Model Pedestrian Neighborhood Zone Regulations

1.6.2014

100 Intent

101 Overall intent. The intent of this proposed regulation is to promote higher density, energy-conscious, people-centered developments within the existing framework of predominantly automobile-centered zoning, which enhance the sense of place, feeling of belonging and experience of community.

102 Floating zone. The "pedestrian neighborhood zone" (PNZ) is designed as a "floating zone" to be overlaid onto parcels within existing zones in urban, sub-urban and rural contexts, and potentially serve as a guideline for developing PUD's and other types of "planned development areas" of at least one acre in size. The PNZ can be used as a "surgical insertion" where higher or focused density is deemed appropriate by a municipality, or as a model for nodal development at the village scale.

200 General Principles

201 Human scale as benchmark. The PNZ is built around the spatial scale of the human, not around the spatial needs of the automobile. As such, all PNZs will have a similar scale *internally*, regardless of context. The context (urban, sub-urban or rural) will determine primarily how the PNZ relates to the outside world, and will have only minimal effect on the rules governing its internal organization. The form and layout of any pedestrian zone must be such that it is easily useable, spatially contiguous and perceived as a coherent whole *by the pedestrian*. To that end, each PNZ should incorporate the principles in section 200.

202 Transit-accessible location. A PNZ is expected to have a minimum density of ten dwelling units per acre, and as such will have both a high concentration of people requiring mobility and limited space for automobiles. To minimize the need to rely on the private motor vehicle for most if not all trips, PNZs are most optimally located in areas already served by public transit and which have other connections to already developed areas, such as bike trails and walking routes. Urban infill or urban edge locations are the best sites for PNZs, however in suburban or rural settings, PNZs should be located along primary transit routes, in close proximity to already developed areas, where road and utility infrastructure already exists to serve them.

203 Shared outdoor space. Shared space is at the heart of creating the experience of community; therefore all buildings in the PNZ would be connected by some kind of shared outdoor space accessible to all residents and generally open to the public. In smaller PNZs (8-12 homes) this could be a single shared yard, as in the Aurora Pocket Neighborhood Climate Showcase Community and other pocket neighborhoods throughout the country. In larger developments it could expand into a pedestrian street or greenway, as in the EcoVillage TREE Climate Showcase Community and most other cohousing communities. In village-scaled developments it would likely become a network of car-free streets and squares. Buildings would front on such shared people-centered spaces, not necessarily on vehicular roads. The shared space itself however, would have some form of frontage on or be accessible from vehicular roads, to facilitate intermittent emergency & delivery vehicle access to all buildings within the PNZ.

204 Perimeter parking. The primary means by which human connectedness is enhanced and buildings are brought closer together in a PNZ is through the exclusion or conscious management of the automobile. In suburban, and even "New Urbanist" neighborhoods, the excessive space required to bring the car up to every building pushes buildings too far apart for human relations that promote a higher level of trust and resource-sharing beyond the typical neighbor relationship. The commitment of resources to excessive automotive infrastructure also hinders community economic viability and sustainable land use. The spatial disruption that the car's movement imposes on pedestrians shatters tranquility, impacts safety, and destroys the experience of shared space. Therefore in an urban context, parking would be on-street or at the edge of a project, with most PNZ developments being contained within the existing urban block structure. In suburban and rural contexts, small developments might have perimeter parking lots, and larger village-sized developments could have structured perimeter parking and even internal shuttle services. In a PNZ, one would expect to walk to one's residence from a parking area or transit stop, and to reap the benefits of car-free public space as a result. *"Welcome to our neighborhood, please check your car at the door"*. In addition, the exclusion of vehicular traffic

and parking internal to the PNZ will make all thoroughfares MORE accessible to emergency vehicles, despite providing a narrower width of paving.

205 Permeable boundary. It is essential that PNZs not occur as gated or spatially isolated communities. In the same way that vehicular roads are open to the public for the purpose of passing through a built up area or visiting particular buildings fronting on those roads, the pedestrian pathways of the shared outdoor space serve the same purpose, and in this sense are considered public rights-of-way, though not for people in vehicles. As such, they must be arranged as a logical path network, with multiple connections to existing vehicle-accommodating public rights of way.

The building architecture should also reflect this "non-gated" philosophy. In an urban context, PNZs would offer views from a city street into the shared space and public pedestrian pathways, a welcoming architectural expression, and facades that address the city street in some positive way. In a sub-urban and rural context, the concept of the permeable boundary would suggest the existence of an obvious path for visitors to approach and feel welcome, a "connective" relationship to main vehicular roads, and a sympathetic relationship between the built form and the natural surroundings. With respect to the relationship between a PNZ and a roadway, municipalities will need to determine whether the built form should abut the road, so as to create a kind of "Main Street" environment, or whether it should be set back to create a "farmstead" type of setting. This choice will depend on the municipality's shared vision.

206 Built Perimeter. In rural and sub-urban areas where a true built context does not exist, the PNZ needs to amalgamate its buildings on the land such that *as a group*, they are perceived as a single entity, whether forming a significant edge along the main road or as an entity set back from the road. This will allow the PNZ to be perceived from outside as a single destination, and thus enhance the experience of it as a place in the larger landscape. The perception of the PNZ as a *single destination* is critical to the success of perimeter parking and simultaneously to the acceptance of walking to one's goal inside it. When approaching in a car (or arriving by transit), the visitor will feel a more powerful sense of arrival if met by a built perimeter, with a simultaneous feeling that the car is un-necessary from that point of arrival forward, because an image of the place as a whole can be readily grasped. Individual buildings should therefore not stand out as destinations until a visitor is on foot and traversing the pedestrian path network of the community.

207 Human Dimensions. The typical assumptions as to the optimal size of building lots, widths of streets, yards and setbacks, and overall sizes of communities, which are currently defined by the needs and capabilities of automobiles and a high-consumption society fueled by cheap energy, will be determined instead by the needs and capabilities of people and a society built to conserve energy. Thus such elements will be significantly downsized in the PNZ.

