6.4 PERFORMANCE STANDARDS FOR MULTIFAMILY OR NONRESIDENTIAL USE.

Performance Standards for all districts.

The open display or open storage of junk shall be prohibited in all districts, including but not limited to wornout, cast-off or discarded articles and materials which are ready for destruction or have been stored or collected for salvage or conversion into some other use. Any storage of such articles and materials shall be enclosed or screened so that they are not visible from adjacent streets or properties.

Within a district, no equipment or process shall be utilized in any use of land, buildings or structures which creates a common nuisance by virtue of unreasonable noise, vibration, glare, fumes or odors.

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- **6.4.1 Purpose.** The following performance standards have been adopted in order to control the size, scale, and impacts of nonresidential and multifamily developments that require a special permit and/or site plan review.
- 6.4.2 Procedures; Rules and Regulations. Applicants for special permits or site plan approval for nonresidential or multifamily uses shall comply with these Performance Standards. "Nonresidential or multifamily use" shall mean any use any nonresidential use or a multifamily dwelling or mixed use structure with six (6) or more dwelling units. The SPGA or the Community Development Board (as the case may be) may adopt rules and regulations for these Performance Standards. The SPGA or Community Development Board may require the establishment of an escrow account, pursuant to G.L. c. 44, s. 53G during the special permit process or site plan approval, to cover all or part of the cost of the technical review required by the project, including services provided by, but not limited to, attorneys, traffic engineers, landscape architects, civil engineers, fiscal analysts, and other professionals.
 - 1. Applicants may seek a credit for Development Linkage Fees otherwise due for work required under this Section 6.4. See Section 10.6.1.

- **6.4.3 Exemptions.** The following are exempt from these special permit standards:
 - 1. Emergency Response. Emergency responses performed by a private entity or a public agency and fire or burglar alarms.
 - 2. Municipal Uses and Structures. All uses and structures, including schools, leased, owned or operated by the City.
 - 3. Events. Properly permitted or authorized parades, fairs or outdoor entertainment between the hours of 7:00 a.m. and 11:00 p.m.
- **6.4.4 Lighting Standards.** The proposed development shall not produce lighting so as to unreasonably interfere with the use and enjoyment of property within the City. Lighting practices and systems shall (i) reduce light pollution, light trespass and glare in order to preserve and enhance the natural, scenic, and aesthetic qualities of the City; (ii) conserve energy and decrease lighting cost without decreasing night time safety, security, and productivity; and (iii) preserve the night sky as a natural resource to enhance nighttime enjoyment of property within the City.
 - 1. **Shielding.** All outdoor light fixtures shall be shielded so as to meet the goals of this Section.
 - 2. **Light Trespass.** Light overspill and glare, including direct light from the light source, is to be confined within the property boundaries. Lighting shall also comply with International Dark Sky Standards when feasible.
 - 3. **Light Intensity.** Outdoor lighting shall be designed to provide the minimum intensity needed at any particular time. LED lighting is preferred.
 - 4. **Illuminated Surfaces.** Preferred surfacing for lighted areas shall be of materials such as blacktop which reflect a relatively small fraction of incident light. Parking area lighting shall be reduced or eliminated outside business hours. The SPGA or Community Development Board may require an electrical configuration for parking areas which support shut off for specific unused areas to reduce the glare from lighting.
 - 5. **Searchlights.** The operation of laser shows or searchlights for advertising purposes is prohibited; provided however, that same may be authorized for a period of not more than fourteen days by special permit issued by the SPGA or Community Development Board.
 - 6. **Indoor Lighting.** Indoor light sources will not be projected outside in a manner to defeat the intent of this Section.
 - 7. **Outdoor Signs.** Outdoor light fixtures used to illuminate an outdoor sign shall be mounted on top of the sign structure or otherwise restricted to prevent up-light and light trespass.

8. **Flickering and Flashing Lights.** No flickering or flashing lights shall be permitted. Processes, such as arc welding, which create light flashes shall be confined within buildings or shielded to prevent either direct glare or flashing.

