

CHARTER TOWNSHIP OF WEST BLOOMFIELD

ORDINANCE NO. CZ 10-04

**TEXT AMENDMENT TO ZONING ORDINANCE
(PUD Types and Confirm Penalties)**

An Ordinance to amend Section 3.13 of the Zoning Ordinance, Chapter 26 of the Charter Township of West Bloomfield Code of Ordinances, to allow for a greater diversity in types of PUDs.

THE CHARTER TOWNSHIP OF WEST BLOOMFIELD ORDAINS:

Section 1 of Ordinance

Section 26-3.13 Planned Unit Development Option in Article 6 of the Zoning Ordinance, Chapter 26 of the Charter Township of West Bloomfield Code of Ordinances, is amended to read as follows:

3.13 PLANNED UNIT DEVELOPMENT OPTION

1. Purpose and intent. The planned unit development (referred to as "PUD" in this section) option is intended to permit flexibility in the zoning regulation for qualifying types of land developments and uses desirable to the township that are substantially in accord with the goals and objectives of the master plan, as provided for in section 503 of the Michigan zoning enabling act, Public Act No 110 of 2006, as amended.
2. Availability. The PUD option is available in all zoning districts.
3. Minimum qualification requirements. In order to qualify for the PUD option, the applicant must make the demonstrations described below to the satisfaction of the township board:
 - A. The PUD option will not be used for the sole purpose of avoiding the applicable zoning requirements. Any permission given for any activity or building or use not normally permitted shall result in an improvement to the public health, safety and welfare in the area affected.
 - B. The PUD must satisfy at least three (3) of the following objectives of the township master plan:
 - i. To redevelop sites.
 - ii. To preserve open space or natural features.
 - iii. To accept dedication or set aside open space areas in perpetuity.
 - iv. To provide alternative uses for parcels that provide transition buffers to single-family residential districts.
 - v. To foster an aesthetic appearance of the township through quality building design and site development.
 - vi. To promote sustainable design through mixture of uses, use of renewable energy and/or green building practices.

- C. For all proposed developments, how the proposed development will:
- i. Encourage innovation in land use and variety in design, layout and type of structures.
 - ii. Achieve economy and efficiency in the use of land, natural resources, energy and the provision of public services and utilities.
 - iii. Encourage useful open space.
 - iv. Provide better housing, employment and shopping opportunities particularly suited to the needs of the residents of the township.
 - v. Be properly integrated with the characteristics of the surrounding area.
- D. All applicable requirements and standards of Section 26-3.13.7 and Section 26-3.13.8 will be satisfied.
- E. That the proposed development will be compatible with adjacent uses of land, the natural environment and the capacities of affected public services and facilities.
- F. That the proposed development is consistent with the public health, safety and welfare of the township.
4. Flexibility allowed.
- A. Uses. The PUD option may permit residential uses of non-residentially zoned areas, uses not allowed in the underlying zoning district or specified in this ordinance if allowed by the township board and the mixing of land uses that would otherwise not be permitted. Conditions may be imposed by the township board on all uses under the PUD option including principal and special approval uses allowed in the underlying district.
 - B. Dimensional standards. The PUD option allows dimensional standards different from the otherwise applicable size, height, floor area, lot coverage, bulk, density, setback and other nonuse regulations for the underlying district and/or use.
5. Nature and effect of approval. Final approval of the PUD option shall be by amendment of the zoning ordinance as a map amendment that shows the underlying zoning district classification accompanied by a reference to "PUD, planned unit development overlay."
6. Procedures and requirements.
- A. Preapplication meetings. Applications for the PUD option shall not be submitted or considered until the applicant, with written authorization from all owners of the property that may be proposed for a PUD, has submitted a written description and concept plan for the PUD to the township and has satisfied all of the following preliminary steps in the order stated below. In the written description and at each meeting, the applicant shall address how the possible PUD would satisfy each of the qualification requirements in Section 26-3.13.3. The township administrative officials, planning commission and township board shall not be obligated to provide any comments on the applicant's presentation and PUD concept plan, individually or collectively, with any comments that are provided being advisory only and not binding on the township with respect to any subsequent application for the PUD option.

- i. The applicant has attended at least one (1) meeting with the township administrative officials whose departments may be involved in the review and processing of a PUD request or the provision of public services and utilities to the property presented for a possible PUD.
- ii. The applicant has attended at least one (1) work session/meeting with the planning commission for presentation, review, discussion and receipt of comments from township administrative officials and the public regarding the use of the PUD option and concept plan for the property.
- iii. If recommended by the planning commission, the applicant has attended at least one (1) meeting with the township board for presentation, review, discussion and receipt of comments from township administrative officials, the planning commission and the public regarding the use of the PUD option and concept plan for the property.