> **206.1 The street.** The purpose of the street within a PNZ is primarily for the movement of people, not vehicles, and is a social space which contributes significantly to community identity. Therefore its design parameters will reflect this purpose, with the street becoming narrower overall, and pavements being reduced only to what are needed for emergency or incidental vehicle access. Building fronts will be drawn closer together to improve opportunities for social contact among neighbors.
>
> **206.2 Lot sizes.** Lot sizes affect the walking distance between buildings, and can impose social separation if too large. Large lots also put fewer uses and architectural events between the starting and ending points of a walk, making walking a less interesting and therefore less desirable experience. The effect of too-large lots makes a community feel "thinned out". Therefore there will be minimum AND maximum lot sizes and frontages, depending on the intended building type for a particular location within the neighborhood. The intent is to achieve an optimum density for social connectedness and land conservation, while maintaining appropriate aesthetics, fire separations and emergency access. Related to lot size, building size and block lengths will also be smaller than what we had come to view as normal in the 20th century.
>
> **206.3 Neighborhood size.** Beyond a 5-10 minute walk (1/4 – 1/2 mile) a neighborhood begins to get too large to be connected by foot travel alone. If a neighborhood is too large, people feel that getting across it is "too far to walk" and may feel the need for mechanical mobility, especially in inclement weather. In a car-oriented world, the "neighborhood" can be any size traversable by car or other machinery. However, since a PNZ consciously eliminates the car as a mobility option within its boundaries, attention must be

paid to having key services and amenities, including access to mechanical means of mobility, at appropriate walk intervals. In addition, sufficient population to support whatever amenities are made available must be housed within walking distance of those amenities. This suggests that there is not only a *maximum* size for a neighborhood, but also a *minimum* population density.

206.4 Use zones. A PNZ is not limited to being a single use zone, depending on its size. Small urban infill sites may be single use in nature, i.e. residential cottage developments, pedestrian retail areas, etc. However as a PNZ increases in size, perhaps approaching 200-300 homes and upwards to the village scale, it will need to incorporate areas within its layout which are appropriate to certain mixed uses, for example locating commercial space closest to a primary vehicular road, perimeter parking area, transit stop or community park. Given the pedestrian scale and slower speed of travel within the PNZ, variation in uses and building types can and must happen faster than is typical of the scale of automobile infrastructure, resulting in a finer grain of use variation that offers more convenient access for the person on foot.

208 Land preservation. The PNZ is a tool that preserves natural and agricultural landscapes in 2 different ways, depending upon whether it is employed in an urban or sub-urban/rural context.

208.1 Urban application. In the urban context, the PNZ offers a way to *increase* overall density, either as a large site infill or as an entirely new neighborhood. Municipalities may want to increase overall density for a number of reasons, such as to provide a better ridership base for transit, to maximize the efficiency of existing services and infrastructure, to improve street life, to achieve the resident base to support businesses, or to increase tax base. Regardless of the internal reason for increasing density in urban neighborhoods, the effect regionally will be to soak up housing demand and reduce development pressure on land outside the urbanized area.

208.2 Sub-urban and rural application. Though densification within urbanized areas is more cost effective and energy efficient, urban living may not be desired by every household, especially if the household derives its income from agricultural activities, and many will continue to choose ex-urban locations. In the sub-urban/rural context, the PNZ offers a way to *focus* density, and thus preserve open space directly, even if what is built doesn't achieve village scale. Use of the PNZ would create well-defined compact places with closer neighbor relationships that would make resource sharing easier, reduce the impacts of ex-urban living, and still offer access to views and open space typically associated with "country life".

209 Contiguous development. To be successful, PNZs must connect to existing walkable areas or form sufficiently large walkable areas themselves. Depending upon its setting, the following should be considered when designing a PNZ:

209.1 Urban settings. PNZs should connect with the surrounding neighborhoods and street grid at least with pedestrian and bike linkages. Efforts should be made to avoid creating "density islands". Connections between neighborhoods through "green gaps" like large parks or natural areas, or through "grey gaps", like single use commercial areas with acres of parking, or multi-lane expressways, do not create the kind of pedestrian experiences that reinforce a sense of "one place". Connections that host a continuous stream of human activity and buildings are necessary to weave a built environment into a seamless whole.

209.2 Multiple parcel development in suburban and rural settings. Municipalities must seriously assess the locations for PNZs, with access to existing public transit being one primary consideration, and the ability of a group of PNZs to grow into a viable cohesive village node with a population of about 3000 people being another. It is possible that several properties could be designated by a rural or sub-urban municipality as being worthy of the "focused density" which can be created using the PNZ regulations. These properties may be clustered around a transit stop, located near existing development or an employment center, or otherwise be thought of as a "node". When PNZs are planned on parcels adjacent to other parcels where PNZs are also permitted, the perimeter setbacks typically required in suburban and rural situations should be eliminated, such that developments on adjacent parcels can be linked so as to form a seamless pedestrian realm.

209.3 Parcel by parcel development in suburban and rural settings. In a situation where a single parcel is allowed a PNZ, and complies with all setbacks and buffer areas required by the underlying zone, but finds itself adjacent to another parcel *later* allowed to host a PNZ, the area between the 2 parcels should be filled-in with new development so that a seamless pedestrian realm can emerge between the existing and new developments. The layout of the later PNZ would need to align itself with the existing. Further reasoning behind the aforementioned "permeable boundary" is to leave opportunities for edges to "grow connections" to future pedestrian areas.

210 Resident Governance. Because of the compact and intimate "village-like" nature of the built environment offered by PNZs, some degree of resident management should be encouraged. Publicly accessible pedestrian rights-of-way and other infrastructure within each PNZ may not necessarily be Town/City maintained infrastructure. Their unique characteristics may necessitate the public purchase of additional types of equipment or hiring of specialized staff. As such, building maintenance, right-of-way maintenance, open space management, as well as the management of lighting, shared energy systems, and other shared infrastructure and amenities peculiar to a PNZ may require residents to organize around these tasks.

The PNZ will most typically be organized using private lots with fee-simple ownership of each lot (with its own internal subdivision regulations), suggesting the use of a home-owners' association for general governance. However within a larger PNZ, cooperatives may group homes on single lots within the village fabric (i.e. dwelling circles or cohousing subject to the definitions of each), and multi-unit buildings could be built as condominiums. Entire PNZs themselves could also be organized as land trusts, cooperatives or condominiums, instead of fee-simple subdivisions. A governance structure should therefore be adopted which best fits the land tenure model chosen by the residents or the developer.

300 Applicability

Each municipality adopting this model ordinance needs to craft its own statement of applicability.

