

905.04 RIV, Riverfront

905.04.A. Purpose

The Allegheny, Monongahela, and Ohio Rivers and their riverfronts are valuable cultural and ecological resources of city-wide and regional significance that contribute to the public's environmental, recreational, and aesthetic well-being. The City intends to improve the ecological health of its rivers and riverfronts for the benefit of the public through regulation of development along its riverfronts. Regulation through the Riverfront (RIV) Zoning District will limit potentially detrimental impacts near the riverfronts while allowing for high-quality, sustainable development and preservation of the diverse character of the City's riverfronts. The RIV Riverfront Zoning District is intended to promote development of the City's riverfronts in a manner that:

- a. Acknowledges the historic diversity of uses, the varied character, and the economic value of the riverfronts;
- b. Facilitates mixed-use development that physically and functionally integrates with the riverfront and strengthens pedestrian connections to the riverfronts;
- c. Maintains and creates connections between the riverfronts and neighborhoods within the City;
- d. Protects areas of industrial use from encroachment of incompatible uses;
- e. Creates an environment that supports multiple modes of transportation;
- f. Promotes sustainable development;
- g. Improves of the ecological health of the rivers;
- h. Conserves and enhances riverbanks and riverfronts;
- i. Conserves, restores, and enhances native riverbank and aquatic plant life, improves river ecosystem health, and supports biodiversity; and
- j. Improves the scenic qualities and the public's enjoyment of riverfronts by preserving, creating, and enhancing public views and access to the riverfronts.

905.04.A.1. RIV Subdistricts

To respond to the variety of development forms along Pittsburgh's riverfronts, the RIV District is divided into five (5) subdistricts that relate to the function, scale, character and use of different areas along the rivers. The subdistricts are as follows and are indicated in the RIV District Subdistricts map:

- a. RIV-RM Mixed Residential Subdistrict

The RIV-RM Mixed Residential Subdistrict is intended for areas of higher density residential development.

b. RIV-MU Mixed-Use Subdistrict

The RIV-MU Mixed-Use Subdistrict is intended to foster a vibrant, connected mixed-use environment that may be designed either vertically within a single development or horizontally within a larger area.

c. RIV-NS North Shore Subdistrict

The RIV-NS North Shore Subdistrict is intended specifically to address the North Shore and its unique mix of large-scale sports, entertainment, and cultural uses. As a mixed-use district, high density residential development is also allowed.

d. RIV-GI General Industrial Subdistrict

The RIV-GI General Industrial Subdistrict is intended to address a variety of industrial uses. The district accommodates both general industrial uses, as well as heavier industrial uses that may produce external impacts such as smoke, noise, glare, or vibration. Outdoor storage and related outdoor activities may also be included in the operation of such uses. The subdistrict is structured to prevent encroachment of non-industrial uses, accommodate site design elements related to public safety, and maintain compatibility with surrounding uses.

e. RIV-IMU Industrial Mixed-Use Subdistrict

The RIV-IMU Industrial Mixed-Use Subdistrict is intended to address areas of the riverfront that are diversifying from their original, strictly industrial nature. It accommodates a variety of higher intensity uses, including light industrial, commercial, and high density residential development. The RIV-IMU Subdistrict is also intended for industrial areas that are focused on research and development and technology-oriented industries.

905.04.B. Definitions

The following definitions apply in the RIV District. Where this Code contains a defined term that conflicts with the definition of the term below, the definitions of this section control in the RIV District.

1. Build-To Zone - The area between the lot line and a specified depth, measured perpendicular from the lot line, where the frontage or façade of a structure must be

located. If a percentage is specified, it indicates the percentage of the building frontage or façade that must be located with the build-to zone.

2. Cool Roof - A roof that has been designed to reflect more sunlight and absorb less heat than a standard roof. Typical designs are roofs made of a highly reflective type of paint, a sheet covering, or highly reflective tiles or shingles. A green roof may also be considered a cool roof.
3. Green Roof - A building roof partially or completely covered with vegetation and a growing medium, planted over a waterproofing membrane. It may also include additional layers such as a root barrier and drainage and irrigation systems.
4. Project Pool Elevation – The hydraulically based reference plane that indicates water surface elevation in an area regulated by water control structures such as dams. For the purpose of 905.04, Pittsburgh’s Project Pool Elevation is measured as 710 feet on all three rivers.
5. Water-Dependent Facility or Use - A facility or use that by its nature is required to be on or adjacent to a river; without such adjacency the use could not exist. This includes facilities or uses in legal existence prior to the RIV District that were originally designed to utilize the rivers (such as concrete factories), but do not currently use river transport and generally maintain legacy infrastructure related to river use.
6. Water Enhanced Facility or Use - Recreation, entertainment, or restaurant facilities or uses that achieve greater value or beauty as a result of a location on or near a river.
7. Visual Access Corridor means the line of sight, identified as to width and distance of an observer looking toward an object of significance to the community from a public space. In the RIV District, the focus of the visual access is the riverfront.