Summary of PUD Process			
Stage	Procedure	Action	Expiration
Conceptual	Preapplication Meetings 1. Township staff 2. PC work session 3. TB meeting <i>(if recommended by PC)</i>	No official action, advisory only	None
Preliminary	PUD Qualification 1. PC public hearing 2. TB public hearing	PC recommendation to TB, TB action	1 year
Final	Final PUD 1. PC public hearing 2. TB public hearing	PC recommendation to TB, TB action	2 years or as determined by TB
PC=Planning Commission TB=Township Board			

- B. PUD qualification application requirements. After the preapplication meetings required by Subsection (A) above, an applicant representing all legal and equitable owners of property proposed for a PUD, as confirmed by an affidavit signed by such owners in a form suitable for recording with the register of deeds, may make application for a decision by the township on whether the property and a PUD proposed for it qualifies for consideration and possible approval as a PUD. A written application for PUD qualification shall include all of the following:
- i. Identification of all persons owning, controlling or in possession of the land proposed for PUD qualification and a single person or entity that would be responsible for implementation of the proposed PUD.
 - ii. A description and supporting evidence of how the proposed PUD would satisfy the minimum qualification requirements in Section 26-3.13.3.
 - iii. Scaled land use plans detailed enough to show the location and size of land uses, streets providing access to the site, pedestrian and vehicular circulation within the site; dwelling unit density and types; and buildings and floor areas; building elevations and open spaces.
 - iv. Demonstration of the market need for the proposed development.

- v. Demonstration of the financial plan and/or ability to proceed with the development.
- vi. The proposed timetable for construction and use of the development, and if proposed in phases, identification of each phase and its timetable and a showing of how that phase would satisfy the minimum qualification requirements in Section 26-3.13.3.
- vii. Conditions that the applicant would agree to as a means to meet one or more of the minimum qualification requirements that is not otherwise satisfied.
- viii. Required fees as established by resolution of the township board.

C. PUD Qualification procedures and decisions.

- i. After the submission of a complete PUD qualification application, a public hearing before the planning commission shall be scheduled and held, with notice of the hearing given in accordance with Section 26-6.3. After conducting the public hearing at one or more meetings, the planning commission shall provide a recommendation to the township board as to whether the proposed PUD satisfies the minimum qualification requirements in Section 26-3.13. The planning commission's recommendation may include conditions, including those which would allow a qualification requirement to be satisfied.
- ii. Upon receipt of the recommendation of the planning commission, the township board may study and deliberate on the request before it conducts a public hearing.
- iii. After conducting a public hearing at one or more meetings on the PUD qualification application with notice given in accordance with Section 26-6.3, the township board shall approve, approve with conditions, or deny the request and direct the preparation of a written report that states the township board's decision and the basis for the decision and any conditions imposed, for approval at a subsequent meeting.
- iv. PUD qualification approval does not assure a final approval of the PUD option, but shall indicate whether the applicant should proceed to prepare a PUD plan upon which a final determination could be based. A PUD qualification approval shall be valid for a period of one (1) year from the date the township board approves the written report of its decision, within which time the final PUD application requirements in Subsection (D) must be satisfied.

D. Final PUD application requirements. An applicant who has received PUD qualification approval may apply for final PUD approval by filing a written application that includes and updates, as applicable, the qualification application information specified in Section 26-3.13.6.B, documents satisfaction of any PUD qualification conditions and includes a final PUD plan consisting of:

- i. A boundary survey of the exact acreage being requested shall be conducted by a registered land surveyor or civil engineer (scale not smaller than one inch equals one hundred (100) feet).
- ii. A topographic map of the entire area at a contour interval of not more than two (2) feet. This map shall indicate all major stands of trees, bodies of water, wetlands and unbuildable areas (scale: not smaller than one inch equals one hundred (100) feet).
- iii. All information required for a full and complete site plan submission under Section 26-6.1 and the following information:

