Intent Illustration A Public Open Space, a square or green.

Taft Corners Form-Based Code:
Sections 1 to 8

Section 5 Public Realm Standards

5.1 Intent

These *Public Realm Standards* are designed to establish environments within Taft Corners that encourage and facilitate pedestrian and bicycle activity by creating streets and other parts of the public realm that are comfortable, efficient, safe, and interesting.

A. Although commonly thought of as just greens, squares or parks, the *public realm* includes the complete street-space—the space between the building façades: the sidewalks, street trees, squares, greens, and the automobile lanes.

B. The street-space is a community's first and foremost public space and should be just as carefully designed and planned as any green or civic building. The character of the street—both its scale and its details—plays a critical role in determining the quality of the place.

C. Streets within Taft Corners should not be thought of as "roads, highways, arterials, or collectors." They should be developed to create people-oriented places balancing all transportation modes. Most streets in Taft Corners should be designed primarily for walkability and pedestrian comfort.

D. The Public Realm Standards:

1. Establish an environment that encourages and facilitates pedestrian and bicycle activity and "walkable" streets that are comfortable, efficient, safe,and interesting.
2. Ensure the coherence of the street-space, serving to assist residents, building owners, and managers with understanding the relationship between the street-space and their own property.
3. Contribute to sustainability. Street trees and plants contribute to privacy, the reduction of noise and air pollution, shade, maintenance of the natural habitat, conservation of water, and storm-water management. Good street-spaces promote sustainable transportation options such as walking and bicycling.
4. Work in concert with the property frontages. Dooryards and facades are the walls of the street-space. They are regulated in *Section 3 Building Form Standards.*

E. The interior portion of the private property (toward the alley, rear lot or common lot lines) is less controlled and allows residents and operators to more freely utilize those spaces out of the public view; and allow residents to have private open space (semi-private for apartment and condominium dwellers), gardens and courtyards.

F. Components

The Public Realm Standards include the following sections:

1. *5.2 General Standards*
2. *5.3 Public Open Space*
3. *5.4 Street Trees*
4. *5.5 Street Specifications*

5.2 General Standards

The following standards regulate the street-space from the facade to the curb within Taft Corners.

A. Street Curb-To-Curb Standards

1. Must meet the standards in *Section 5.5 Street Specifications* below.
2. Must meet the Town Construction Standards, See the Williston Public Works Specifications.

B. Tree Lawn: the area between the clear sidewalk and the curb is used as the planting area for street trees. It may also be used, in more intense pedestrian situations, as a pedestrian area with seating and cafe tables. The tree lawn is regulated in *Section 5.4 below.*

C. Sidewalks: The developer is required to install sidewalks that meet all Town (and ADA) standards and specifications at the time of development. They shall provide a minimum clear sidewalk in accordance with *Section 5.5 Street Specifications* below.

D. Dooryards

1. All:
   a. Thorny plants shall not be planted along the clear sidewalk or entry walkways.
   b. Noxious weeds, as defined by the Vermont Agency of Agriculture, Farm, and Markets Noxious Weeds Amended Rule are prohibited.
   c. Any planting/vegetation may not block any fenestration nor extend over the clear sidewalk.
   d. Ground cover or grass must not exceed a height of 12”
   e. Shrubs or hedges (maximum height 40”) may be planted within the dooryard.
   f. Trees may be planted within the dooryard, but must be “limbed up” as they gain appropriate maturity so as to be minimum 7’ clear over the clear sidewalk.
   g. A hard-surfaced walkway(s) must be provided between the clear sidewalk and the building entry(s) in the facade.
2. Urban General and Storefront frontages: may be planted or hard-surfaced with pervious pavers.
3. Urban General 2 and Urban Neighborhood frontages: must be planted, at a minimum with grass, ground cover, or flowering vines.

Intent Illustration

The dooryard of a street of residences.

Intent Illustration

The dooryard of a retail street frontage.

E. Street Furniture

1. Street furniture is an element of the overall street-space design. Public street furnishings should be simple, functional, and durable. Placement will generally be within the tree lawn area. Any specific green or

SQUARE designs may specify different placement. All street furniture must meet these standards.