905.04.C. Required Site Plan Review

- 905.04.C.1. The following development actions are subject Site Plan Review and approval per Section 922.04, unless such actions meet the thresholds of Section 905.04.C.2, which are subject to Project Development Plan review and approval:
- a. Any new construction or expansion of accessory structures or expansion of primary structures within 200 feet of the Project Pool Elevation.
 - b. All new construction of primary structures.
 - c. Any expansion or any exterior renovation to an existing primary structure.
 - d. All new construction of surface parking lots or parking structures.

e. The expansion of any existing surface parking lot.

905.04.C.2. The following development actions are subject to Project Development Plan review and approval by Planning Commission per Section 922.10.

a. All new construction of a primary structure located fully or partially within 200 feet of the Project Pool Elevation of the river, excluding necessary equipment for Manufacturing and Assembly or Basic Industry use.

b. All new construction of 15,000 square feet or more in gross floor area.

c. Any addition or expansion of 15,000 square feet or more in gross floor area or building footprint.

d. Commercial structured parking of 50 or more spaces.

905.04.C.3. Any single-family detached dwellings located within the RIV District are exempt from Site Plan Review, unless otherwise specifically required by the Zoning Code.

905.04.C.4. A transportation study is required for any development project subject to Site Plan Review or requiring a Project Development Plan when it is anticipated that such project may have substantial impacts on the City's comprehensive transportation network.

a. To determine whether a transportation study is required for such projects, a transportation scoping form must be prepared by a qualified transportation engineer. If required, the transportation study scope will be tailored to the site-specific elements of the proposed land development project and must conform to City guidelines.

b. The project applicant must submit a transportation management plan as a part of the transportation study. The transportation management plan must conform to City guidelines and will be reviewed and approved as part of the transportation study.

c. The transportation study shall meet the applicable Project Development Plan criteria of 911.10.E.2.

905.04.D. Uses

1. Primary uses shall be allowed in the RIV-RM, RIV-MU, RIV-NS, RIV-GI, and RIV-IMU Subdistricts in accordance with the Use Table of Sec. 911.02.

2. Lawful uses and structures existing in the RIV zoning district prior to the adoption of the RIV zoning district and zoning text may continue to lawfully exist pursuant to Chapter 921: Nonconformities.
3. Legal nonconforming Single-Unit Detached Residential uses and accessory structures located on the same Zoning Lot in the RIV zoning district may make improvements, alterations or expansion subject to all Zoning Code provisions applicable to Single-Unit Detached Residential uses in RID-H zoning districts.
4. Where a site has an Act 2 designation as part of the Pennsylvania Department of Environmental Protection's Land Recycling Program, any use permissions or restrictions that are part of such designation control over the related provisions and standards of the RIV District.

905.04.E. Dimensional Regulations

1. The following dimensional regulations apply in the RIV District. The regulations apply throughout the RIV District unless a regulation is specifically identified as applying only to a particular subdistrict.
2. Where a site has an Act 2 designation as part of the Pennsylvania Department of Environmental Protection's Land Recycling Program, any regulations or requirements that are part of such designation control over the related provisions and standards of the RIV District.

905.04.E.1. Height

- a. Base height in the RIV is 55 feet except where, in accordance with the adopted height map for the RIV, maximum height is indicated to be 45 feet.
- b. A minimum height of 24 feet is required for Primary Structures.
- c. The maximum height of a structure may exceed 55 feet, but shall not exceed the maximum height provided in the Height Map, provided the following conditions are met:

i. Height Bonus

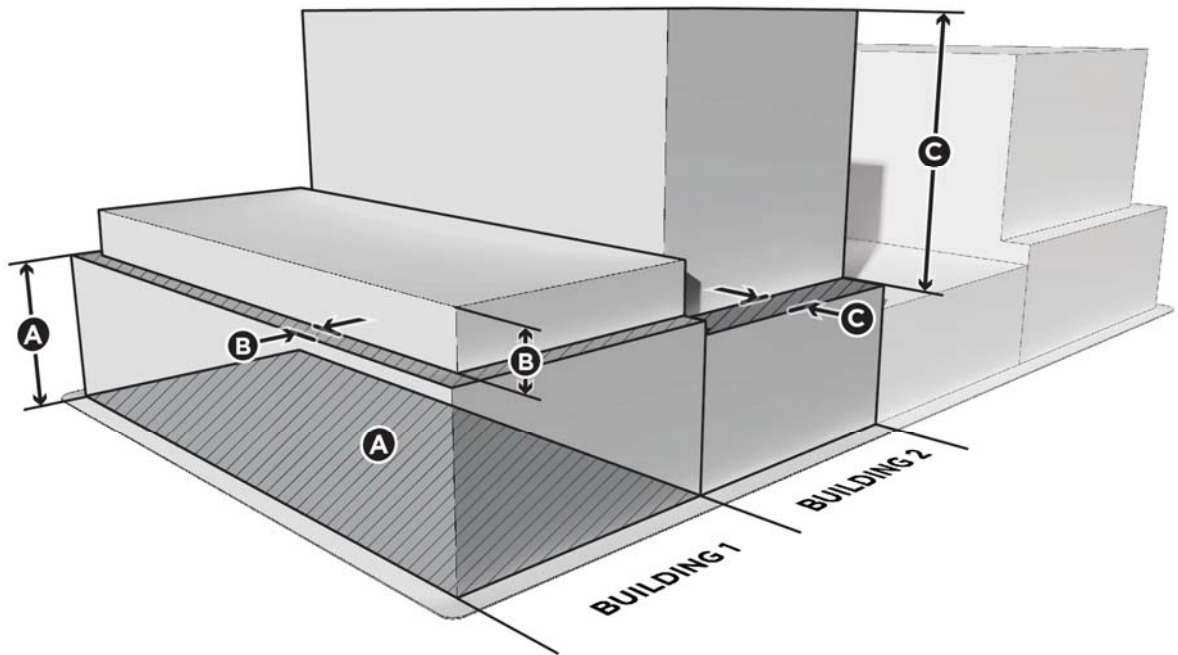
To exceed the height of 55 feet, a development must qualify for a height bonus as described in Section 905.04.K and 915.07.

ii. Height Design Standards

To exceed the height of 55 feet, as permitted in the Height Map, buildings must meet the following design standards:

- (1) Buildings over 65 feet in height are limited to a maximum building footprint of 40,000 square feet.
- (2) Where a building exceeds 65 feet in height, step backs are required as follows (see Figure 2):
 - (A) A minimum front and street-side step-back of ten feet is required for structures of 65 feet in height or greater.
 - (B) Structures in excess of 85 feet in height shall meet one of the following standards beginning no higher than 85 feet:
 - (i) An additional ten (10) foot step-back, in addition to the ten (10) foot step back required at 65 feet.
 - (ii) The portion of the structure that exceeds 85 feet in height must be no more than 80% of the building footprint. The required 10 foot step-back at 65 feet shall be maintained.
 - (C) A minimum step-back of ten (10) feet along the façade parallel to the river, beginning no higher than 65 feet, is required for all buildings located within 125 feet of the Project Pool Elevation.
 - (D) Any required building step-back may begin at a lower height but at a minimum must occur at the portion of a building exceeding 65 feet or six stories, whichever occurs first.
- (3) For structures that exceed 65 feet in height, applicants must submit a shadow study demonstrating the effects of the proposed structure to the Zoning Administrator. Pre- and post-development shadows must be included in the shadow study. The study must depict, at a minimum, mid-morning and mid-afternoon shadows cast on the following dates: March 21, June 21, September 22, and December 21, corresponding to the first day of each season.
- d. If federal or state regulations that preempt this Code require a height that exceeds 55 feet for any structure, such height is permitted to the extent the preempting law requires even if it exceeds the maximum height limitations of Figure 2. In such case, compliance with the bonus provisions of Section 905.04.K is not required for the additional required height. Structures accessory to Basic Industry and Manufacturing and Assembly uses that exceed 55 feet in height and require additional height to function as an essential part of the use are also exempt.

FIGURE 2: BUILDING HEIGHT AND UPPER-STORY STEPBACKS



- A** Buildings over 65 feet in height are limited to a maximum building footprint of 40,000 square feet.
- B** Structures measuring 65 to 85 feet in height are required to provide a minimum front and street-side step back of ten feet at the portion of the building exceeding 65 feet or six stories, whichever occurs first.
- C** Buildings in excess of 85 feet in height are required to provide a minimum front and street-side step back of 20 feet at the portion of the building exceeding 65 feet or six stories, whichever occurs first.

905.04.E.3. Structure Placement

- a. Riparian Buffer Zone. Riparian Buffer Zones are vital elements of riverfronts, and they create and provide protection of surface and ground water quality, water resources, and complex ecosystems that provide food and habitat for unique plant and animal species. Riparian Buffer Zones are essential to the mitigation and control of nonpoint source pollution.
- i. No development is permitted within 125 feet of the Project Pool Elevation of the river. The riparian buffer zone may be reduced to no less than 95 feet if it complies with the bonus provisions in Section 905.04.K. (See Figure 3.)
- ii. The following are exempt from the riparian buffer zone requirement:

(1) Water-Dependent Facilities or Uses.

(2) Water-Enhanced Facilities or Uses.