400 Definitions

401 Interpretation. These definitions, which may differ from identical terms used in the general ordinance, shall apply only within the areas designated by the municipality as PNZs.

402 Specific terms. *This section is meant to be read to introduce these terms in categories, and as such is not alphabetized. An adopted version of this ordinance would likely alphabetize these terms so as to act as a reference, rather than as an introduction.*

402.1 General

Pedestrian Neighborhood Zone (PNZ). A floating zone designation allowing for the subdivision of land such that building lots front on and are accessed via public or private rights of way which exclude or limit mechanized vehicular traffic, which has a physical scale built around human dimensions, and which has a physical arrangement which optimizes foot travel within its boundaries.

Underlying density. The number of dwelling units allowed on a parcel by the underlying zoning, prior to designating the parcel a PNZ, used to determine the maximum number of dwelling units allowed in the PNZ. This density can be increased at the discretion of the municipality depending upon planning goals.

Built Perimeter. The contiguous edge defined by the outermost vertical building walls, or other structures greater than 4' high, facing adjacent properties.

Perimeter Setback. The setback from adjacent properties which are not part of the PNZ, to the nearest allowable building within the PNZs built perimeter. This setback dimension will most frequently be determined by the requirements of the zone into which the PNZ is inserted, and be inclusive of other required setbacks.

402.2 Lots and setbacks

Lot. Parcel of land upon which the owner has exclusive right to build, within regulations. This parcel may be owned outright as a separate property, or be a portion of a single commonly owned property upon which the owner holds a proprietary lease as in a land trust or cooperative. Lots shall not include conservation open space (as defined in this section) in their area

Front Yard Setback. Setback required from the public right of way to a building edge greater than 4' high, including the front porch.

Side Yard Setback. Setback required between adjacent properties perpendicular to a public right of way.

Zero lot line. Lot configuration where two lots abut with a side yard setback of zero where the buildings constructed on each lot share a common fire wall. Each of the 2 abutting buildings may contain up to two dwelling units.

Row-house. Lot configuration where 3 or more lots abut with side yard setbacks of zero and where buildings constructed on each lot share two common firewalls unless on a corner lot. Each of the abutting buildings may contain up to 2 dwelling units.

402.3 Rights of Way

Pedestrian Cut-through (PCT). A publicly accessible way which does not accommodate motorized vehicles, and which may **not** be the only access to a building or lot. Its primary purpose is to connect between larger rights of way or a right of way and an open space.

Pedestrian Pathway (PPW). A publicly accessible way which does not accommodate motorized vehicles. (note that this is distinct from a "sidewalk" which is generally an optional accessory on a vehicular street) which may serve as the primary access to a building or lot, despite the lack of vehicle access.

Multi-mode Pathway (MMP). Similar to the Dutch *woonerf*: A publicly accessible way which is designed to allow incidental vehicular access, such as for delivery trucks, trash pickup and emergency vehicles, but where pedestrians and cyclists have legal priority over vehicles.

Vehicular Street (VST). A publicly accessible way internal to the PNZ designed to support local vehicular traffic, bicycle traffic and pedestrian traffic, short term-vehicle parking, loading, long-term parking for residents, and providing access from main roads to other long-term parking areas, loading facilities, transit stops and other vehicle dependent functions within the PNZ. Such streets shall not be designed to carry through traffic, and driveways onto private property will not be allowed across sidewalks.

Emergency Access-way (EAW). A publicly accessible way, intended primarily for emergency vehicles, connecting main roads to the internal multi-mode pathway network.

402.4 Form Districts

Village Residential District (VR). Portion of a PNZ characterized by individual 1-3 story buildings set back from lot lines. This type of district exhibits typically North American "residential" or "village" architecture (i.e. pitched roofs, wood detailing etc). Commercial activity in VR would typically serve resident needs and generate minimal visitor traffic.

Village Mixed Use District (VM). Portion of a PNZ used in conjunction with a VR district and characterized by individual 2-4 story mixed use buildings of a limited footprint in keeping with the architectural character of neighboring houses. This type of district exhibits typically North American "residential" or "village" architecture (i.e. pitched roofs, wood detailing etc). Commercial activity in VM would serve resident needs, yet also be expected to attract visitors. This type of district will therefore have a higher level of access to transit stops and parking facilities.

District Transition (DT). Portion of a PNZ with special area regulations which moderate the transition between a VR and UM district when both are combined in a single development. The transition typically occurs across a right-of-way between the VR and UM, with modifications to the UM regulations pertaining to height, front yard setback, building articulation and maximum façade length.

Urban Mixed-use District (UM). Portion of a PNZ characterized by 2-5 story buildings typically built up to the front lot line and frequently built out to the side lot lines. This type of district exhibits typically North American "urban" or "Main Street" architecture (i.e. masonry facades, flat roofs with cornice lines, etc). Commercial activity in UM would serve resident needs, yet also be expected to attract visitors. This type of district will therefore have a higher level of access to transit stops and parking facilities.

402.5 Building and use types

Dwelling Circle. A group of 4 to 8 dwelling units, contained within one-family and two-family structures, arranged around a semi-public "Common Open Space" (defined in this section) measuring no less than 30 feet in any direction and opening onto a multi-mode pathway or vehicular street for a minimum width of 15 feet, on a parcel of land under single ownership organized as a cooperative or mutual housing association under NYS law, and managed by its residents. Dwelling circles may also include shared indoor spaces accessible to all residents (i.e. workshops, root cellars, recreation rooms, storage areas, common kitchens, laundries, etc) which are built into the one and two family structures but which are not part of any particular dwelling unit. Building placement within a dwelling circle lot shall be regulated by fire code, and the provision of "transition" and "common" open space as defined in this section and designated in area standards below.

Cohousing Cluster. A group of 8 to 40 dwelling units, contained within one-family, two-family, and multi-family structures, arranged around a semi-public "Common Open Space" (defined in this section) measuring no less than 30 feet in any direction and opening onto a multi-mode pathway or vehicular street for a minimum width of 15 feet, on a parcel of land under single ownership organized as a cooperative or mutual housing association under NYS law, and managed by its residents. Cohousing clusters typically include a "Common House" (defined in this section). Building placement within a cohousing cluster lot shall be regulated by fire code, and the provision of "transition" and "common" open space as defined in this section and designated in area standards below.