9. Height of Fixtures.

- a. *Wall Mounted Fixtures*. Luminaires attached to a building for area lighting shall be mounted no higher than fifteen (15) feet above grade;
- b. *Pole Mounted Fixtures*. Pole mounted exterior lighting fixture types shall be mounted no higher than 20 feet above grade.
- 10. **Hours of Operation.** Except as may be deemed appropriate for site safety or security, all external lighting, including lighting accessory to authorized signs, shall be extinguished one half hour after the facility is closed for the business day. Such lighting may be timed to resume one half hour prior to the arrival of the first employee on the premises. Motion activated lights are encouraged for security purposes.
- **6.4.5** Noise Standards. The proposed development shall not unreasonably interfere with the reasonable use and enjoyment of property within the City as a result of the generation of noise. Practices and systems shall (i) reduce noise pollution in order to preserve and enhance the natural and aesthetic qualities of the City; (ii) preserve property values; and (iii) preserve neighborhood character.
 - 1. **Limitation.** No person or entity shall operate or cause to be operated any source of sound in a manner that creates a sound level of 10 dBA above ambient, as set forth in 310 CMR 7.10, measured at the property boundary of the receiving land use. The Board of Health shall administer this provision.
 - 2. **Hours of Operation.** As a condition of any special permit or site plan approval, the SPGA or Community Development Board may prohibit or regulate the following circumstances regarding hours of operation.
 - a. The loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or other objects or materials for sale or storage or use in a manner that causes a condition of noise pollution at any time but most specifically between the hours of 6:00 p.m. and 8:00 a.m. across a real property boundary in any district established under this Bylaw.
 - b. Operating or permitting the operation of tools or equipment used in construction, drilling or demolition work between the hours of 6:00 p.m. and 8:00 a.m. on weekdays or Saturday or at any time on Sundays or Holidays so that the sound creates a condition of noise pollution across a real property boundary.
 - c. The operation of construction devices between the hours 8:00 a.m. and 6:00 p.m. including such items as compressors, jackhammers, bulldozers, cranes,

etc., in a manner that causes a condition of noise pollution that could be avoided by the application of best available technology, which might include mufflers where commercially available.

- **6.4.6 Site Development Standards.** To the extent practicable, the proposed development shall be located to preserve and enhance the natural features of the site, to avoid disturbances of environmentally sensitive areas, to minimize adverse impacts of development on adjoining properties, to minimize the alteration of the natural features of the site and to preserve and enhance scenic points, historic buildings and places and similar community assets which add value and attractiveness to the development and the City.
 - 1. **Land Disturbance.** Site/building design shall preserve natural topography outside of the development footprint to reduce unnecessary land disturbance and to preserve natural drainage on the site.
 - 2. **Replication.** Clearing of vegetation and alteration of topography shall be replicated with native vegetation planted in disturbed areas as needed to enhance or restore wildlife habitat.
 - 3. Clearing for Utility Trenching. Clearing for utility trenching shall be limited to the minimum area necessary to maneuver a backhoe or other construction equipment. Roots should be cut cleanly rather than pulled or ripped out during utility trenching. Tunneling for utilities installation should be utilized wherever feasible to protect root systems of trees.

4. Site Design.

- a. Placement of buildings, structures, or parking facilities shall not detract from the site's scenic qualities and shall blend with the natural landscape.
- b. Building sites shall be directed away from the crest of hills, and foundations shall be constructed to take advantage of the natural terrain.
- c. Sites shall be designed in such a way as to avoid impacts to rare and endangered species and wildlife habitat on a site, and to maintain contiguous forested areas.
- 5. Archeological or Historical Resources. If the structure is not subject to demolition delay, the SPGA or Community Development Board may require applicants to submit the proposed development plan to the City's Historical Commission and/or the Massachusetts Historical Commission for review and comment regarding possible archaeological or historical resources on the site.
- 6. **Preservation of Existing Vegetation.** Priority shall be given to the preservation of existing stands of trees, trees at site perimeter, contiguous vegetation with adjacent sites (particularly existing sites protected through conservation restrictions), and specimen

trees. Understory vegetation beneath the dripline of preserved trees shall be retained in an undisturbed state. During clearing and/or construction activities, all vegetation to be retained shall be surrounded by temporary protective fencing or other measures before any clearing or grading occurs, and maintained until all construction work is completed and the site is cleaned up. Barriers shall be large enough to encompass the essential zone of all vegetation to be protected. All vegetation within the protective fencing shall be retained in an undisturbed state.