(3) Accessory uses that are open space amenities such as unstaffed bike rental stations, unstaffed bike repair stands, kayak launches, and fishing areas.

iii. Within the required riparian buffer zone, landscaping must consist primarily of species that are native or naturalized to the region. Landscape should incorporate species from the Pennsylvania Department of Conservation and Natural Resources' (DCNR's) Native Wild Plant Species Accounts. Grading, filling, excavation, clear cutting, and removal of vegetative cover are prohibited within the riparian buffer zone, except in the following instances, and only to the extent the Zoning Administrator determines to be necessary:

(1) To remove noxious or invasive vegetation.

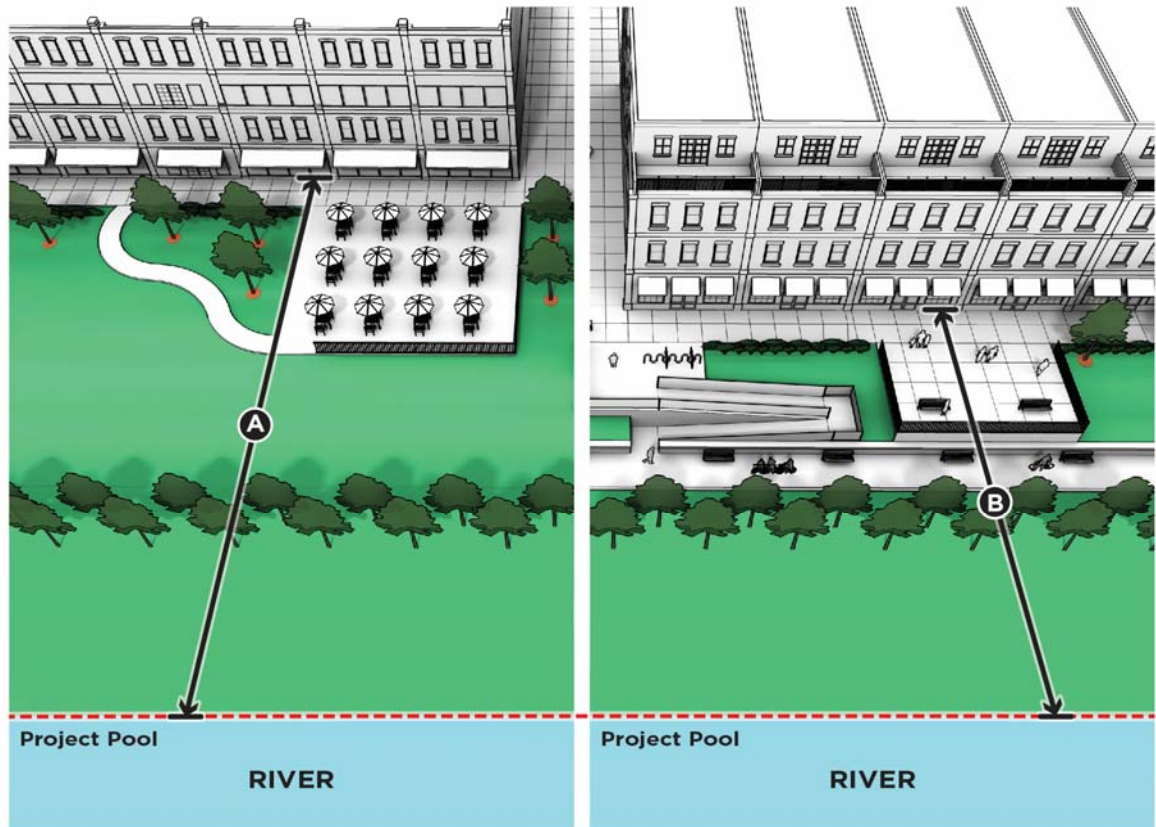
(2) To implement green infrastructure or stormwater best management practices (BMPs).

(3) To facilitate a Water-Dependent or Water-Enhanced Facilities or Uses, including riverfront trails.

(4) To implement erosion and flood control measures.

(5) To undertake activities related to riverbank restoration and stabilization.

FIGURE 3: RIPARIAN BUFFER ZONE



A Non-exempt structures must be set back 125 feet from the project pool of the river.

B The riparian buffer zone may be reduced to no less than 95 feet for a structure if it provides one or more bonus actions.