Common House. A *non-public* structure for the use of residents of a cohousing cluster, which is owned by the residents, and may include but is not limited to: a kitchen, meeting room, guest rooms for resident use, a workshop, a play room for resident children, an exercise room, administrative offices, a mail room, a computer or business center, bathrooms, storage space, a community deck or patio, community pool, community greenhouse, apartments, or other such facilities for use only by the resident owners and their guests.

Public House. A *neighborhood commercial* structure which may be privately or cooperatively owned, offering some combination of "common house" amenities, commercial activity and community services to residents and the public at large, including but not limited to: a community kitchen, meeting rooms, bed & breakfast, eatery, a workshop, child care center, an exercise room, administrative offices, a mail room, a computer or business center, public bathrooms, storage space, a community deck or patio, community pool, community greenhouse, apartments, or other such facilities.

Neighborhood Services. Services and/or facilities, which may be publicly or privately provided, that assist residents in meeting the needs of daily life within walking distance, such as child and elder care, social services, clinics, schools, religious & secular meeting spaces, fitness centers, etc.

Neighborhood Commercial Space. Building area, typically though not necessarily on the ground floor, serving the needs of residents within walking distance. Such space should generate limited visitor traffic from outside the neighborhood.

402.6 Open Space

Dwelling Unit Equivalent (DUE). For the purposes of calculating amount of open space "per dwelling unit" a dwelling unit containing more than 4 bedrooms shall be counted as 2 units. A single room occupancy residential building, group home or cooperatively shared residence shall provide required open space "per dwelling unit" for every 4 bedrooms.

Common Open Space. Outdoor space accessible to all residents of a cohousing cluster or dwelling circle opening onto a public way for the purpose of visitor, resident and emergency access to dwelling units, and for recreational and social use by residents. Does not include open space required by building setbacks to adjacent lots or properties.

Transition Open Space. The outdoor space between the common open space of a cohousing cluster or dwelling circle and the front entry of a dwelling unit within a dwelling circle, or a dwelling unit or multi-unit building entrance within a cohousing cluster. Transition open space does not include a front porch, if provided.

Private Open Space. Outdoor spaces on a lot for the exclusive use of residents occupying that lot.

Public Open Space. Spaces *inside* the built perimeter of the built-area of the PNZ, bounded by buildings on at least 3 sides, which are NOT pathways. These areas include but are not limited to: paved public squares, linear public green-spaces parallel to pathways (wide r.o.w.) small wooded plots, public gardens, community food gardens, playgrounds, grassy recreation areas, etc. It does *not* include conservation open space as defined in this section.

Conservation Open Space. Spaces *inside* the built perimeter of the built-area of the PNZ which are NOT pathways and include un-buildable land, such as land with greater than a 25% slope, land within 100' of streams, designated wetlands, standing water, etc, or other land with natural features that preclude building, but which cannot be entirely avoided by the neighborhood layout.

Rural Open Space. Undeveloped, recreational, agricultural (inclusive of community gardens), wooded, wildlife preservation or other form of land adjacent to and accessible to the residents of a PNZ *in an exurban context*, which is preserved by the clustering of buildings. Rural open space does not include public open space, conservation open space, pedestrian ways or other open space *inside* the built perimeter of the PNZ, nor does it include land required for the perimeter setback from adjacent properties. A minimum requirement for rural open space will be set forth in the standards, however a municipality may already require some form of conservation land in its underlying zoning which may be greater than this minimum.

500 Pedestrian Zone Standards

501 Form Districts. The space within the built perimeter of the PNZ shall be comprised of one or more of the form districts in this section. Form districts will be assembled in a manner that places the highest desired density closest to the primary transportation arteries (road, bus, rail) so as to limit overall intrusion by mechanized vehicles.

502 Village Residential (VR) form district. 10-20 DU/acre

502.1 INTENT

The Village Residential (VR) form district contains predominantly single-family and two-family residential structures, with small mixed-use apartment buildings allowed on larger lots. The intent of including mixed-use buildings is to create a greater diversity of housing types and affordability ranges within the district. Ground floor uses in such buildings are limited to community services and commercial uses of a scale that can be supported by residents within walking distance, so as not to attract vehicular traffic into the neighborhood. Non-residential uses would not be permitted above the ground floor.

The architectural character of the district is that of the New England village, featuring detached structures with pitched roofs and modest setbacks from the public right of way. Front porches would be mandatory regardless of architectural vocabulary. Single-family and two-family homes range from 1-1/2 story cottages to 2-1/2 story houses. Apartment buildings can have 3 full stories, with limitations on their siting to protect solar access by smaller buildings.

502.2 DENSITY

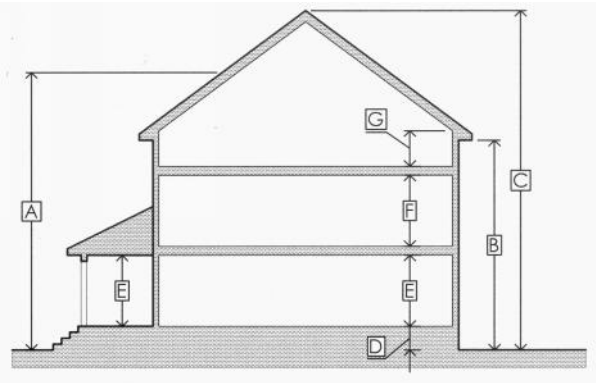
The Village Residential District shall have a minimum density of 10 dwelling units per acre and a maximum density of 20 dwelling units per acre, and no more than 30% of land area within the form district may be uses other than those limited to 1700sf in 502.3.4

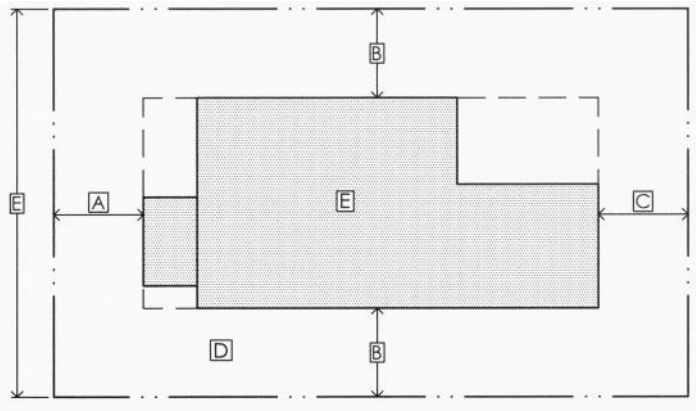
Reference district plan

Reference District 3D view

502 Village Residential (VR) form district continued

502.3 DISTRICT REGULATIONS





502.3.1 HEIGHTS

Building Ht. fronting on PPW

A.	Stories (min/max)	
	1&2 family	1.5 / 2*
	Other uses	2 / 3
B.	Eave Height (min/max)	
	1&2 family	10’ / 20’
	Other uses	18’ / 30’
C.	Total Height (maximum at peak)	
	1&2 family	35’
	Other uses	55’