2. Street lighting:
   a. At the time of development, the developer is required to install streetlights per these standards and any adopted streetscape plan, on any frontage they are developing.
   b. Streetlights must:
      (ii) use the double-globed _______ luminaires on 16-18 foot _______ poles, for ST-86PCT and ST-2A streets and;
      (i) use the single-globed _______ luminaires on 12 -14 foot _______ poles, for ST-80, ST-74 , and ST-29 STREETS and;
      (ii) be coordinated with any adopted Streetscape Plan and the Department of Public Works and;
      (iii) be installed on both sides of the STREET-SPACE, except where otherwise specified. (See *Section 5. Public Realm Standards*) and;
      (iv) be aligned with the STREET TREES, and at least 10' from any STREET TREE.
3. ALLEY lighting: all lots with ALLEY access must have lighting fixtures illuminating the ALLEY, see *Section 4.K.3.*
4. Benches - Benches must have backs.
   a. Benches in Taft Corners shall be the Victor Stanley "Steelsites" model # RB-28 or equivalent, with a dark green finish.
   b. Benches located in the TREE LAWN, and oriented perpendicular to the street, maximum 4 feet in length. Benches located in the TREE LAWN but not perpendicular to the street may be longer so long as their length does not conflict with the placement of other streetscape elements or obstruct necessary pedestrian movement.
   c. Bench ratios provided below are be used to calculate only the number of required benches and may not necessarily determine the bench locations.
   d. Where present, the amount of frontage dedicated to transit stops, as determined by the Zoning Administrator, may be substracted from the frontage used to calculate the total number of required benches.
   e. For Shopfront frontages, at least one bench for every 75 feet of street frontage.
   f. For Urban General frontages, at least one bench for every 150 feet of street frontage.
   g. For Urban General 2 frontages, at least one bench for every 250 feet of street frontage.
   h. For Urban Neighborhood frontage sites, no benches are required.
5. Waste/Recycling Bins - The standard waste/recycling bin for Taft Corners is the Victor Stanley "Ironsites" model # SD-242 or equivalent, with a dark green finish. At a minimum, one waste bin shall be provided at each street intersection for Shopfront, Urban General, and Urban General 2 frontages, and one per every other intersection for Urban Neighborhood frontages.
6. Bicycle Racks - The approved bike rack for Taft Corners is any of the Victor Stanley "Cycle Sentry" series or equivalent, with a dark green finish. Bike Racks must be installed on both sides of the street within the TREE LAWN (not to interfere with the placement of STREET TREES or street lights). At the time of the development, the developer is responsible for the installation of bicycle racks on the side(s) of the street/in front of the frontage being developed.
7. Placement and model/type of all street furniture and fixtures, if different than these standards, will be reviewed by the PROJECT REVIEW COMMITTEE.

F. Mechanical and electrical equipment is prohibited within any STREET-SPACE[1] including the DOORYARD. This includes, but is not limited to, air compressors, pumps, exterior water heaters, water softeners, and private garbage cans. Public sidewalk waste bins and water pumps for public fountains or irrigation are not included in this prohibition. (Temporary placement of private garbage cans within the STREET-SPACE is allowed to accommodate scheduled pick-up.)[2]

1 *A Utility Co. box sitting out on the corner of an intersection is bad (blocks the STREET-SPACE and safety-wise blocks the view of drivers and pedestrians. There is plenty of room in the Block interior and/or these could be behind the RBL with a STREET WALL fence/gate).*

2 *all lots will have an ALLEY and this might go away - But should we retain it for "special pick ups (bulk item)?*

5.3 Public Open Space

Public Open Spaces such as SQUARES and GREENS are designated on the REGULATING PLAN.

A. Intent

Public open space is a key element of the quality of life within Taft Corners. Its trees and plants provide a landscape and civic architecture that complement the surrounding private building architecture. The SQUARES and GREENS will foster places for the social interaction, community gathering and family recreation of all age groups, all within a comfortable walking distance.

1. SQUARES are active pedestrian centers; GREENS are intended for less intensive foot traffic. Surface treatment is regulated accordingly.
2. Pervious paving materials (to allow oxygen for tree roots and absorb stormwater run-off) are encouraged, and the percentage of impervious paving material is limited. (See *B.3. Materials and Configurations.*)
3. These standards apply to those spaces that are designated on the REGULATING PLAN whether publicly owned or publicly accessible through an access easement.