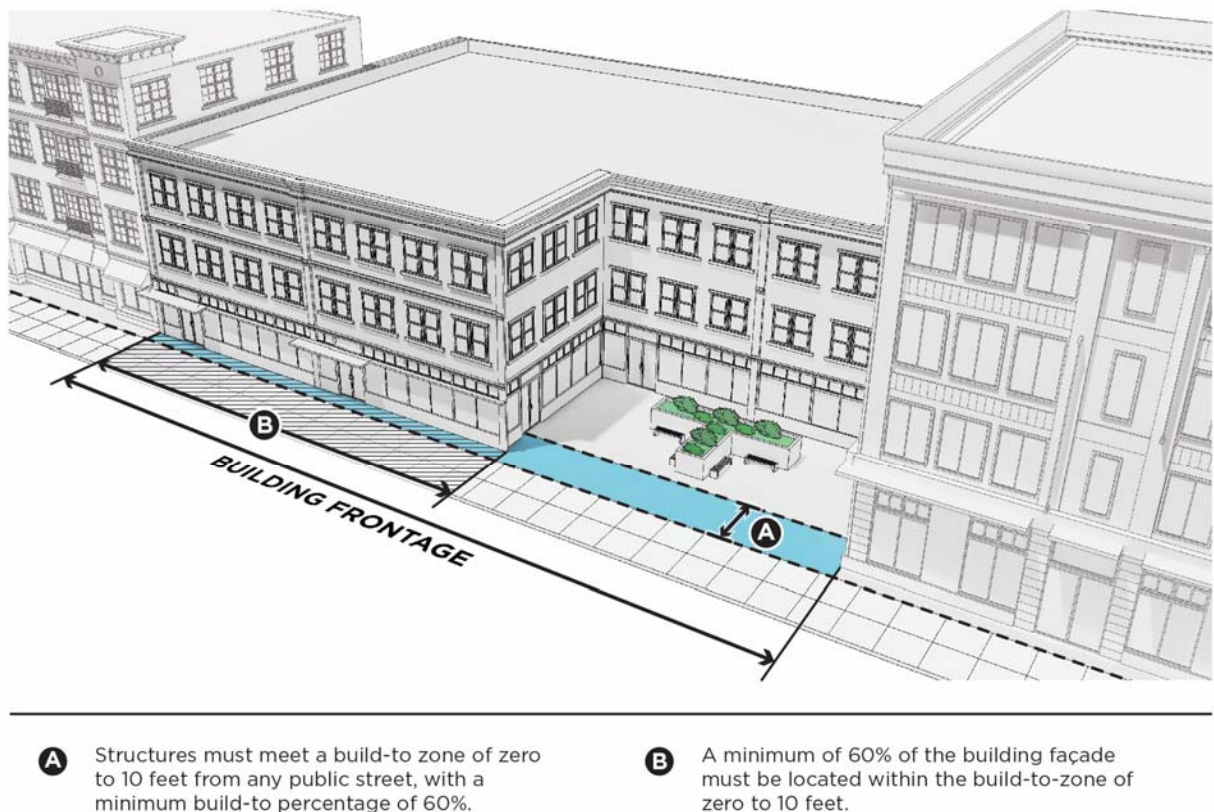
b. Street Build-To Zone and Pedestrian Sidewalks

- i. When abutting a public street, a build-to zone is imposed between zero and ten (10) feet inward from the property line (See Figure 4).
- ii. When abutting a Street, a minimum of 60% of the building frontage or façade must be located in the Build-To Zone.
- iii. Continuous pedestrian sidewalks at least ten (10) feet wide shall be provided along the facades or frontages of the side of a building abutting a Street, inclusive of obstructions including street furniture, tree pits, and Green Infrastructure. A clear path exclusive of obstructions of at least five (5) feet shall be provided. If the sidewalk does not have ten (10) feet of width available in the public right of way as determined by

the City, the additional width must be provided on the development parcel.

- iv. The Build-To Zone requirements of Section 905.04.E.b.ii-iii and the pedestrian sidewalk requirements of Section 905.04.E.3.b.iii shall be applied concurrently. If a sidewalk ten (10) feet wide is placed entirely on a development parcel, the Build-To Zone shall begin at ten (10) feet from the lot line.