- a. Description and location of existing and proposed land uses.
 - b. A tree location survey.
 - c. Proposed open space areas.
 - d. A preliminary grading plan showing areas which are not to be graded or disturbed.
 - e. A description of existing and proposed water distribution, storm and sanitary sewer systems.
- iv. Full and complete applications for all township permits and approvals, other than actual building and construction permits, necessary for the proposed PUD. Except for those which are within the planning commission's jurisdiction, all such permits or approvals shall be obtained before public hearings on the final PUD.
- v. Required fees as established by resolution of the township board.
- E. Final PUD procedures and decisions.
- i. After the submission of a complete final PUD application, a public hearing before the planning commission shall be scheduled and held, with notice of the hearing given in accordance with Section 26-6.3. After conducting the public hearing at one or more meetings, the planning commission shall provide a recommendation to the township board as to whether the proposed final PUD should be denied, approved, or approved with conditions.
 - ii. Upon receipt of the recommendation of the planning commission, the township board may study and deliberate on the request before it conducts a public hearing.
 - iii. After conducting a public hearing at one or more meetings on the final PUD application and introduction of an ordinance to rezone the property to "PUD, planned unit development overlay," with notice given in accordance with Section 26-6.3, the township board shall approve; approve with conditions; or deny the request and direct the preparation of a written report that states the township board's decision and the basis for the decision and any conditions imposed, for approval at a subsequent meeting.
 - iv. If the township board approves the application with or without conditions, it shall instruct the township attorney to prepare a contract setting forth the conditions upon which such approval is based, which contract, after approval by resolution of the township board, shall be executed by the township and the applicant and a notice that a PUD encumbering the land is recorded with the Oakland County Register of Deeds.
 - v. After approval of the report described in Section 26-3.13.6.E.iii and the applicant's execution of the contract described in Section 26-3.13.6.E.iv, the township board shall adopt the ordinance to rezone the property to "PUD, planned unit development overlay."
- F. Final PUD implementation.
- i. After the adoption and effectiveness of the ordinance rezoning the property to PUD, planned unit development overlay, development may not take place on the land nor

shall it be used except in accordance with the final approved PUD plan or with an amendment to the Plan, unless the plan is terminated.

- ii. Within two (2) years following the effectiveness of the ordinance rezoning the property to PUD, planned unit development overlay, or such longer time as allowed by the township board when approving the final PUD for subsequent phases, final plats or site plans for land within the PUD must be submitted to the township. If such plats or plans have not been submitted within the applicable period, the right to develop under the approved PUD plan shall be suspended, and absent a township board approved extension after a planning commission recommendation, shall be subject to termination as provided in Section 26-3.13.6.H.

G. Amendments. Proposed amendments or changes to an approved PUD plan shall be submitted to the planning commission. The planning commission shall determine whether the proposed modification is of such minor nature as not to affect the overall character of the plan, and in such event may approve or deny the proposed amendment. If the planning commission determines the proposed amendment is material in nature, the amendment shall be reviewed by the planning commission and township board in accordance with the provisions and procedures for final PUD approval.

H. Termination.

- i. An approved final PUD plan may be terminated by the applicant or the applicant's successors or assigns prior to the effectiveness of the ordinance rezoning the property to PUD, planned unit development overlay, by filing with the township and recording in the county records an affidavit so stating. The approval of the plan shall terminate upon such recording and the township shall proceed with the process to repeal the rezoning ordinance.
- ii. After the effectiveness of the ordinance rezoning the property to PUD, planned unit development overlay, the obligation to develop the property in accordance with the final PUD plan shall not be terminated unless approved by the township board and the owners of the land.
- iii. For failure to develop, maintain and/or use the land as required by the final PUD approval, contract and this ordinance, after notice and an opportunity for hearing is given to the applicant, person or entity responsible for development and all owners of record, the township board may terminate, in whole or in part, the right to develop under the approved PUD plan. If the township board permanently terminates the right to develop under the approved PUD plan, it shall thereafter proceed with the ordinance amendment process to remove the "PUD, planned unit development overlay" zoning classification for the property.

7. Planned unit development types.

In addition to the requirements in Section 26- 3.13.6, a type of development identified in this section must also be applied for, qualified and approved for the planned unit development option according to the additional requirements and standards specified in this section for that development type.

A. Senior Independent Residential PUD. A senior independent residential PUD shall meet all of the following requirements:

i. Site Requirements

- a. The parcel size shall be a minimum of five (5) acres.
- b. The minimum setbacks shall be eighty (80) feet for front yards and one hundred (100) feet for side and rear yards.
- c. A minimum landscaped yard sixty (60) feet in width shall be provided on the lot adjacent to a major secondary thoroughfare. A minimum landscaped yard one hundred (100) feet in width shall be provided adjacent to a one family residential zoning district. A minimum landscaped yard of ten (10) feet shall be provided in all other instances.
- d. Off-street parking shall be screened by landscape berms in accordance with Section 26-5.12 for any portion abutting a major secondary thoroughfare or one-family residential district. Such screening requirement may be waived by the planning commission when it is found that such requirement is not needed to achieve the landscape/screening objective or that it would be contrary to public interest.
- e. Three-quarter (3/4) parking spaces shall be provided for every dwelling unit plus one (1) space per employee.
- f. Accessory uses and buildings restricted to residents and their guests may be permitted if directly related to, and integrated with senior independent living.
- g. The proposed site shall have at least one (1) property line, apart from its thoroughfare frontage, in common with land which is developed, zoned, or otherwise committed for use other than for the construction of one-family residential dwellings, or shall be at a major thoroughfare intersection location where land directly across the thoroughfare(s) is zoned for non-residential purposes.
- h. Site plan review may require other conditions that directly relate to the health, safety and welfare of the elderly persons who will inhabit the proposed development, in addition to the health, safety and welfare of the residents of the township.

ii. Exterior Architectural Design

- a. The building height for all structures shall not exceed forty-five (45) feet or three (3) stories.
- b. More than fifty (50%) percent of the units shall have balconies or patios.
- c. The maximum length of any one (1) building shall not exceed six hundred (600) feet measured along any single front, side, rear or other exterior elevation. Within this limit, the following wall or building offsets shall be provided:
 - (1) The maximum length of any continuous wall line shall not exceed sixty (60) feet without interruption by a horizontal offset of a minimum of six (6) feet in depth as measured from the outer surfaces of the walls.

(2) Building elements (including roofs) shall not exceed sixty (60) feet in length without interruption by horizontal offset or architectural features.

- d. The minimum distance between any two (2) buildings on the same site or parcel shall be forty (40) feet.
- e. Senior independent living facilities shall be designed architecturally to reflect the predominant architectural character of adjacent residential areas.
- f. Emergency electrical generator(s) that provide for essential services in the event of power failure are required.

iii. Dwelling Unit Standards.

- a. Electrical outlets at levels at least twenty-four (24) inches above the floor.
- b. At least one (1) emergency signal in each unit that is audible and visible at a central location on site as well as off-site.
- c. Individually controlled HVAC system.
- d. Recessed apartment unit entryways, featuring package shelves.
- e. Fully equipped kitchens, including microwave, dishwasher, refrigerator with icemaker, and stove/cook top.
- f. Bathrooms equipped with access compliant amenities: elevated counters and toilets, large showers, nonskid bathtubs, and grab bars around bathtubs and showers.
- g. Covered parking.
- h. In the corridors yielding access to each apartment quality handrails shall be provided.
- i. The minimum floor area per dwelling unit shall be as follows:
 - (1) One-bedroom dwelling unit—750 square feet;
 - (2) Two-bedroom dwelling unit—950 square feet;
 - (3) Three or more bedroom dwelling units—1,250 square feet, plus 250 additional square feet for each additional bedroom over three (3).

B. Mixed Use PUD. A mixed use PUD shall meet all of the following requirements:

- i. A mixed use PUD shall contain an integrated mixture of at least two (2) different uses, such as residential, office, or retail. Industrial uses shall not be permitted in a Mixed Use PUD unless the property has frontage on and access to Haggerty Road.
- ii. A minimum landscaped yard one hundred (100) feet in width shall be provided adjacent to a one family residential zoning district.
- iii. To encourage a true integration of mixed uses and improved efficiency in land use, the planning commission may permit the overlap in parking requirements between uses that have alternating peak-parking demands or where the mixture of uses on a site would result in multi-purpose trips. Approval for the parking reduction shall be based upon documentation submitted by the applicant indicating the types of uses, intensity and characteristics of the parking demands for such uses.

- iv. The proposed site shall have at least one (1) property line, apart from its thoroughfare frontage, in common with land which is developed, zoned, or otherwise committed for use other than for the construction of one-family residential dwellings, or shall be at a major thoroughfare intersection location where land directly across the thoroughfare(s) is zoned for non-residential purposes.
- v. Buildings shall be designed architecturally to complement the predominant architectural character of adjacent areas.
- vi. Site plan review may require other conditions that directly relate to the health, safety and welfare of the residents of the township.