- 7. **Revegetation.** Proper revegetation techniques shall be employed during construction using native plant species, proper seed bed preparation, fertilizer and mulching to protect germinating plants. Revegetation shall occur on cleared sites within seven (7) calendar days of final grading and shall occur during the planting season appropriate to the selected plant species.
- 8. **Limit of Clearing.** Development envelopes for structures, driveways, wastewater disposal, lawn areas and utility work shall be designated to limit clearing and grading. In order to minimize the clearing and grading on a site associated with construction activities such as parking of construction vehicles, offices/trailers, stockpiling of equipment/materials, such activities may be limited to areas already planned for permanent structures. Topsoil shall not be stockpiled in areas of protected trees, wetlands, and/or their vegetated buffers.
- 9. **Finished Grade.** Finished grades should preserve, match, or blend with the natural contours and undulations of the land to the greatest extent possible. Finished grade shall be no higher than the trunk flare(s) of trees to be retained. The design of grade changes at the base of existing large trees shall be subject to the approval of the SPGA or Community Development Board or its agent.
- 10. **Topsoil.** A minimum of 6 inches of topsoil shall be placed on all disturbed surfaces which are proposed to be planted.
- 11. **Irrigation.** The SPGA or Community Development Board may require that water for the purpose of irrigation shall be provided by an on-site well, after consultation with the Water Department.
- 12. **Phasing of Development.** After consultation with the Water Commission and Board of Health, the SPGA or Community Development Board may limit the extent of a site exposed at any one time through phasing of construction operations. Effective sequencing shall occur within the boundaries of natural drainage areas.
- **6.4.7 Pedestrian and Vehicular Access; Traffic Management Standards.** The proposed development and/or redevelopment shall be designed with a forecast for the next five years from the time of application to (i) minimize hazards to public health and safety as a result of traffic; (ii) provide safe access and circulation on the site for expected vehicles, pedestrians, and emergency vehicles; (iii) provide off-site traffic mitigation, where required, to offset the impact of the development; (iv) reduce the traffic impacts of the proposed development on the area and

the City by incorporating traffic management devices; and (v) minimize the impact on scenic roads, historic districts, natural resources, and community character. The development shall not degrade safety for pedestrians, bicyclists, motor vehicle occupants, or property.

- 1. Access. To the extent feasible, access to nonresidential uses and structures shall be provided via one of the following: (i) Access via a common driveway serving adjacent lots or premises; (ii) Access via an existing side street; (iii) Access via a cul-de-sac or loop road shared by adjacent lots or premises. Access via roadways abutting residential districts shall be avoided where possible. Access and egress to a development with frontage on more than one street shall be in a manner that causes the least impact to the surrounding neighborhoods as determined by the SPGA or Community Development Board.
- 2. **Driveways.** Each development shall be served by an adequate driveway. The SPGA or Community Development Board may, in certain circumstances, allow additional driveways as a condition of approval where the access is shared or the project has frontage on two separate streets. All driveways shall be designed to afford adequate sight distance to pedestrians, bicyclists, and motorists exiting to public ways. Improvements may be required on the public way for vehicular turning movements in or out of the site and safe pedestrian access to adjoining sidewalks, paths, walking trails or bikeways.
- 3. **Curb Cuts.** Curb cuts shall be limited to the minimum width for safe entering and exiting, and shall in no case exceed 20 feet for a residential property or 30 feet for a commercial property, unless waived by the SPGA or Community Development Board for commercial truck traffic. The location of driveway openings in relation to traffic and to adjacent streets shall provide for the convenience and safety of vehicular and pedestrian movement within the site. The number of curb cuts on state and local roads shall be minimized.
- 4. **Interior Circulation.** The proposed development shall assure safe interior circulation within its site by separating pedestrian, bikeways, and vehicular traffic.
- 5. **Transportation Plan Approval.** The proposed development shall be subject to Transportation Plan approval by the SPGA or Community Development Board. The Transportation Plan shall consist of the following information:
 - a. A plan showing the proposed parking, loading, and traffic circulation within the site; access and egress points; and other features related to traffic generated by the proposed use.
 - b. A traffic study, prepared by a qualified traffic engineer licensed by the Commonwealth of Massachusetts, detailing the excepted traffic impacts. For proposed development in excess of 25,000 gross square feet, the required traffic study shall substantially conform to the Institute of Transportation Engineers "Traffic Access and Impact Studies for Site Development: A Recommended Practice," latest edition (TIAS). The SPGA shall approve the geographic scope

and content of the TIAS. In addition, the applicant shall submit a Transportation Demand Management (TDM) plan tailored to the specific uses and the geographic location of the site.