FIGURE 4: STREET BUILD-TO ZONE



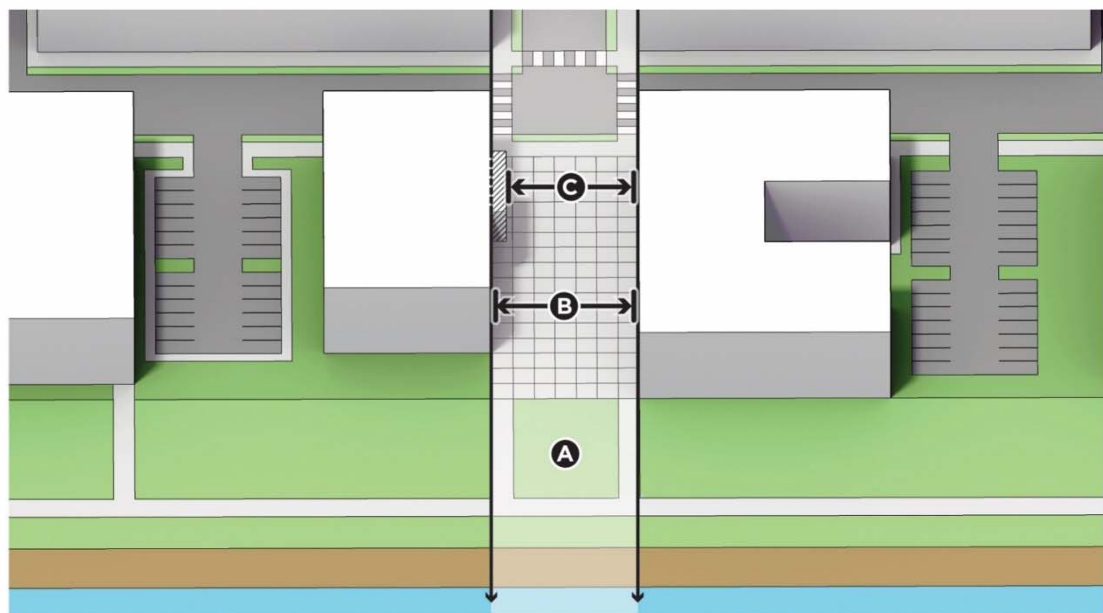
c. Rear Setback

- i. The rear setback for Single-Unit Attached Residential, two-unit residential, and three-unit residential structures is five (5) feet. This may be reduced to two (2) feet when the rear yard abuts a way.
- ii. No rear setback required for other uses.

d. Visual Access along Street Corridors

- i. No structure may block the Corridor between the riverfront and any public street perpendicular to the riverfront that:
 - (1) Extends to the riverfront.
 - (2) Terminates before reaching the riverfront but is within the RIV District.
- ii. Corridors must be at least the same width as the public right-of-way and must continue to the riverfront as a straight-line extension of the Street.
- iii. Primary Structures may set back farther from the visual access area. The encroachment of a structure into any Corridor is limited to no more than 10% of the width of the Corridor (See Figure 5).
- iv. Requirements for visual access along street Corridors shall apply to all new structures and uses regardless of existing structures and uses located within the Corridors. No Accessory Structures may be located in the Corridor.
- v. Building passages cannot be used to meet the requirement of this Section.

FIGURE 5: VISUAL ACCESS CORRIDORS



A Structures may not block the view of the riverfront from any public street that extends to the riverfront or terminates prior to reaching the riverfront.

B Corridors must be the same width as the public right-of-way and continue to the riverfront.

C A building may project into the view corridor no more than 10% of the corridor's width.

905.04.E.4. Building Length

Building length is limited to a maximum of 500 feet. Where a zoning lot has a building at a length of 500 feet, any new buildings or building addition on the same zoning lot shall be separated by at least 30 feet.

905.04.F. Stormwater Management

Stormwater standards (Chapter 1003) shall apply to all Project Development Plans and Site Plan Review with Regulated Activities equal to or greater than 5,000 square feet in area. Small Project Stormwater Standards of Section 915.03 shall apply to all new construction and building additions that include a land disturbance greater than 500 square feet but less than 5,000 square feet in area.

905.04.G. Design Standards

905.04.G.1. Alternative Design Standard Compliance

The Zoning Administrator may approve alternative design standard compliance as an Administrator Exception, in accordance with Section 922.08, where the alternative design is determined to achieve the purpose of the RIV District equally or more so than through strict adherence to the standards.

905.04.G.2. Design Standards for Residential Uses in the RIV District

Single-Unit Attached Residential, Two-Unit Residential, Three-Unit Residential and Multi-Unit Residential uses must meet the following requirements:

- a. Façades must be designed with consistent building materials and treatments that wrap around all façades. There must be a unifying architectural theme for the entire development, using a common vocabulary of architectural forms, elements, materials, and/or colors.
- b. Façades of structures containing Multi-Unit Residential uses abutting a street or abutting the riverfront must be articulated through the use of architectural elements to break up blank walls, add visual interest, and present a residential character. Two or more of the following forms of building articulation must be incorporated into the design of structures containing Multi-Unit Residential uses (see Figure 6):
 - i. For facades over 50 feet in length, modulation of the façade through the use of features such as projections or indentations. Such building modulations must either be projected or be set back a minimum of two (2) feet in depth, and must be a minimum of four (4) feet in width. There may be no more than 50 feet between such modulations.

- ii. Architectural elements such as balconies, bay windows, patios, porches, or terraces. There may be no more than 50 feet between such elements.
 - iii. Changes in color, texture, or material. Changes should occur at inside corners to convey solidity and permanence, and should not occur on a flat wall plane or an outside edge. There may be no more than 50 feet between such changes.
 - iv. Lighting fixtures or other building ornamentation such as artwork, trellises, or green walls. There may be no more than 50 feet between such fixtures or elements of ornamentation.
 - c. Public entrances on any façade must be designed as visually distinct elements of the façade.
 - d. Where private open space for residents is maintained along the riverfront façade, only 40% of the total of such area may consist of impervious surface. Any fencing that delineates the private open space from public space must be open fencing of at least 60% open design with a maximum height of six and one half (6.5) feet. Shadowbox fencing is prohibited.
 - e. Single-Unit Attached Residential uses are subject to the following curb cut standards:
 - i. Garages and parking spaces must be accessed from the rear yard if rear yard access is available. Corner lots, with or without rear access, may alternatively access garages and parking spaces from the exterior side yard.
 - ii In cases where front-loaded garage design is the remaining option, shared driveways with one curb cut are encouraged.