B. General Standards

GREENS and SQUARES must be designed, planted and maintained according to the following requirements:

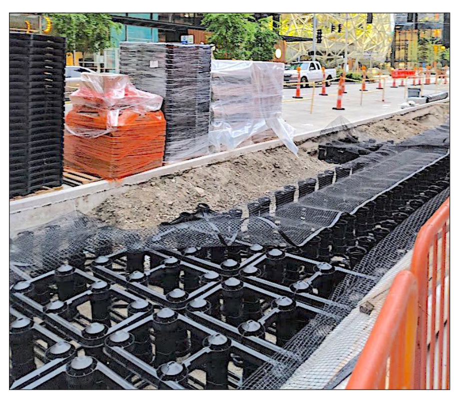
1. SQUARES and GREENS shall have at least 60 percent of their perimeter fronting public rights-of-way and they shall be surrounded by STREET TREES. Their dimensions shall be no narrower than a 1:5 ratio and no width or breadth dimension shall be less than 20'.
2. A clear view through the public open space (from 2' to 7' in height) is required, both for safety and urban design / placemaking purposes. The foliage of newly planted trees may intrude into this area until the tree has sufficient growth to allow such a clear trunk height.
3. Materials and Configurations
   a. The street frontages of SQUARES and GREENS within Taft Corners shall be configured consistently with the street or BLOCK which they are fronting in accordance with this section. However, the species of the trees surrounding a SQUARE or GREEN may be of a different species than the connecting streets.
   b. The ground elevation shall be between -18" and +24" of the top of any curb within 10 feet.
   c. The slope within any public SQUARE or GREEN shall not exceed ten percent (terraces are permitted where necessary for steeper sites).
   d. SQUARES and GREENS shall not include active / formal recreation structures such as ball fields, but may include playground equipment.
   e. Trees within a PUBLIC OPEN SPACE may be selected from outside the Street Tree List but must satisfy this section and be approved by the Town Arborist (see *5.G. Street Tree List* in this section).
   f. Asphalt is prohibited within a SQUARE or GREEN.

Intent Illustration

The continuous tree trench supports tree longevity and storm-water management.

C. Greens

GREENS should be designed with a low percentage of hard-surfaced area, appropriate to their less pedestrian-intensive character. Surface treatment and materials (within the area back-of-curb to back-of-curb area excluding any CIVIC USE building, public art or monument footprint) shall be a minimum 50 percent unpaved pervious surface area (such as turf, ground cover, soil or mulch).



Intent Illustration

Silva Cell technology is a Best Practice for STREET TREE infrastructure.

D. Squares

SQUARES incorporate a higher percentage of hard-surfaced area, appropriate to their more pedestrian-intensive character. Surface treatment and materials (within the back-of-curb to back-of-curb area, excluding any CIVIC BUILDING, public art or monument footprint) shall be between 20 percent and 40 percent unpaved pervious surface (turf, ground cover, soil or mulch).

E. Pedestrian Pathway

A PEDESTRIAN PATHWAY shall be a public access easement or right-of-way and generally open to the sky. Their width must be between 20 and 30 feet with a hard-surfaced walkway between 10 and 20 feet providing an unobstructed view through its entire length, except where otherwise specified on the REGULATING PLAN.

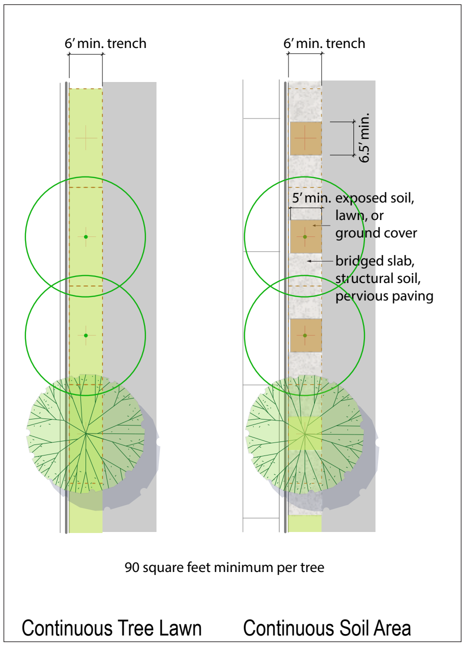


Diagram A. Connected Situation

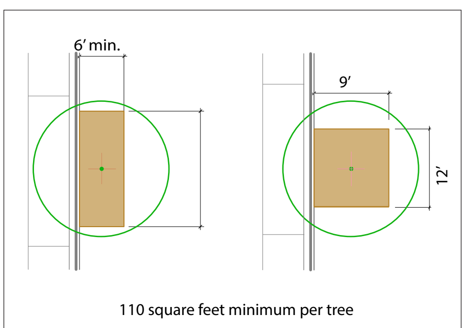


Diagram B. Isolated Tree Situation

5.4 Street Trees and Tree Lawns

STREET TREES are part of an overall STREET-SPACE plan designed to provide both canopy and shade and to give special character and coherence to each street.