- c. Proposed mitigation measures, if any, such as left-turn lanes, roadway widening, signage, signalization of intersections.
- d. For proposed development in excess of 25,000 square feet of gross floor area, the applicant shall submit a Traffic Management Component (TMC) as part of the Transportation Plan. The TMC shall provide information on the number of expected person trips to and from the site, broken down by various travel modes (e.g., single occupancy vehicle, carpool, walk, bicycle, commuter rail, shuttle bus, etc.). The TMC may also incorporate one or more of the following techniques to reduce the number of single occupancy vehicle trips by employees coming to and departing from the proposed use:
 - (1) Establishment of or contribution to a Traffic Management Association (TMA) within the region, which shall provide shuffle services for employees and other services as may be appropriate;
 - (2) Employee carpools or vanpools sponsored by the employer or the TMA;
 - (3) Subsidized commuter rail passes, provided by the employer, and sold on the site or offered through payroll deduction;
 - (4) Monetary incentives to employees who do not use a parking space;
 - (5) On-site shower facilities and/or bicycle racks for employees who do not drive to work;
 - (6) Other techniques as may be deemed appropriate by the SPGA or Community Development Board or its traffic consultant.
- 6. **Reduction in Parking.** In consideration of the applicant providing one or more of the above measures to reduce vehicular traffic to and from the site, the SPGA or Community Development Board may reduce the number of required parking spaces below what would ordinarily be required by Section 6.1 of this Bylaw. To be considered for such a reduction, the applicant's traffic engineer shall determine and justify the parking demand for the project, as well as reduction in needed parking spaces attributable to each traffic management measure.

7. Level of Service Maintenance or Improvement.

a. If the proposed project will result in an intersection level of service below a rating of LOS D, the applicant may be required to provide detailed plans with a

cost estimate (including reconstruction concepts), that when implemented would result in an intersection level of service rating of D or better.

- b. If the proposed project will result in a reduction in level-of-service of one letter grade or an increase of 10 seconds of delay to a signalized or unsignalized intersection, the applicant may be required to provide detailed plans with a cost estimate that when implemented would result in a return to existing conditions.
- 8. **Dangerous Intersections.** The SPGA may require mitigation for any net increase in traffic volumes of 10% or more at an intersection that has an accident history of more than five accidents in the last three years for which data is available.
- 9. **Sight Distance.** Acceptable sight distance shall be provided and maintained at all access locations, egress locations, and all intersections affected by the Development. At a minimum, these site distances shall meet the stricter of the Massachusetts Highway Department and American Association of State Highway Transportation Officials standards for safe-stopping sight distances.
- 10. **Maximum Parking.** The maximum parking allowed for a development shall be no more than 200% of the minimum number of spaces required under zoning.
- 11. **Mitigation.** The SPGA or Community Development Board may require as a condition of any special permit off-site improvements to mitigate the impact of the proposed development. Such improvements include intersection widening and traffic signals or the components of the TMC.
- 12. **Pedestrian and Bicycle Safety.** Pedestrian and bicycle circulation, and the amenities required thereof, on and off site, shall be in accordance with the following requirements:
 - a. All development and redevelopment shall provide for pedestrian and bicyclist connections on the property, and allow for possible future connections with adjoining properties, where deemed appropriate by the SPGA or Community Development Board.
 - b. Pedestrian access shall connect to all building entrances with further connections to local pedestrian arteries.
 - c. All road and intersection widening and new traffic signals or modification of existing traffic signals required as part of a Development or Redevelopment shall include appropriate bicycle and pedestrian accommodation.
 - d. The SPGA or Community Development Board may require proposed development and redevelopment to provide sufficient rights-of-way on their properties to accommodate expected needs for bicycle and pedestrian use.

- e. Sidewalks, crosswalks, walkways, bike racks or other pedestrian access shall be provided to allow access to adjacent properties and between individual businesses within a development.
- f. If the property abuts a public bikeway/ right-of-way, a paved access route to the bikeway may be required.
- 13. Location of Parking Areas. Where feasible, the SPGA or Community Development Board may require parking areas to be located to the side or behind buildings so as to provide an appropriate setting for the building within the context of the site and neighborhood and allow parking areas to be shared with adjacent businesses. The SPGA or Community Development Board may require alternative studies of parking area layouts. Except where physical constraints, site configuration, or safety considerations preclude strict compliance, all parking must be accessible by driveways to the parking areas of adjacent nonresidential uses and land zoned for nonresidential uses.
- 14. **Parking in Required Front Setback.** The SPGA or Community Development Board may prohibit parking within the required front setback.
- 15. **Traffic Calming Features.** Traffic calming measures such as crosswalks, bike lanes, rumble strips and landscaped islands may be required.
- **6.4.8 Aesthetic Standards.** The location, size and design, building materials, and operating characteristics of the proposed development shall be compatible with and will not adversely affect the livability or appropriate development of abutting properties, with natural and built environment in the area and the surrounding neighborhood.
 - 1. **Compatibility with Neighborhood.** The location, size and design, building materials, and operating characteristics of the proposed development shall be compatible with and will not adversely affect the livability or appropriate development of abutting properties, with natural and built environment in the area and the surrounding neighborhood, with consideration to be given to the following:
 - a. Harmony in scale, bulk, massing, and density;
 - b. Consistency with the goals and objectives of the Master Plan and with any other plan that has been adopted by the City.
- **6.4.9 Utilities; Security; Emergency System Standards.** The proposed development shall be adequately served by public or private utilities, security systems, and emergency systems.
 - 1. **Wastewater Treatment and Disposal.** The SPGA or Community Development Board may require a report from the Board of Health confirming that the proposed site development provides for wastewater treatment and or disposal in a manner that is consistent with regulations of the Commonwealth of Massachusetts and the Board of Health.

