on a tower or alternative tower structure shall be governed by the following criteria:

- a) Whip antennas shall not exceed 20' in length for an individual antenna, and shall be limited to two (2) per mount, with no more than three (3) mounts at a given level;
- b) Microwave dish antennas. The aggregate diameters of microwave dish ntennas mounted within a 20' vertical section of a tower may not exceed 24', with no single dish being more than 8' in diameter and 5' in depth, unless otherwise required per the path reliability and/or tower structural studies:
- c) Panel antennas. The horizontal centerline of all panel antennas of a single carrier must be aligned in the same horizontal plane, with each antenna not to exceed 8' in length nor 2' in width;
- d) d) Panel antenna mass per array. The mass of antennas, including required antenna support structures, on a tower shall not exceed five hundred (500) cubic feet per antenna array, with no one dimension exceeding fifteen (15) feet per array. The mass shall be determined by the appropriate volumetric calculations using the smallest regular rectilinear, cuboidal, conical, cylindrical, or pyramidal geometric shapes encompassing the perimeter of the entire array and all of its parts and attachments.
- 2) Lot Area: A new wireless communications tower shall not be constructed on a lot that does not conform to the minimum lot area required in the zoning district even if such lot is a lawful non-conforming lot of record.
- 3) Access. The Planning Board shall have the authority to review and approve the access to the tower site. If the Planning Board determines that there may be future development on the access road to the tower, it may require a fifty (50) foot Right of Way. Road access to the telecommunication site shall be the minimum size necessary to allow safe access

4) Setbacks.

- a) The center of the tower base shall be set back from all structures by a distance of at least one hundred (100%) percent of the total tower height. Equipment facilities and other non-residential structures deemed functionally dependent by the Planning Board for the WCF may be permitted within the fall-down zone if desired by the applicant. If guy wires are used, they shall meet the applicable building setback from the property line.
- b) If the site is leased, a fall-down zone easement, approved by the Planning Board and recorded in the Registry of Deeds, may be acceptable. Such fall-down easements shall prohibit any structures, existing or in the future, within the area 100% of the total tower height. Easements on several parcels may be acceptable provided that the fall-down easements cover the area within one hundred (100%) percent of the total tower height.
- c) Equipment facilities shall meet the required District setback.
- e) There shall be no setback requirements for antennas mounted on alternative tower structures. The standard District setbacks shall continue to apply for alternative tower structures and equipment facilities, where applicable.

7. PERFORMANCE STANDARDS. All applications requiring Planning Board review shall meet and maintain the following performance standards to the maximum extent possible as determined by the Planning Board.

a. Structural Design Standards

- 1) Any new single-use tower shall be designed to structurally support a minimum of two (2) additional antenna arrays.
- 2) Communication towers shall be designed and installed in accordance with the most current standards of the Electronic Industries Association (EIA) Structural Standards for Steel Antenna Towers and Antenna Supporting Structures
- 3) The applicant's engineer shall provide documentation showing that the proposed WCT meets or exceeds the most current standards of the American National Standards Institute ANSI/EIA/TIA-222 for Cumberland County relative to wind and ice loads when the tower is fully loaded with antennas, transmitters, and other equipment as described in the submitted plan.
- 4) For towers or antennas placed on buildings or alternative tower structures, the applicant shall also provide written certification from a structural engineer that the building or ATS itself is structurally capable of safely supporting the tower, antennas, their accompanying equipment and ice and wind loads.
- 5) A proposal to construct a new Co-located WCT taller than the maximum height permitted for a single wireless communication service must include evidence that the tower can structurally support a minimum of two (2) antenna arrays for each anticipated co-locating entity. (Section (6)(c) entitled "Tower Height".)
- 6) Radiation Emission Standards. The design, siting and operation of the tower and any related structures must assure that all potentially hazardous radiation are controlled or contained, and that radiation levels are at safe levels as determined by applicable State and Federal standards.