C. Medical PUD. A medical PUD shall meet all of the following requirements:

- i. The parcel size shall be a minimum of five (5) acres.
- ii. A medical use PUD shall contain an integrated mixture of complementary uses in a campus setting. Uses permitted in a medical use PUD shall primarily be for the purposes customarily associated with medical uses such as offices, clinics, hospitals, short term stay facilities, meeting and related facilities, and ancillary commercial businesses.
- iii. A minimum landscaped yard one hundred (100) feet in width shall be provided adjacent to a one family residential zoning district.
- iv. Parking shall be provided based on Ordinance requirements; however, if the applicant wishes to provide shared parking, the planning commission may permit the overlap in parking requirements between uses that have alternating peak-parking demands. Approval for the parking reduction shall be based upon documentation submitted by the applicant indicating the types of uses, intensity and characteristics of the parking demands for such uses.
- v. The proposed site shall have at least one (1) property line, apart from its thoroughfare frontage, in common with land which is developed, zoned, or otherwise committed for use other than for the construction of one-family residential dwellings, or shall be at a major thoroughfare intersection location where land directly across the thoroughfare(s) is zoned for non-residential purposes.
- vi. Buildings shall be designed architecturally to complement the predominant architectural character of adjacent areas.
- vii. Site plan review may require other conditions that directly relate to the health, safety and welfare of the residents of the township.

- 8. Development Intensity. The intensity of development for a PUD is defined by density for residential uses, by height for medical uses, and by both for mixed uses. The development intensity for PUDs is indicated in the table. Residential and mixed use PUDs may have up to six (6) dwelling units per acre, which may be increased by (7) dwelling units per acre up to thirteen (13) dwelling units per acre for a PUD that satisfies at least ten (10) of the following criteria. Similarly, medical and mixed use PUDs may have up to three (3) stories in height, which may be increased by one (1) story up to four (4) stories for a PUD that satisfies at least ten (10) of the following criteria. The intensity that will be allowed for a qualifying PUD shall be included as part of the planning commission's recommendation and township board's qualification decision.

PUD Type	Intensity By Right	Intensity Bonus if Criteria Met
Senior Independent Residential	6 dwelling units per acre	13 dwelling units per acre
Mixed Use	6 dwelling units per acre & 3 stories in height	13 dwelling units per acre & 4 stories in height
Medical	3 stories in height	4 stories in height

A. COMMUNITY CONNECTIVITY

1. Construct or renovate the building on a previously developed site AND within half (½) mile of at least ten (10) basic services AND with pedestrian access between the building and the services.
2. For senior independent residential use PUDs, the congregate services in the project building itself can be considered as the ten (10) basic services, but no more than four (4) of the ten (10) services required may be anticipated (at least four (4) must be existing and operational). In addition, the anticipated services must be documented by lease agreements or other appropriate documentation to demonstrate that these other services will be operational in the locations indicated within one (1) year of occupation of the applicant's project.

Basic Services include but are not limited to:		
a. Bank	h. Hardware	o. Place of Worship
b. Beauty	i. Laundry	p. Post Office
c. Cleaners	j. Library	q. Restaurant
d. Community Center	k. Medical/Dental	r. School
e. Convenience Grocery	l. Museum	s. Senior Care Facility
f. Fire Station	m. Park	t. Supermarket
g. Fitness Center	n. Pharmacy	u. Theater

- B. **MIXED USE DEVELOPMENT.** Include the development, or redevelopment, of 1,500 square feet of any combination of office, retail, and commercial space within the proposal.
- C. **BROWNFIELD REDEVELOPMENT.** Develop on a site documented as contaminated (by means of an ASTM E1903-97 Phase II Environmental Site Assessment or a local Voluntary Cleanup Program) OR on a site declared as a "brownfield" by a local, state or federal government authority.
- D. **PUBLIC OR ALTERNATIVE TRANSPORTATION ACCESS.** Locate project within 1/4 mile walking distance of one or more stops for two or more public bus lines usable by project residents, employees, customers or guests (measured from the building entrance) or provide alternative transportation.
- E. **BICYCLE STORAGE.** Provide covered storage facilities for securing bicycles for a minimum fifteen (15%) percent of the project's residents, employees, or customers.
- F. **FUEL EFFICIENT VEHICLES.** Provide preferred parking for low emission and fuel efficient vehicles (a minimum green score of 40 on the American Council for an Energy

Efficient Economy current annual vehicle rating guide) five (5%) of total vehicle parking on site.