FIGURE 6: DESIGN STANDARDS FOR MULTI-UNIT RESIDENTIAL



A Façades must be designed with consistent building materials and a unifying architectural theme.

B Building façades must be articulated using architectural elements occurring at intervals no greater than 50 linear feet.

905.04.G.3. Design Standards for Nonresidential Uses

The RIV District Design Standards Table sets forth the required designs standards in RIV Subdistricts RIV-MU, RIV-NS, RIV-GI, and RIV-IMU. The Design Standards table does not apply to Residential uses in any subdistrict, or necessary equipment and industrial structures for that functions as an essential part of Manufacturing and Assembly or Basic Industry uses. For non-residential uses within the RIV-RM Subdistrict, RIV-MU Standards apply. An X indicates that a standard is required in the corresponding subdistrict. (See Figure 7.)

<u>RIV District Design Standards</u>					
		<u>RIV-MU</u>	<u>RIV-NS</u>	<u>RIV-GI</u>	<u>RIV-IMU</u>
	<u>Facade Design</u>				
<u>1</u>	<u>The ground floor of a multi-story building must be a minimum of 15 feet in height measured floor to floor, to promote mixed-use and accommodate a variety of ground-floor uses.</u>	<u>X</u>	<u>X</u>		<u>X</u>
<u>2</u>	<u>No facade adjacent to a street or a riverfront can contain a non-articulated condition greater than 50 linear feet in length. Building wall articulation must be achieved through changes in the façade depth no less than six inches.</u>	<u>X</u>	<u>X</u>		<u>X</u>

	<u>RIV District Design Standards</u>				
		<u>RIV- MU</u>	<u>RIV- NS</u>	<u>RIV- GI</u>	<u>RIV- IMU</u>
<u>3</u>	<u>Façades must be designed with consistent building materials and treatments that wrap around all façades. A unifying architectural theme must be used for the entire development, using a common vocabulary of architectural forms, elements, materials, and/or colors.</u>	<u>X</u>	<u>X</u>		<u>X</u>
	<u>Building Entry</u>				
<u>4</u>	<u>All buildings must maintain a public entrance from the sidewalk along the primary street frontage.</u>	<u>X</u>	<u>X</u>		<u>X</u>
<u>5</u>	<u>Public entrances on any façade must be designed as visually distinct elements of the facade.</u>	<u>X</u>	<u>X</u>		<u>X</u>
	<u>Fenestration Design</u>				
<u>6</u>	<u>The ground floor of a street facing façade must maintain a transparency of 50%, measured as a percentage of the ground floor façade floor to floor height.</u>	<u>X</u>	<u>X</u>		<u>X</u>
<u>7</u>	<u>The ground floor of a riverfront façade, must maintain a minimum transparency of 50%, measured as a percentage of the ground floor façade floor to floor height.</u>	<u>X</u>	<u>X</u>		<u>X</u>
<u>8</u>	<u>Upper floors of a riverfront façade must maintain a transparency of 25% of the wall area of each story.</u>	<u>X</u>	<u>X</u>		
	<u>Roof Design</u>				
<u>9</u>	<u>Any roof that is visible from a public right-of-way must be 30-year architectural shingle or colored standing seam metal roofing.</u>	<u>X</u>	<u>X</u>		<u>X</u>
<u>10</u>	<u>Cool Roofs are required for new construction and for roof replacement on existing buildings. Solar Reflective Index values of cool roofs must be consistent with Energy Star Roof Products Key Product Criteria.</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>11</u>	<u>Reflective roof surfaces that produce glare are prohibited, except for solar panels or cool roofs intended to radiate absorbed or non-reflected solar energy and reduce heat transfer to the building.</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
	<u>Site Design</u>				
<u>12</u>	<u>Curb cuts, including access to surface parking lots and structures, should be minimized along perpendicular connections to the riverfront.</u>	<u>X</u>			<u>X</u>
<u>13</u>	<u>Impervious surfaces of plazas or open spaces along riverfronts shall not exceed 40%.</u>	<u>X</u>	<u>X</u>		<u>X</u>

	<u>RIV District Design Standards</u>				
		<u>RIV- MU</u>	<u>RIV- NS</u>	<u>RIV- GI</u>	<u>RIV- IMU</u>
<u>14</u>	<u>Security elements, such as bollards, and site amenities, like bike racks, should be coordinated with the architectural theme of the building and/or the surrounding landscape and hardscape design.</u>	<u>X</u>	<u>X</u>		<u>X</u>
<u>15</u>	<u>No curb cuts should be permitted along primary streets when access to a lot is otherwise available via a secondary street or a way.</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

905.04.G.4. Building Material

Durable, high quality building materials are required.

a. The following building materials are prohibited on any façade.