Building Ht. fronting on MMP & VST

A.	Stories (min/max)	
	1&2 family	1.5 / 2.5*
	Other uses	2 / 3
B.	Eave Height (min/max)	
	1&2 family	12’ / 25’
	Other uses	18’ / 30’
C.	Total Height (maximum at peak)	
	1&2 family	40’
	Other uses	55’

* .5 story refers to a habitable space within a pitched roof

All Locations

D.	First Floor above grade (min/max)	
	1&2 family & apartments	2’ / 3.5’**
	Other uses	0’ / 3.5’
E.	Ceiling at street level story (minimum)	
	1&2 family & apartments	8’
	Other uses	10’
F.	Ceiling at upper story (minimum)	
	1&2 family & apartments	8’
	Other uses	not permitted
G.	Knee-wall Height (maximum)	4’

** Measured at main entry. Wheelchair accessible units exempt.

502.3.2 SITING

Setbacks

			min/max
A.	Front Yard:	1&2 family	10’ / 20’
		Other uses	10’ / 20’*
B.	Side Yard:	1&2 family	5’ / 20’
		Other uses	15’ / 30’
C.	Rear Yard:	1&2 family	10’ / none
		Other uses	15’ / none

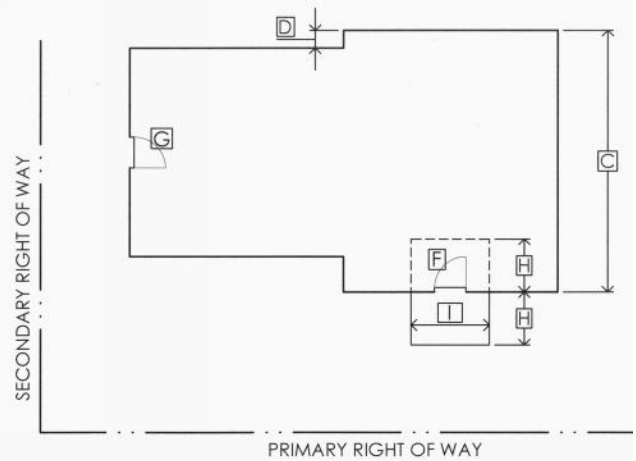
* Maximum setbacks apply to the extent of the building closest to the property line. The intent is to limit large gaps in the streetscape.
** Other uses may not have their front yard on a PPW.

Lot Dimensions

D.	Lot Area (min/max)	
	1&2 family	2000sf/3400sf***
	1&2 family (zero lot line)	1500sf/3400sf***
	Other uses	2000sf/15000sf
E.	Width at R.O.W. line (min/max)	
	1&2 family	30’ / 50’
	1&2 family (zero lot line)	25’ / 40’
	Other uses	30’ / 150’
F.	Lot coverage by building(s) (min/max)	
	1&2 family	30% / 50%
	Other uses	30% / 50%

*** Truncated corner lots may be up to 4000sf.

502 Village Residential (VR) form district continued



502.3.3 ELEMENTS

Roof

A. All uses (min/max) 6 on 12 / 12 on 12

Street Façade

B. Length of blank wall 10' max.

C. Length between building articulations

1&2 family	40' max.
Other uses	45' max.

D. Minimum depth of articulation

1&2 family	1'
Other uses	2'

Doors/Entries (lots facing one R.O.W.)

E. Front façade 1

Doors/Entries (lots facing multiple R.O.W.)

F. Façade facing largest R.O.W. 1

G. Façade facing other R.O.W.s*

1&2 family	none
Other uses under 2000sf	none
Other uses over 2000sf	1

* Additional entries not required on facades facing PCTs

Porch

Required at primary entry (may be recessed)

H. All uses 6' minimum depth

I. All uses 8' minimum width

502.3.4 USES & BUILDING SIZE

Uses limited to 1700sf footprint

- One and Two family structures
- Zero lot line One and Two family structures
- Dwelling circles comprised of the above
- Dwelling units of cohousing clusters comprised of the above
- Home occupations less than 300sf in any of the above

Other uses limited to 6000sf footprint*

- Apartment buildings containing less than 15 dwelling units or 20 single room occupancy units
- Common houses, which can include apartments subject to the limits above, in cohousing clusters.
- Home occupations less than 300sf in any of the above
- Transit facilities
- Neighborhood Services
- Public Houses
- Neighborhood commercial

* Buildings fronting on a main thoroughfare at the edge of the PNZ or more than 100' from 1&2 family residential structures may have up to a 7500sf footprint.

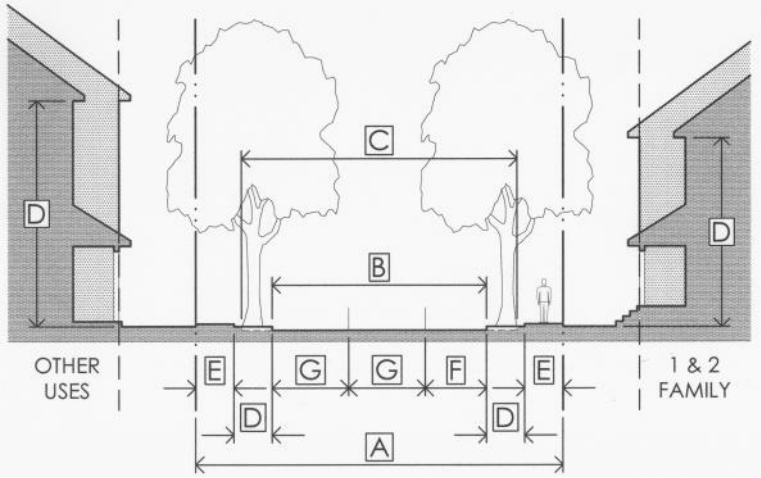
Uses by Special Permit

- Home occupations in excess of 300sf
- Vehicle parking areas (subject to parking area design standards)