- G. **PARKING CAPACITY.** Size parking capacity to not exceed minimum local zoning requirements, AND, provide infrastructure and support programs to facilitate shared vehicle usage such as carpool drop-off areas, designated parking for vanpools, or car-share services, ride boards, and shuttle services to mass transit.
- H. **RECYCLING.** Provide on-site recycling facilities and programs to project's residents, employees, customers or guests.
- I. **MAXIMIZE OPEN SPACE.** Reduce the development footprint (defined as the total area of the building footprint, hardscape, access roads and parking) and/or provide vegetated open space within the project boundary to exceed the local zoning's open space requirement for the site by twenty-five (25%) percent.
- J. **PUBLIC PARK SPACE.** Create a park with access for the general public that may have active or passive recreation opportunities that the developer will maintain as part of proposed development.
- K. **NON-ROOF HEAT ISLAND EFFECT REDUCTION.** Use one (1) or more of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots):
 - 1. Provide shade from existing tree canopy or within five years of landscape installation; landscaping (trees) must be in place at the time of certification of occupancy.
 - 2. Provide shade from structures fully covered by solar photovoltaic panels.
 - 3. Provide shade from architectural devices or structures that have a solar reflectance index (SRI²) of at least 29. Implement a maintenance program that ensures these surfaces are cleaned at least every two years to maintain good reflectance.
 - 4. Have paving materials with an SRI of at least 29 and implement a maintenance program that ensures these surfaces are cleaned at least every two years to maintain good reflectance. Have an open-grid pavement system (at least 50% pervious).
- L. **ROOF HEAT ISLAND EFFECT REDUCTION.** Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate and human and wildlife habitat thorough the following options:

- 1. Use roofing materials having a Solar Reflectance Index (SRI)³ equal to or greater than the values in the table below for a minimum of 75% of the roof surface. . If more than 75% of the roof area is covered with the SRI material, the SRI value may be lower than the required value if the resulting area-weighted equivalent SRI performance is at least as high as having the required value on 75% of the area.

Roof type	Slope	SRI
Low-sloped roof	≤ 2:12	78
Steep-sloped roof	>2:12	20

- 2. Install a vegetated roof for at least 50% of the roof area.
- 3. Install high albedo and vegetated roof surfaces that, in combination, meet the following criteria: $(\text{Area of SRI Roof} / 0.75) + (\text{Area of vegetated roof} / 0.5) \geq \text{Total Roof Area}$

- M. **WATER EFFICIENCY AND CONSERVATION.** Employ strategies that in aggregate use substantially less water than the water use baseline calculated for the project (not including irrigation). The baseline shall meet the requirements of the Energy Policy Act of 1992 and subsequent rulings by the Department of Energy, requirements of the Energy Policy Act of 2005, and the plumbing code requirements as stated in the 2006 editions of the Uniform Plumbing Code or International Plumbing Code as to fixture performance. Calculations are based on estimated occupant usage and shall include only the following fixtures and fixture fittings (as applicable to the building): water closets, urinals, lavatory faucets, showers, kitchen sink faucets and pre-rinse spray valves.
- N. **WATER EFFICIENT LANDSCAPING.** Substantially reduce potable water consumption for irrigation from a calculated mid-summer baseline case. Reductions shall be attributed to any combination of plant species factors, irrigation efficiency, use of captured rainwater, use of recycled wastewater, or use of water treated and conveyed by a public agency specifically for non-potable uses.
- O. **ENERGY EFFICIENCY.** New Construction R Values for building envelope should substantially exceed the minimum required by Code. Use Energy Star-Rated Appliances in individual units.
- P. **ENHANCED REFRIGERANT MANAGEMENT**
1. **OPTION 1** Do not use refrigerants.
 2. **OPTION 2** Select refrigerants and HVAC&R that minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. The base building HVAC&R equipment shall comply with the following formula, which sets a maximum threshold for the combined contributions to ozone depletion and global warming potential: $LCGWP + LCODP \times 105 \leq 100$ Where:
 - a. $LCODP = [ODPr \times (Lr \times Life + Mr) \times Rc] / Life$
 - b. $LCGWP = [GWPr \times (Lr \times Life + Mr) \times Rc] / Life$
 - c. LCODP: Lifecycle Ozone Depletion Potential (lbCFC11/Ton-Year)
 - d. LCGWP: Lifecycle Direct Global Warming Potential (lbCO2/Ton-Year)
 - e. GWPr: Global Warming Potential of Refrigerant (0 to 12,000 lbCO2/lbr)
 - f. ODPr: Ozone Depletion Potential of Refrigerant (0 to 0.2 lbCFC11/lbr)
 - g. Lr: Refrigerant Leakage Rate (0.5% to 2.0%; default of 2% unless otherwise demonstrated)
 - h. Mr: End-of-life Refrigerant Loss (2% to 10%; default of 10% unless otherwise demonstrated)
 - i. Rc: Refrigerant Charge (0.5 to 5.0 lbs of refrigerant per ton of cooling capacity)
 - j. Life: Equipment Life (10 years; default based on equipment type, unless otherwise demonstrated)
 - k. For multiple types of equipment, a weighted average of all base building level HVAC&R equipment shall be applied using the following formula: $[\sum (LCGWP + LCODP \times 105) \times Q_{unit}] / Q_{total} \leq 100$ Where: Q_{unit} = Cooling capacity of an individual HVAC or refrigeration unit (Tons) Q_{total} = Total cooling capacity of all HVAC or refrigeration