A. Each STREET-SPACE must have STREET TREES planted generally in the centerline of the TREE LAWN or not less than 3'6" from the back of the curb, unless otherwise specified on the REGULATING PLAN, and at an average spacing not greater than 30' on center (average calculated per BLOCK FACE). Spacing allowances may be made to accommodate curb cuts and infrastructure elements; however, at no location may STREET TREE spacing exceed 45' on center except where necessary for ALLEYS, driveways, or transit stops.

B. Required STREET TREE planting area minimum specifications are as follows:

1. They shall be at or not greater than 6" above the sidewalk.
2. Soil surface area shall be no less than 110 square feet per isolated tree or 90 square feet per tree for connected (TREE LAWN) situations. (See *Diagrams A* and *B* at right).
3. No dimension of the soil surface area may be less than 6' unless otherwise specified in this ordinance.
4. A pervious paving strip, maximum 18" wide, may be placed at the back of the curb for access to on-street parking.
5. Neither the pervious paving strip per *4* above, nor a Town Arborist approved tree grate, will be measured against the minimum soil surface area in *2* and *3* above.

C. Street construction designs should incorporate continuous street tree trenches (connected soil areas). The requirements in *B,* above may be met through the use of Silva Cells, bridged slab, structural soil, or other techniques that clearly exceed these standards in the fostering of healthy and long-lived STREET TREES.

D. At planting, STREET TREES shall be at least 3½" caliper, measured 4 feet above grade and at least ten feet in overall height. Species shall be selected from the *G. Street Tree List*, below. Consult with the Zoning Administrator/Town Arborist for any designated tree species for a particular STREET-SPACE.

E. Any unpaved ground area shall be planted with ground cover, or flowering vegetation, not to exceed 8" in height unless approved by the Zoning Administrator as part of a streetscape plan. STREET TREES should be "limbed up" as they gain appropriate maturity so as to not interfere with pedestrian or truck travel (minimum 7' clear over the sidewalk and 14' over any travel lanes) and to maintain visibility.

F. Street Tree Specifications

1. Species in the Street Tree List are selected for their physical characteristics: size, habit of growth, and hardiness. The use of alternate species may be permitted, if approved by the Town Arborist.

2. The Street Tree list should be periodically reviewed and updated. These are appropriate species, but regional disease patterns change over time, and this list will need to evolve. Inclusion in this list shall be based on the following criteria:

   a. Structural – STREET TREES shape and subdivide the STREET-SPACE, increasing pedestrian comfort and adding value to the street and community. These are primarily "canopy shade tree" species that grow to heights in excess of 60' and have a broad canopy—enabling them to clear auto and pedestrian traffic, form a ceiling-like enclosure, and open a clear view of the STREET-SPACE, FAÇADES, and SHOPFRONTS.

   b. Survivability – Life as a typically planted street tree is nasty, brutish, and short. Few species are tough enough to thrive and grow. Appropriate species have special tolerance to salt and soil compaction. Proper STREET TREE planting techniques and configurations provide a healthy environment in which the tree can thrive—this will ensure that the trees increase their value to the community as they grow.

   c. Form and color – consistent[1] species planted along a given length of a STREET-SPACE will provide a distinct form, especially in Fall colors. This provides species diversity at the same time it provides specific street character by planting different STREET-SPACES with different trees. Species diversity is important, and a variety of appropriate STREET TREE species must be planted within Taft Corners, to provide a healthy overall bio-diversity.

4. Public Space Trees
   In addition to the above, trees recommended by Vermont Urban & Community Forestry and meet the Taft Corners standards may be placed within DOORYARDS, SQUARES or CIVIC GREENS.

5. Private Space Trees
   No trees, or other plant species that have been identified as invasive by the Vermont Agency of Agriculture, Farm, and Markets Noxious Weeds Amended Rule may be planted in any outdoor location within Taft Corners.