502 Village Residential (VR) form district continued

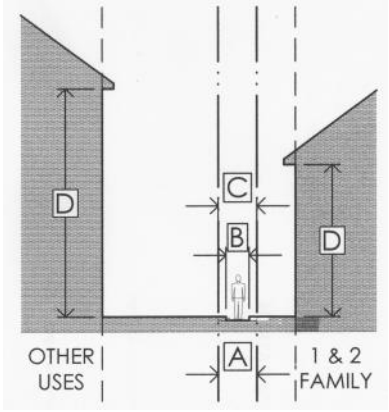
502.3.5 RIGHT-OF-WAY STANDARDS

Diagrams of rights-of way show the narrowest allowable r.o.w. width and paving, paired with the tallest allowable eave heights per 502.3.1 and smallest allowable setbacks per 502.3.2. Other r.o.w. cross sections are possible within the minimum and maximum parameters of these variables.



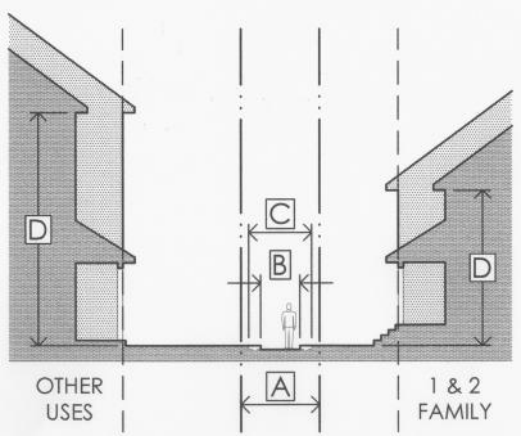
502.3.5.1 VEHICULAR STREET (VST)

A.	Right of way width (min/max)	48’ / 58’
B.	Pavement width (min – 1 parking aisle)	28’
C.	Pavement width (max – 2 parking aisles)	36’
D.	Tree lawn (min)	5’
E.	Sidewalk (min)	5’
F.	Parking aisle	8’
G.	Travel lane (max)	10’
	Speed limit	15mph



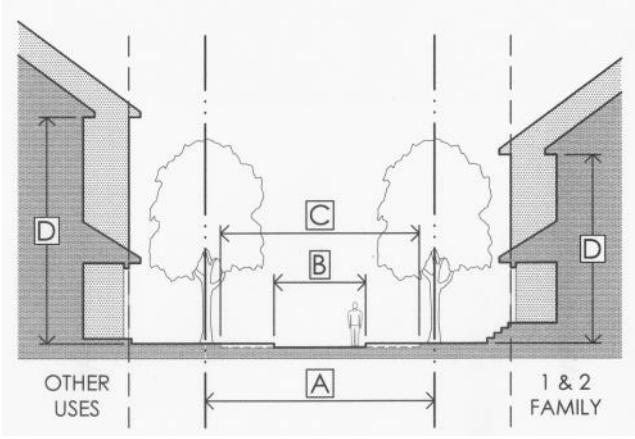
502.3.5.2 PEDESTRIAN CUT-THROUGH (PCT)

A.	Right of way width (min/max)	5’ / 10’
B.	Pavement width	3’
C.	Pavement width	5’
D.	Eave height (max)	
	1 & 2 Family	25’
	Other uses	30’



502.3.5.3 PEDESTRIAN PATHWAY (PPW)

A.	Right of way width (min/max)	10’ / 15’
B.	Pavement width	5’
C.	Pavement width	8’
D.	Eave height (max)	
	1 & 2 Family	20’
	Other uses	30’



502.3.5.4 MULTI-MODE PATHWAY (MMP)

A.	Right of way width (min/max)	30’ / 36’
B.	Pavement width	12’
C.	Pavement width	26’
D.	Eave height (max)	
	1 & 2 Family	25’
	Other uses	30’

502.3.6 PARKING AND LOADING (TBD)
502.3.7 TRASH AND RECYCLING

503 Village Mixed-use (VM) form district: 15 – 25 DU/acre
504 Urban Mixed-use (UM) form district: 20 – 40 DU/acre
505 Transition (TD) form district: “seam” district between VR and UM

600 PNZ Design Standards

601 Applicability. Within the boundaries of the PNZ, these standards supersede any other design or subdivision standards of the municipality.

602 Paving standards

602.1 Accessibility. Paving materials and grading of pathways, including sidewalks on vehicular streets, shall comply with ADA standards such that at least one accessible route is available to serve the main entries of all buildings in the PNZ. If pathways cannot be graded to make all buildings accessible, publicly accessible chair lifts, elevators or other means shall be provided to achieve this level of access. Gravel or grass-paved vehicular driving and parking aisles are permitted, however multi-mode pathways must have at least a 5' width of ADA compliant paving material that cannot be disturbed or displaced by incidental vehicular traffic, and vehicular streets must have 5' minimum of ADA compliant sidewalk paving material on each side of street, as well as ADA compliant crosswalks at intersections.

602.2 Stairways. A pedestrian pathway may include a stairway, provided it is not the sole path of access to a building. If the slope of a pathway exceeds 1:20 (5%) it shall be designed as an ADA compliant ramp. If it exceeds 1:12 (8.33% grade), intermittent ADA compliant stairs with handrail on one side shall be required as part of the pathway.

602.3 Traffic calming. Vehicular streets and multi-mode pathways may incorporate rough surfaced materials so as to discourage high vehicle speeds, however a minimum 5' width of bicycle friendly paving must be provided. Speed bumps, which seriously disrupt passage by emergency vehicles, are not permitted.

602.4 Permeability. Paving materials shall generally be permeable so as to minimize surface runoff. If not permeable, bio-swales and rain gardens shall be incorporated in the public right of way.

602.5 Repair-ability. It is preferred that pavement be modular and re-settable (i.e. concrete or brick pavers, etc) especially over utilities, so that buried infrastructure can be serviced with minimum intrusion from heavy construction equipment.

602.6 Aesthetics. Paving shall employ patterns, colors and textures appropriate to a pedestrian scaled environment. (i.e. designs should avoid large expanses of asphalt or concrete without joints or color variations). Gravel or similar granular paving shall be bounded by curbs, or other structured site-work elements, so as to contain the material within the designed width of the surface.