1. Small HVAC units (defined as containing less than 0.5 lbs of refrigerant), and other equipment such as standard refrigerators, small water coolers, and any other cooling equipment that contains less than 0.5 lbs of refrigerant, are not considered part of the "base building" system and are not subject to the requirements of this credit.
- Q. **RENEWABLE ENERGY.** Provide at least thirty-five (35%) percent of the project's electricity from renewable sources by engaging in at least a two-year renewable energy contract. Renewable sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements.
1. Use the Department of Energy (DOE) Commercial Buildings Energy Consumption Survey (CBECS) database to determine the estimated electricity use.
 2. All purchases of renewable energy shall be based on the quantity of energy consumed, not the cost.
- R. **CONSTRUCTION WASTE MANAGEMENT.** Recycle and/or salvage at least fifty (50%) percent of non-hazardous construction and demolition debris. Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or co-mingled. Excavated soil and land-clearing debris do not contribute to this credit. Calculations can be done by weight or volume, but must be consistent throughout.
- S. **RECYCLED CONTENT.** Use materials with recycled content such that the sum of postconsumer recycled content plus one-half of the pre-consumer content constitutes at least 10% (based on cost) of the total value of the materials in the project. The recycled content value of a material assembly shall be determined by weight. The recycled fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value. Mechanical, electrical and plumbing components and specialty items such as elevators shall not be included in this calculation. Only include materials permanently installed in the project. Recycled content shall be defined in accordance with the International Organization of Standards document, ISO 14021— Environmental labels and declarations—Self-declared environmental claims (Type II environmental labeling). Postconsumer material is defined as waste material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. Pre-consumer material is defined as material diverted from the waste stream during the manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.
- T. **REGIONAL MATERIALS: EXTRACTED, PROCESSED AND MANUFACTURED REGIONALLY.** Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site. If only a fraction of a product or material is extracted / harvested/recovered and manufactured locally, then only that percentage (by weight) shall contribute to the regional value. Mechanical, electrical and plumbing components and specialty items such as elevators included in this calculation. Only include materials permanently installed in the project.

U. CERTIFIED WOOD. Use a minimum of 50% (based on cost) of woodbased materials and products, which are certified in accordance with the Forest Stewardship Council's (FSC) Principles and Criteria, for wood building components. These components include, but are not limited to, structural framing and general dimensional framing, flooring, subflooring, wood doors and finishes.

V. LOW EMITTING MATERIALS

1. Adhesives, Sealants and Sealant Primers: South Coast Air Quality Management District (SCAQMD) Rule #1168. VOC limits are listed in the table below and correspond to an effective date of July 1, 2005 and rule amendment date of January 7, 2005. Aerosol Adhesives: Green Seal Standard for Commercial Adhesives GS-36 requirements in effect on October 19, 2000.
2. Paints and coatings used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the following criteria:
 - a. Architectural paints, coatings and primers applied to interior walls and ceilings: Do not exceed the VOC content limits established in Green Seal Standard GS-11, Paints, First Edition, May 20, 1993.
 - b. Anti-corrosive and antirust paints applied to interior ferrous metal substrates: Do not exceed the VOC content limit of 250 g/L established in Green Seal Standard GC-03, Anti-Corrosive Paints, Second Edition, January 7, 1997.
 - c. Clear wood finishes, floor coatings, stains, and shellacs applied to interior elements: Do not exceed the VOC content limits established in South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004.
3. All carpet installed in the building interior shall meet the testing and product requirements of the Carpet and Rug Institute's Green Label Plus program. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program. This credit is only available to projects where carpet is installed. All carpet adhesive shall meet the requirements of EQ Credit 4.1: VOC limit of 50 g/L.
4. All of the hard surface flooring must be certified as compliant with the FloorScore standard (current as of the date of this Rating System, or more stringent version) by an independent third party. Flooring products covered by FloorScore include vinyl, linoleum, laminate flooring, wood flooring, ceramic flooring, rubber flooring, wall base, and associated sundries. An alternative compliance path using FloorScore is acceptable for credit achievement according to the following stipulations. 100% of the non-carpet finished flooring must be FloorScore certified, and it must comprise, at minimum, at least 25% of the finished floor area. Potential examples of unfinished flooring include floors in mechanical rooms, electrical rooms, and elevator service rooms.
5. Concrete, wood, bamboo, and cork floor finishes such as sealer, stain and finish must meet the requirements of South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004. VOC limits are listed below.