STREET TREE LIST
(Large Canopy Trees – mature height 60 feet and above)

Acer saccharum	Sugar Maple
Betula nigra	River Birch
Celtis occidentalis *	Common Hackberry *
Ginkgo biloba	Ginkgo (male only)
Gleditsia triacanthos var. inermis	Thornless Honey Locust
Liquidambar styraciflua "Rotundiloba'	Seedless Sweetgum
Liquidambar tulipifera	Tulip Tree
Nyssa Sylvatica	Black Tupelo
Platanus occidentalis 'Bloodgood'	London Plane tree
Quercus alba	White Oak
Quercus bicolor	Swamp White Oak
Quercus coccinea	Scarlet Oak
Quercus macrocarpa	Bur Oak
Quercus palustris	Pin Oak
Quercus phellos	Willow Oak
Quercus rubra	Red Oak
Quercus shumardii	Shumard Oak
Quercus velutina	Black Oak
Tilia Americana *	American Linden*
Tilia cordata 'Greenspire'	Greenspire Littleleaf Linden
Tilia euchlora	Crimean Linden
Tilia tomentosa	Silver Linden
Ulmus americana "libertas"	Liberty Elm
Ulmus americana	Princeton Elm

Intent Illustration *Street trees give a structure to the street, providing habitat, shade in the summer, color in the fall, and mitigate the architecture.*

1 *Plan B = "consistent genus" So that the tree-form is relatively consistent per/street.*

5.5 Street Specifications

A. Intent

1. These are presented both for new street construction and for the future reconfiguration of existing streets.
2. Streets within Taft Corners are designed to be an ideal complement to good transit service.
3. DOORYARDS and ALLEYS are generally reserved for utility easements.
4. These are Streets—not "roads, highways, arterials, or collectors"—and are designed as such to create people-oriented places balancing all transportation modes.

B. Street Type Specifications

These are the configurations for streets within Taft Corners. These include a "comparative pedestrian crossing time" as a measure of pedestrian comfort - measured by the time a pedestrian will be outside the curb and in the automobile area when crossing at the intersection. Detailed cross sections follow.

1. Street Specifications
   a. ST-36-80 and 38-80
   b. ST-36-74 and 38-74
   c. ST-38/86PCT
   d. ST-P2A
   e. ST-29
   f. Mid-Block Crossing and Emergency Vehicle Staging Area.
   g. Alley 18/24
2. The street prescriptions can be found on the Taft Corners Street Specifications Map. (See the Zoning Administrator.)

Principles for Street Design in Taft Corners:

The appropriate design of streets is one of the most important elements for a vital urban environment. The following are general and current state of the practice design principles as well as public preferences expressed during the public outreach for Taft Corners.

- Designing for continuous free-flowing traffic creates situations where vehicles will travel at speeds greater than desirable for pedestrians.
- With appropriate street designs, drivers self-select slower speeds and less aggressive behavior, a feat typically not achieved through basic speed limit changes or enforcement actions.
- An interconnected street network allows traffic capacity to be diffused and maintained across numerous streets, thereby lowering traffic volumes on each street.
- Differences between "requirements" and "preferences" can be significant—increased lane width and the accompanying increased vehicle speed more often than not decreases the overall safety for pedestrians.
- On-street parking slows passing vehicular traffic and acts as a buffer between moving vehicles and pedestrians.
- Overall function, comfort, safety and aesthetics of a street are more important than efficiency alone.
- In a Town Center, non-vehicular traffic should be provided with every practical advantage so long as considered safety of all users is achieved.
- Street design should take into consideration what is reasonably and regularly foreseeable, not every situation that is conceivably possible.
- Designing a street to facilitate (rather than accommodate) infrequent users will likely be the wrong design for the frequent users of the space.
- When the street design creates a conflict between the vehicular and non-vehicular user, it should be resolved in favor of the non-vehicular user.
- Emergency vehicle access is important. With an interconnected street network, there will always be at least two routes of access to any lot or parcel, which creates redundancy and more opportunities for multi-modal streets favoring non-motorists.

H. Intersection Configurations

1. At intersections the curbs extend the depth of the parking lanes, out to the travel lanes. Crosswalks are aligned as extensions of the sidewalks. This minimizes the pedestrian crossing distance and maximizes pedestrian comfort and visibility. (See *Diagram C* at right)
2. Curb Radii. Intersections involving any ST-2A and ST-86 Streets have a 30' curb radius. Intersections involving ST-80, ST-74, and ST-29 streets have a 20' curb radius. Street/ Alley intersections have a 15' curb radius.