b. Aesthetics

- 1) Except where dictated by Federal or State requirements, the Planning Board may require that a proposed tower be camouflaged or designed to blend with its surroundings. This may include, but is not limited to, having a galvanized finish, being painted "flat" blue gray or in a skytone above the top of surrounding trees and earthtone below treetop level.
- 2) Equipment facilities shall be adjacent to the tower base unless an alternative location will be less visually obtrusive or topographic considerations require an alternative location.
- 3) Equipment facilities shall be no taller than one story in height and shall be created to look like a building or facility typically found in the area.
- 4) If lighting is required by State or Federal regulations, the Planning Board may review the available lighting alternatives and approve the design that would cause the least disturbance to the surrounding properties and views.
- 5) Antenna arrays and microwave dishes located on an alternative tower structure shall be placed in such a manner so as to be as indistinguishable as

possible from the current appearance of the existing structure as viewed from the ground level adjacent to the ATS. If, however, circumstances do not permit such placement, the antenna array and dishes shall be placed and colored to blend into the architectural detail and coloring of the host structure.

- 6) The Planning Board may require special design of the facilities where findings of particular sensitivity are made (e.g., proximity to historic or aesthetically significant structures, views and/or community features).
- 7) If more than one tower is proposed on a single lot or parcel, they shall be clustered as closely together as technically possible.
- 8) Buffering Requirements. Vegetative buffering must be provided to screen, at ground level, the tower including any accessory buildings and structures from adjacent land uses. The preservation of existing mature vegetation, especially trees, is strongly encouraged by the Planning Board. If existing vegetation at the time of the application does not provide adequate buffering, as determined by the Planning Board, to minimize visual impact of the structure, the Planning Board may require the applicant to provide, at the applicant's expense, a visual impact analysis by a qualified professional, who will provide a written recommendation to the Planning Board for approval.

All telecommunication facilities shall maintain the required setbacks as undisturbed vegetated buffers, except for the access road. The Planning Board may require additional plantings in the buffer area(s) to enhance the quality and effectiveness of the buffer area to serve as a visual screen. The size and quantity of plantings shall be subject to Planning Board approval.

c. Safety/ Security

- 1) Sufficient anti-climbing measures and other security measures preventing access to the site shall be incorporated into the facility, as needed, to reduce the potential for trespass and injury.
- 2) Manually operated or motion detecting security lighting is permitted.
- 3) A chain-link (security) fence at least eight feet in height from the finished grade shall be provided around any tower.
- 4) Access to tower(s) shall be through a lockable gate. Roof mounted towers are exempt.

8. ADDITIONAL STANDARDS & CRITERIA

a. Performance Guarantee. Any application that required Planning Board review and approval may be required to post a performance guarantee for the development, construction, or modification to the WCF. The Planning Board shall determine whether or not a performance guarantee is required based on the Boards assessment of the potential of the project to cause the Town to incur expenses, such as to stabilize the site if the project is not completed.

The amount of the guarantee shall be sufficient to return the land to a condition as near to the original pre-construction condition as possible as determined by the Planning Board. The amount of the guarantee shall be determined by the Planning Board based on estimates from independent contractors. The type of

guarantee shall be approved by the Town Manager. The guarantee shall be released only as authorized by the Planning Board.

b. Guarantee for Removal of Abandoned Wireless Communication Facilities.

The applicant for a new tower shall post a performance guarantee in the form of a continuous corporate surety bond or an escrow account in favor of the Town equal to 125% of the estimated demolition and removal cost of the tower and associated facilities if abandoned at any time by the applicant. Estimates of demolition and removal costs shall be provided by an independent contractor and shall not be based on services being provided by Town employees and Town equipment.

The amount of the guarantee shall be approved by the Planning Board and shall be sufficient to return the land to a condition as near to the original preconstruction condition as possible as determined by the Planning Board. All above ground structures, equipment, foundations, guy anchors, utilities and access roads or driveways specifically constructed to service the tower, structures, equipment or utilities shall be removed, and the land returned to a condition as near to the original pre-construction condition as possible. The type of the guarantee shall be approved by the Board of Selectpersons. The Board of Selectpersons shall have the authority to require either a certified check payable to the Town of Raymond, a savings account passbook issued in the name of the Town or a faithful performance bond running to the Town of Raymond and issued by a surety company authorized to do business in Maine and acceptable to the Board of Selectpersons.