6. Composite Wood & Agrifiber Products Composite wood and agrifiber products used on the interior of the building (defined as inside of the weatherproofing system) shall contain no added ureaformaldehyde resins. Laminating adhesives used to fabricate on-site and shopapplied composite wood and agrifiber assemblies shall contain no added ureaformaldehyde resins. Composite wood and agrifiber products are defined as: particleboard, medium density fiberboard (MDF), plywood, wheatboard, strawboard, panel substrates and door cores. Materials considered fit-out, furniture, and equipment (FF&E) are not considered base building elements and are not included.
- W. PROVIDE GUIDEBOOK, MANUAL, AND WALKTHROUGH. Provide a manual that includes the following: a routine maintenance plan; instructions for all appliance, HVAC operation, water system turn offs, lighting equipment and other systems that are a part of each occupancy unit; an occupancy turnover plan that describes in detail the process of educating the tenant about proper use and maintenance of all building systems; and information on how to maintain the green features of the site, including paving materials and landscaping. Provide a guide for homeowners and renters that explains the intent, benefits, use and maintenance of green building features, and encourages additional green activities such as recycling, gardening and use of healthy cleaning materials. Provide a walk-through and orientation to the homeowner or new resident that reviews the building's green features, operations and maintenance.
- X. EXTERIOR ARCHITECTURAL MATERIALS. Exterior building materials that are low maintenance and high-durability such as stone, cement board siding, or brick shall cover a minimum 50% of dominant exterior walls (only their finished surfaces exclusive of windows and doors). As such, the following materials shall not be used as the predominant coverings on exterior surfaces: EIFS, stucco, T-111, smooth-faced or painted concrete block, tilt-up concrete panels, or pre-fabricated steel panels.
- Y. PUBLIC, FUNCTION, AND SOCIAL AREAS
1. Incorporation of natural light filtration through the use of skylights or glass enclosures (as in winter garden enclosures).
 2. Architectural lighting design that corresponds with social programming in public areas.
 3. Use of wood paneling, marble, stone, granite and innovative man made materials (such as resin) accents in installation of flooring, shelving and furnishings.
 4. Media displays throughout the project that provide information, news, announcements and acknowledgments.
 5. Spatial allocation for passive and active socializing, providing indoor and outdoor ambiance.
 - 6.
 7. Original art to create a sense of indigenous place corresponding to the geographic origins of residents, local community and current developments.

Section 2 of Ordinance

Section 26-7.13 Violations and Penalties in Article 7 of the Zoning Ordinance, Chapter 26 of the Charter Township of West Bloomfield Code of Ordinances, is amended to read as follows:

7.13 VIOLATIONS AND PENALTIES

1. In addition to all other remedies, including the penalties provided in this section, the township may commence and prosecute appropriate actions or proceedings in a court of competent jurisdiction, to restrain or prevent any noncompliance with, or violation of, any of the provisions in this chapter, or to correct, remedy or abate such noncompliance or violation. Buildings erected, altered, razed or converted, or uses carried on in violation of any provisions of this chapter or in violation of any regulations made under the authority of Act No. 110 of the Public Acts of Michigan of 2006, as amended, are hereby declared to be a nuisance per se, and the court may order such nuisance abated.
2. Any person, persons, firm or corporation, or anyone acting on behalf of any person, persons, firm or corporation, violating any of the provisions of this chapter shall, upon conviction, be punished as provided in section 1-10 of this Code.

Section 3 of Ordinance

Should any section, subdivision, sentence, clause or phrase of this ordinance be declared by the Courts to be invalid, the same shall not affect the validity of the ordinance as a whole or any other parts not invalidated.

Section 4 of Ordinance

Except as expressly set forth above, the Zoning Ordinance shall remain in full force and effect.

Section 5 of Ordinance

This Ordinance shall take effect upon the expiration of seven (7) days after publication, unless otherwise provided by law.

CERTIFICATION

I hereby certify that this ordinance was adopted by Board of Trustees of the Charter Township of West Bloomfield at a meeting of the Board duly called and held on February 7, 2011.

CHARTER TOWNSHIP OF WEST BLOOMFIELD

By: *Catherine Shaughnessy*
CATHERINE SHAUGHNESSY, Township Clerk

INTRODUCED: January 24, 2011
ADOPTED: February 7, 2011
PUBLISHED: February 16, 2011