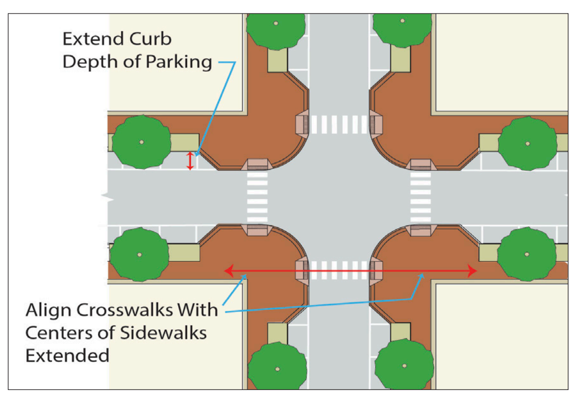


Diagram C. Intersection Crossings

5.5 ST-36/80 and 38/80

Intent, ST-80: This street will serve areas that are generally residential.

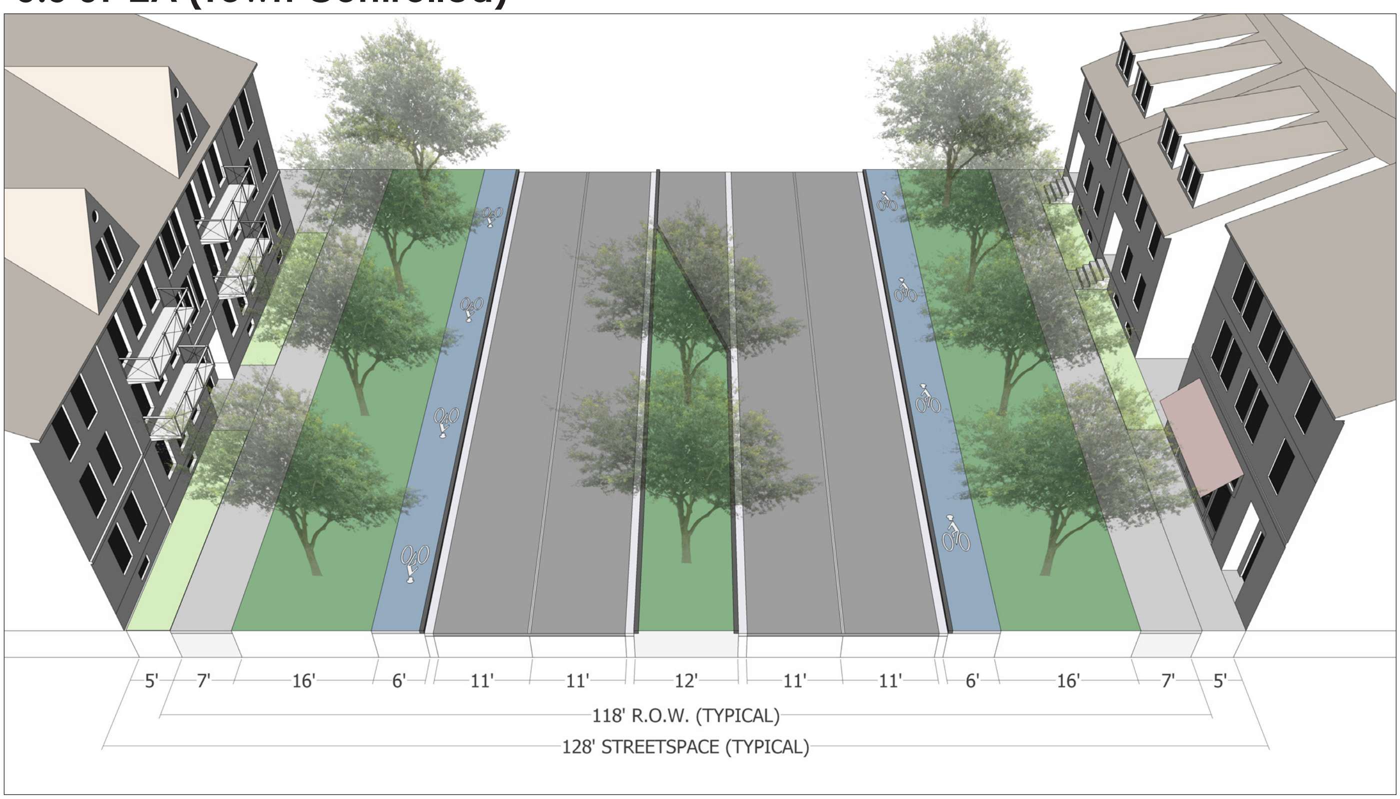
5.5 ST-36/74 and 38/74

Intent, ST-74: This street will serve areas that are mixed-use and residential (green dooryard). It is also the designated Shopfront retail street (with the dooryard and tree lawn areas paved).