All performance guarantees shall be on a continuous basis, with any provision for cancellation to include that a minimum 30 day notice of cancellation or non-renewal be sent by certified mail to the Town of Raymond. The performance guarantee covering such removal shall be for a minimum term of five years. It must contain a mechanism, satisfactory to the Planning Board, for review of the cost of removal of the structure every five years, and a mechanism for increasing the amount of the guarantee should the revised cost estimate so necessitate.

c. Removal and Storage of Materials

- 1) All used structural and electronic components shall be removed and properly disposed of once they have exceeded their useful life and are no longer in use. This standard includes, but is not limited to, removing used guy wires, used fence parts, and structural components for towers.
- 2) Outside storage of materials shall not be permitted except as specifically approved by the Planning Board.

9. ALTERATIONS TO EXISTING FACILITIES

a. Alterations to New or Existing Conforming Wireless Communication Towers. Any conforming wireless communications tower and its related buildings may perform normal maintenance and repairs without a permit from the CEO.

Planning Board review and approval in accordance with the standards established in subsection 5 of this Section S entitled "Planning Board Review" is required if any of the following changes are proposed:

- Any increase in the number or size of antenna(s)/ antenna array(s) or broadcast capacity in excess of the exemption standards contained in FCC OET Bulletin #65;
- 2) Any increase in tower height;
- 3) Any change to tower lighting or existing buffering;
- 4) Any change to the access road or the size (square feet or volume) of any structure on site.
- b. Alterations to Existing Non-Conforming Wireless Communication Tower. Any change to a non-conforming wireless communication tower shall comply with the following standards:
 - 1) The normal maintenance of wireless communication towers existing as of the adoption of these standards (3/20/99) is permitted provided that all applicable standards are met;
 - 2) Any change except normal maintenance requires a permit from the CEO. This includes but is not limited to the replacement of any structural or functional component on or attached to a WCF;
 - 3) Planning Board review is required as established in Section (5)(b) entitled "Planning Board Review Procedure" for any of the following alterations:
 - a) An increase in tower height;
 - b) Any change to tower lighting or existing buffering;
 - c) Any change to the access road or the size (square feet or volume) of any structure on site.
 - 4) If an applicant requests a permit from the CEO that has the effect of altering, repairing, maintaining, or changing the WC tower to the extent that fifty (50) percent or more of the construction cost of the tower would be replaced, repaired, or altered during the past ten (10) year period, then Planning Board review in accordance with the procedure established in Section (5)(b) entitled "Planning Board Review Procedure" is required.
 - 5) If Planning Board review is required as established above due to the 50% standard, the Planning Board shall have the authority to allow an existing tower to be altered, repaired, replaced or rebuilt provided that the following conditions are met as determined by the Planning Board:
 - a) The Planning Board shall not have the authority to allow an increase to the existing towers non-conformity;
 - b) The burden of proof shall be on the applicant to demonstrate to the Planning Board that the existing non-conforming tower can not be changed to conform, as much as practical, to the present standards;
 - c) The burden of proof shall be on the applicant to demonstrate to the Planning Board that it is not technically feasible to provide wireless communication service in accordance with the standards contained in this Section S entitled Wireless Communication Facilities. If the Planning Board determines that there is no technically feasible option of providing Wireless communication Service without allowing the Non-Conforming

Tower to be permitted, the Planning Board shall only allow the minimum amount of non-conformity necessary to permit the Wireless Communication Service Provider to provide the services to customers.