603 Emergency vehicle access.

603.1 Paving. All rights of way except pedestrian pathways and pedestrian cut-throughs (PPW & PCT) must be paved with material of sufficient strength to support emergency vehicles (75,000 pounds) and of sufficient width to allow its safe passage. Any pathway with a pavement width under 20' wide shall be designated as "one-way' for motorized vehicle travel.

603.2 Level areas. Regardless of paving width, within the public right of way, there must be a level area 20' wide, (26' at fire hydrants per NYS fire code) contiguous in elevation with the paving area and not separated by raised curbs or other abrupt elevation changes, maintained free of swales, shrubs, vegetation over 8" in height, or permanent structures such as raised planting beds, benches etc. This is to insure space for the stepping aside of pedestrians and/or pulling over of incidental vehicles to allow passage of emergency vehicles, and to provide adequate access area around an emergency vehicle for responders to utilize emergency response equipment.

603.3 Pavement Radii. At all intersections of vehicular streets (VST) and/or multi-mode pathways (MMP), pavement and right-of-way shall be provided so as to accommodate turning movements for emergency vehicles. This typically requires an outside radius of 50' and an inside radius of 26'. Right of way may expand at intersections to accomodate the required radii.

604 Dead Ends.

604.1 Vehicular terminations. No pathway within a PNZ may be a dead end, however if right-of-way allowing vehicular access must terminate (i.e. as a cul-de-sac or "T") pedestrian pathways must extend from the vehicular dead end to other pathways, such that no pedestrian feels trapped and a contiguous network of walking/biking routes is formed. Dead-ending of any pathway accommodating vehicles is discouraged because of the inordinate amount of space and paving necessary to provide an adequate turnaround for emergency vehicles.

604.2 Future connections. If a pathway is intended to be a connection to a future area of development, its pavement and hosting of lot frontages shall be terminated at the nearest crossing pathway, and its extension shall be planned such that the right of way can be used as public open space until future development occurs.

605 Trash/recycling areas. Trash and recycling shall be collected from MMPs or VSTs accessible to collection vehicles. All trash generated by properties fronting on PPWs must be walked out to a collection area adjacent to the nearest VST or MMP. Space for trash and recycling containers shall be provided per district regulations in section 500.

THE FOLLOWING TO BE INCORPORATED AS A GRAPHIC IN THE DISTRICT REGULATIONS SECTION 500

VR & VM trash/recycling accommodation: A level space for trash and recycling receptacles must be provided on the lot, adjacent to the front walk within 5' of the property line. To preserve the emergency accessibility width of MMPs and sidewalk width along VSTs, trash may not be placed within an MMP or VST right of way. Level space for trash and recycling receptacles of properties located along PPWs must be provided at the intersection of PPWs and MMPs/VSTs.

UM trash/recycling accommodation: Trash and recycling may be put out in front of rowhouses provided 5' of sidewalk is left un-obstructed. Because of the number of dwelling units in larger buildings, UM districts should have centralized trash/recycling areas with appropriately sized dumpsters or compactors, utilized by multiple properties and located within loading dock areas accessible to collection vehicles. Façade frontage used for dock purposes shall be minimized. Having loading docks for every building is discouraged because of the disruption this would impose on the streetscape and sidewalks.

606 Access distances. Walking distance from the main entry of a building to the main entry or edge of a particular feature of the PNZ shall comply with table 606.

TABLE 606 - ACCESS DISTANCES

Feature	Distance to	Maximum Walk time (250ft/min)
Transit stop	2500' maximum	10 minutes
Motor vehicle parking area	500' maximum	2 minutes
Bike parking area	100' maximum	.4 minutes
Public open-space	300' (600' apart) maximum	1.2 minutes
Rural open-space	1250' maximum	5 minutes
Multi-mode pathway	150' (300' apart) maximum	.6 minutes
Vehicular Street	1250' maximum, but spaced no less than 600' apart.*	5 minutes
Block length**	500' maximum	1.2 minutes
Block Perimeter	1250' maximum	5 minutes

* If on-street parking is resident parking, vehicular streets may be placed 300' apart

** Block length is measured from property line to property line between 2 successive public rights of way (as opposed to center line to center line of R.O.W.)

607 Transit access requirements.

Besides meeting the distance requirements set forth in section 606, the PNZ shall be located on its site and internally arranged so as to minimize the walking distance to available transit stops. Safe pedestrian linkages to transit shall be constructed as necessary, and transit shelters shall be provided. Signage directing residents and visitors to the PNZ to and from transit stops shall also be provided. An agreement with the municipality, outlining which parties are responsible for seasonal maintenance of the pedestrian connection to transit stops must be established as part of the PNZ development plan.

608 Motor vehicle parking area standards

608.1 Clustered Parking. Parking for motor vehicles is not permitted on private lots. All parking is to be aggregated in shared parking areas, located in a manner as to create the largest possible pedestrian areas while complying with access requirements set forth in section 606.

608.2 Surface parking. Parking lots for resident and visitor parking shall be designed in accordance with table 608.2.

TABLE 608.2 - SURFACE PARKING AREAS

Size of parking space	9' x 18'
Width of driving aisle	22'
Maximum allowable area per space	300sf
Maximum area per open lot	10,000sf
Maximum length	150'
Maximum parking lot site coverage	20% of built perimeter, not inclusive of parking areas*

* test layouts of the VR district show that a density of 15DU/acre would require 10% of built perimeter to provide 1 space per dwelling unit.

608.3 On-street parking. In lieu of or supplementing surface parking lots, resident and visitor parking may be provided on vehicular streets. On-street parking may not occur in front of the intersection of a PPW and the VST if the PPW crosses the VST. At such mid-block crossings and at main intersections, neck downs will be installed to shorten crossing distances and define the parking aisle. On-street parking must be interrupted at least every 100' (5 spaces) with a neck down or tree bump-out. Resident parking shall be clearly marked as such. Visitor parking shall typically be located so as to not create excessive non-resident vehicular traffic into the PNZ. The surface area of on-street parking counts toward parking lot site coverage, however the driving lanes themselves do not.

608.4 Parking for people with disabilities. All parking areas, including on-street parking, shall provide parking for people with disabilities according to ADA requirements. Parking for people with disabilities may be provided close to a resident's home on a temporary basis at intersections of MMPs.