5.5 ST-38/86PCT

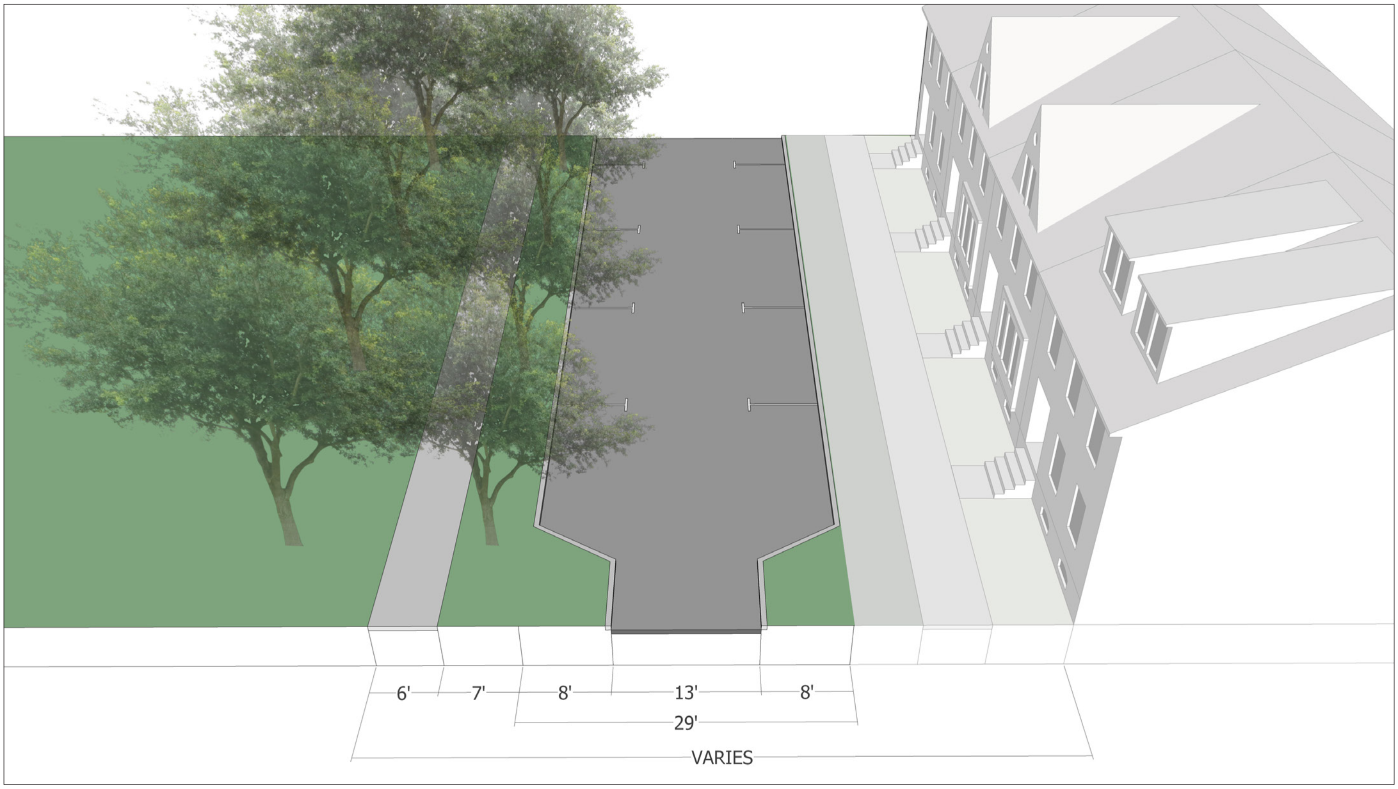
Intent, ST-86PCT: This street provides the main circulation framework for autos and bicycles in Taft Corners. It will serve areas that are mixed-use and residential.