- 2. **Water.** There shall be sufficient water capacity to meet the flow demands of the proposed use without causing municipal water flow characteristics off-site to fall below the standards adopted by the City.
- 3. **Site Security.** There shall be a certification by the Police Chief that the petitioner has provided a written plan for site security, which plan has been approved by the Police Chief.
- 4. **Underground.** All electrical, cable and telecommunications services shall be installed underground.
- 5. **Fire Alarm System.** There shall be sufficient municipal fire alarm system capacity to meet the operating requirements of the proposed site development and use under applicable codes, regulations, and statutes enforce by the Fire Chief.
- **6.4.10 Fiscal Analysis Standards.** The proposed development shall maintain a positive net fiscal position for the long term, giving consideration to revenue estimates and actual growth in municipal service costs induced by the proposed development.
 - 1. The applicant shall provide an analysis of fiscal costs from the development, including increases in marginal costs, assessment of the capacity of existing municipal facilities to serve the new development, and, by order of magnitude, share of capital costs if improvements are needed.
 - 2. The applicant shall identify an order of magnitude estimate as to the extent to which this development would generate the additional need for responses from police, fire, EMS, schools and affordable housing.

6.4.11 Miscellaneous Performance Standards. (from old MUZ)

All uses of land in a MUZ District shall comply with the following performance standards; provided, however, that these performance standards shall not be applicable to demolition, construction or rehabilitation work performed pursuant to an applicable demolition or building permit. If the building inspector has reasonable grounds to believe there is a violation of performance standards, such violation shall be subject to the performance standards procedure set forth herein.

- 1. Vibration. An operation which creates intense earthshaking vibration, e.g., heavy drop forges, heavy hydraulic surges, shall not be discernible beyond the property lines of the industry.
- 2. Radioactivity. No operation shall be permitted which causes radioactivity in violation of Title 10, Chapter I, Part 20, Code of Federal Regulations, "Standards for Protection Against Radiation," dated June 16, 1957, or any subsequent revision or amendments.

- 3. Odor. No emission of odorous gas or other odorous matter in such quantity as to be readily detectable at any point along lot lines without use of instruments shall be permitted.
- 4. Toxic or noxious matter. No discharge beyond lot lines of any toxic or noxious matter in such quantity as to be detrimental to or endanger the public health, safety, comfort or welfare, or cause injury or damage to property or business, shall be permitted.
- 5. Dust and fly ash. No solid or liquid particles shall be emitted in such quantity as to be readily detectable at any point along lot lines or as to produce a public nuisance or hazard beyond lot lines.
- 6. Smoke. No smoke shall be emitted in such quantity as to become a nuisance.
- **6.4.12 Waiver of Standards.** The SPGA or Community Development Board, in the course of granting a special permit or site plan approval for nonresidential or multifamily development as defined in Section 6.4.1, may waive any of these performance standards where such waiver is not inconsistent with public health and safety, and where such waiver does not derogate from the purposes of this Section because the proposed development will adequately serve the goals and objectives set forth in Section 6.4.1, hereof.
- **6.4.13 Enforcement.** Issuance of an Occupancy Permit is contingent upon compliance with all conditions set forth in any special permit or site plan approval, including conditions required by this Section 6.4. The SPGA or Community Development Board may ensure compliance with these performance standards at the application stage by requiring evidence of probable compliance, whether by example of similar facilities or by engineering analysis, verified by technical peer review. In addition, the SPGA or Community Development Board may require a monitoring program post-permit issuance for compliance purposes for a time period as may be specified in the special permit or site plan approval.