608.4 Parking structures. Depending on the municipality's parking requirements, it is generally expected that if a development incorporates a UM district, the required parking will exceed the maximum allowed in open lots. Exceptions to this would be developments sited close to transit and other mobility options, or as infill in an existing urban environment, where the parking requirements per DUE are lower, or on-street parking or other public parking facilities exist. To be economically feasible, parking garages may need to be constructed that exceed the maximum lot area and dimensions for the UM districts. Given that garages should be sited along the perimeter of such districts and that liner buildings are expected to shield the garages from the pedestrian spaces of the district, this may not produce a serious negative effect, however parking garages will be subject to specific design review. As such, the following are guidelines, not strict requirements.

Size of parking space	9' x 18' clear of structural supports
Width of driving aisle	22'
Maximum allowable area per space	300sf plus ramps if needed
Maximum size of garage	37,500sf (longest side 250')*
Minimum space between garages	500'
Liner building depth (required on 2 sides)**	20' minimum (except sides facing outside built perimeter)
Ground floor façade occupied by garage ***	33%

Maximum height	5 parking levels above first story including open rooftop
Maximum vehicles per garage	460

* Underground portions of a garage may exceed these dimensions.

** The liner building is intended to screen the inside of the built perimeter from the street-deadening effect of exposed parking structures. Possible uses for such narrow space include but are not limited to: art studios, apartments, linear office suites, hotel rooms, etc. With a maximum dimension of 150' it is expected that at least 120' will be needed for 2 double-loaded parking aisles. This leaves only 30' for the liner, implying that liner on all sides would make efficient parking layouts impossible. The developer is given the choice of prioritizing which 2 sides to apply the liner. Other faces of the garage should be aesthetically integrated with the liner building facades.

*** As much ground floor as possible should be used for commercial purposes to minimize the grade level impact of the garage. Exposed garage faces should be screened by pleasing facades, and vehicle entries should occupy no more than 28 lf of façade area.

609 Bike parking standards

609.1 Size. Bike parking spaces shall be 18" wide by 72" deep with a "U" type locking rung 3' on center (one per 2 spaces).

609.2 Location. Bike parking shall be sited so as not to intrude on walking surfaces or onto pavement areas used for emergency access. Bike parking shall be recessed into building facades if necessary to maintain clearance for pedestrians. Indoor bike parking shall be clearly marked as such on the façade of the building.

609.3 Extent. Bike parking may not occupy more than 1/3 of the lot frontage.

610 Lighting Standards

610.1 Dark skies and light privacy. All exterior lighting, both public and private, shall use "cut-off" fixtures that respect "dark skies" concepts. Lighting shall not be aimed directly into windows, create excessive glare, or unreasonably intrude across property lines.

610.2 Porch lighting as pathway lighting. Porch lighting may serve as the primary pathway lighting along any rights-of way which are narrow enough to be lit in this manner. Any porch lights which are the only pathway lighting may be considered part of public infrastructure and tied to a community meter as street lighting. This lighting should be controlled by photocell and be minimal in intensity. Additional resident controlled porch lighting should be provided so that a resident may choose higher levels of illumination during active porch use.

610.3 Building mounted lighting. In UM districts and other locations were buildings are close to pathways, lighting should be building mounted so as to reduce obstacles to pedestrians. Where rights of way are too wide for building mounted illumination, or in the case of large public squares or parks, pole mounted fixtures shall be placed in a manner that minimizes intrusion on walking surfaces.

611 Utilities

611.1 Public underground utilities. All utilities shall be accommodated underground within the public right of way. Where possible, utilities shall not be located beneath paving, so as to limit the need to rebuild paving after repairs and thus reduce the time period during which the neighborhood is disrupted by construction noise and equipment.

611.2 Utility tunnels. In districts where buildings are sufficiently close together or abutting, utility tunnels accessible from the basements of buildings are encouraged, thus eliminating the need for street disruption and the intrusion of construction equipment for utility work. These tunnels may be within the public right of way, or incorporated on the individual lots with one side collinear with the r.o.w. boundary. Such "on-lot" tunnels shall be accompanied by a 3 dimensional easement allowing utility access below ground level, while allowing the lot owner to build above the tunnel.

611.3 Above-ground utility structures. Utility structures such as electrical boxes, transformers, parcel boxes, communication interfaces, parking meters, etc shall be placed in a manner that minimizes intrusion on walking surfaces.

612 Solar Access Guidelines.

612.1 Layout. Neighborhood layout and building design (especially in VR & VM districts with pitched roofs) shall insure that the maximum number of individual rooftops have a southern exposure (i.e. with ridges running east/west). Building spaces should also be arranged to maximize passive solar gain, however without sacrificing urban form or the relationship of interior spaces to outdoor neighborhood social spaces.

612.2 Tall building placement. Mixed-use buildings which are taller than houses should be sited so as to not have the lower buildings abutting them immediately to the north. A public open space or public right of way to the north of taller buildings should be used to reduce potential roof shading conflicts.

612.3 Tree Placement. Very tall trees should be grouped at public open spaces and pathway intersections so as to minimize roof shading. More compact species should be used on individual lots and along rights-of-way. Edible species are encouraged with an appropriate harvest and edible landscape management plan.

612.4 Alternative to rooftop solar. Land may be set aside outside the built perimeter for community owned ground-mounted solar energy systems in lieu of complying with 611.1 – 611.3 above.

613 Pathway signage (TBD)

614 Green Infrastructure Standards (TBD)

615 Building standards

615.1 Fire safety. Due to the limited size and design speed along most rights-of-way within a PNZ, all 1 & 2 family structures shall be fitted with residential sprinklers. All other buildings shall be fitted with commercial sprinkler systems.

615.2 Energy conservation. Because part of the inspiration behind this ordinance is the conservation of energy and long-term energy security, every building constructed as part of a PNZ shall be designed to use no more than half the overall energy as a building of similar size and configuration designed to meet current energy codes. This may be achieved through any combination of improvements to the building envelope, improvements in mechanical systems, on-site renewable energy, or through innovative public/cooperative infrastructure systems. This requirement will be a condition for granting approval for pedestrian neighborhood zone designation (PNZ).

615.3 Mechanical equipment placement. In coastal locations and any locations within a 500 year flood zone, all mechanical equipment shall be located above grade, preferably in upper stories or attics.

616 Aesthetic Standards. (TBD)

617 Governance standards (TBD)