5.5 ST-2A (Town Controlled)



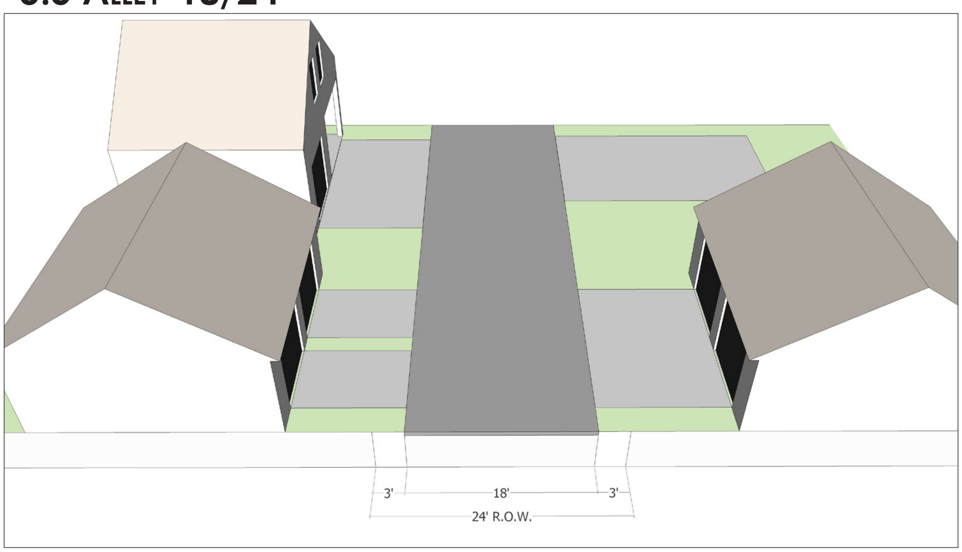
Intent, ST-2A (Town-controlled): This Boulevard will serve areas that are primarily mixed-use.

5.5 ST-29/P



Intent, *ST-29*: This street will serve areas that are generally residential.

5.5 Alley-18/24



Intent, Alley: This will serve all areas.

5.5 Mid-Block Crossing and EV Staging Area

Intent, Mid-Block Crossing and EV Staging Area: This will serve all areas.

5.5 Taft Corners Street Specification Metrics

	ST-36/80	ST-38/80	ST-36/74	ST-38/74	ST-38/86	ST-2A Town	ST-29/Var.	Alley
Target Speed	**20**-25	20-**25**	**20**-25	20-**25**	20-**25**	25	**15-20**	10-15
Family	Street	Street	Street	Street	Street	Street	Street	Alley
Travel	2-way	2-way	2-way	2-way	2-way	2-way	1-way	2-way
Travel Lanes	1 lane each direction	1 lane each direction	1 lane each direction	1 lane each direction	1 lane each direction	2 lanes each direction	1 lane	shared space
Lane Width	10'	11'	10'	11'	11'	11'	13'	18'
Allowable Turn Lanes	no	no	no	no	optional	yes	no	no
Parking Lanes	8' parallel both sides	8' parallel both sides	8' parallel both sides	8' parallel both sides	8' parallel both sides	no	8' parallel both sides	no
Curb - Curb Pavement Width	36'	38'	36'	38'	38'	24' + 24'	29'	18' no curbs
Curbs	yes, vertical	yes, vertical	yes, vertical	yes, vertical	yes, vertical	yes, vertical	yes, vertical	no
Median	no	no	no	no	no	yes, 12'	no	no
Bicycle Facilities	yes	yes	yes	yes	yes	yes	yes	no
Bike Lane	no	no	no	no	no	no	no	no
Cycletrack	yes	yes	no	no	yes	yes	no	no
Sharrows	no	no	yes	yes	no	no	yes	no
Pedestrian Facilities								shared space
CLEAR SIDEWALK	6'	6'	6'	6'	6'	7'	6' (varies)	n/a
TREE LAWN	9'	8'	8'	7'	7'	16'	7' (varies)	n/a
DOORYARD	7'	7'	5'	5'	5'	5'	n/a (varies)	n/a
Street Buffer	9'	9'	8'	7'	7'	16'	7' (varies)	n/a
Pedestrian Crossing Time	5.7 sec	6.3 sec	5.7 sec	6.3 sec	6.3 sec	6.9 sec + 6.9 sec	3.7 sec	n/a
Pedestrian Threshold Gap	94'	115'	94'	115'	115'	251'	158'	n/a

This page intentionally left blank.