- c. If an applicant proposes to increase the number or size of antenna/ antenna array(s), add antenna/ antenna array(s), or increase broadcast capacity (in excess of the exemption standards contained in FCC OET Bulletin #65) to an existing Non-Conforming Wireless Communication Tower, Planning Board review and approval is required in accordance with the following guidelines:
 - 1) The applicant shall submit evidence to the Planning Board indicating whether or not the 50% standard established in subsection 9 (b) (4) above in this Section S will be met as a result of the proposed change. If the CEO determines that the 50% standard will be exceeded as a result of the proposed change, the applicable review process is required;
 - 2) If the CEO determines that the 50% standard will not be exceeded as a result of proposed change, the applicant shall submit the following information to the Planning Board for their review:
 - a) Submission requirements contained in subsection 5(f) of this Section S entitled "Submission Requirements" numbers 1, 2, and 3;
 - b) Submission requirements contained in subsection 6(a) of this Section S entitled "Submission Requirements" numbers 6, 7, 9, and 11.
 - 3) The Planning Board shall review the information submitted by the applicant and review the application in accordance with the following guidelines established in subsection 5(e) of this Section S entitled "Planning Board Review Guidelines"; numbers 1, 4, 5, 7, 8, 11, 12, 16, and 18;
 - 4) In reviewing an application under this subsection 9(c), the applicant shall design the proposed changes to meet the standards contained in this Section S to the maximum extent feasible. This specifically includes the standards established in subsection 6(d)(1) entitled "Mounting and Dimensions" and subsection 7 entitled "Performance Standards" in this Section S. The Planning Board shall have the authority to determine whether or not the standards contained in this Section S have been met to the maximum extent feasible:
 - 5) The Planning Board shall have the authority to require the establishment of or revision to a performance bond(s) as established in subsection 8(a) and (b) of this Section S entitled "Performance Guarantee" and "Guarantee for Removal of Abandoned Wireless Communication Facilities".

10. INSPECTIONS

- a. Inspections of towers by either a Registered Professional Engineer in the State of Maine or a qualified third party mutually agreed upon by the applicant and the Raymond CEO/ Town Engineer shall be performed to assess structural integrity. Such inspections shall be performed as follows:
 - 1) Monopole towers at least once every seven (7) years following completion of construction. The inspection shall take place between the sixth and seventh year of the repeat sequence.

- 2) Self-supporting towers at least once every five (5) years following completion of construction. The inspection shall take place between the fourth and fifth year of the repeat sequence.
- 3) Guyed towers at least once every three (3) years following completion of construction. The inspection shall take place between the second and third year of the repeat sequence.
- b. The inspection report shall be submitted to the Town Engineer/CEO within thirty (30) days of its receipt by the tower owner. Based upon the results of the inspection, the CEO, upon recommendation by the Town Engineer/CEO, may require repair or demolition of the tower.
- c. The cost of such inspections, reports, repairs or demolition required under this Section of the Ordinance shall be borne entirely by the tower owner. Required repairs shall be completed within ninety (90) days or less as required by the CEO and agreement by the Town Engineer/CEO for safety reasons.
- d. Failure to provide required inspection reports in the required time schedule shall be deemed prima facie evidence of abandonment.

11. REMOVAL OF ABANDONED WIRELESS COMMUNICATION FACILITIES

- a. The owner of a wireless communication facility shall notify the Code Enforcement Officer of the date of cessation of use of the facility or any component(s) thereof within one (1) month from the date of such cessation. If the owner fails to give the notice required by this paragraph, the Code Enforcement Officer shall make a determination of such date, which determination shall be conclusive.
- b. Any WCF or component thereof that is not operated for a continuous period of twelve (12) months shall be considered abandoned. The owner of an abandoned WCF or component thereof shall remove it within ninety (90) days of receipt of notice from the Code Enforcement Officer of determination of abandonment.
- c. The applicant shall be required to post a performance guarantee in accordance with standards established in Section 8 entitled "Additional Standards & Criteria".
- d. If there are two (2) or more users of a single tower or WCF, then this provision shall not apply until all users cease using the tower or WCF.
- e. If all antennas above a manufactured connection on a tower are removed, the resulting unused portions of the tower shall subsequently be removed within six (6) months.
- f. The replacement of all or portions of a WCF previously removed requires a new site plan approval as established in Section 5 entitled "Planning Board Review".

12. WAIVER PROVISION

The Planning Board may waive any of the submission requirements based upon a written request of the applicant submitted at the time of application. A waiver of any submission requirement may be granted only if the Planning Board finds in writing that, due to special circumstances of the application, the information is not required to determine compliance with the standards of this Ordinance. The Planning Board must additionally determine that such modification or waiver would not adversely affect properties in the vicinity or the general safety and welfare of the Town. The burden of proof regarding any such modification or waiver rests solely with the applicant and must be shown to be consistent with federal and state law and with the purposes of this Ordinance.