- i. Plain concrete block, restriction does not apply in the RIV-GI Subdistrict or to Basic Industry and Assembly and Manufacturing where not visible from the public realm including rivers.
- ii. Exposed aggregate (rough finish) concrete wall panels
- iii. Exterior insulating finish systems (EIFS)
- iv. T-111 composite plywood siding
- v. Vinyl, excluding cellular vinyl trim; this does not apply to single-family attached dwellings
- vi. Fiber cement and composite panels on the ground floor; this does not apply to single-family attached dwellings
- vii. Reflective (mirror finish) glass

b. The following building materials are may be used only as decorative or detail elements for up to 25% of the façade, measured as the total of the whole facade.

- i. Corrugated metal
- ii. Cellular vinyl trim when used for single-family attached and multi-family.

FIGURE 7: DESIGN STANDARDS FOR DEVELOPMENTS IN THE RIV DISTRICT



- A** The ground floor of a multi-story building must be at least 15 feet in height.
- B** Façades abutting a street or the riverfront cannot have blank wall areas that exceed 50 linear feet.
- C** Buildings must feature a public entrance from the sidewalk along the primary street frontage. All public entrances must be visually distinctive.
- D** Total impervious surface area for plazas or open spaces along riverfronts is limited to 60%.



- A** Developments must have a unifying architectural theme and use consistent building materials throughout.
- B** Multi-building complexes must be designed using unifying visual links between buildings.
- C** Developments should provide pedestrian links to adjacent commercial uses.
- D** Security elements and site amenities like bollards and bike racks should be coordinated with the architectural theme of the building and/or the surrounding landscape design.

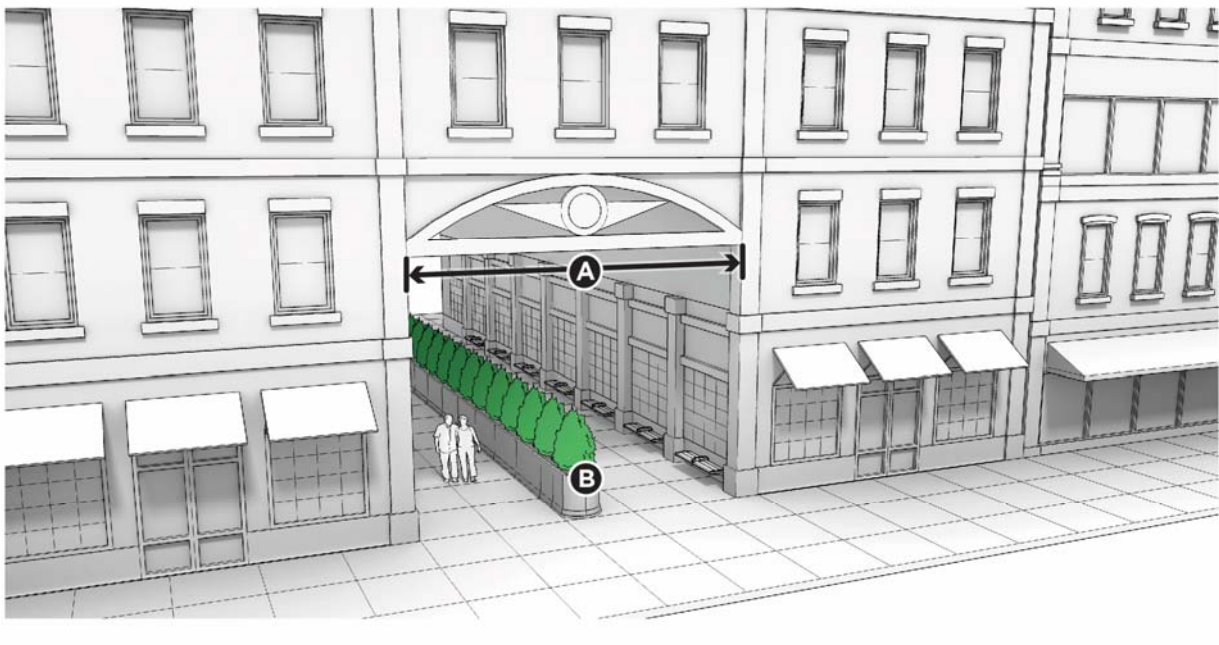
905.04.G.5. Building Passages

Building passages provide a break in the ground floor façade from a public street and may include stories above the ground floor are encouraged. Building passages may be public, allowing public access to the riverfront, or private. (See Figure 8.)

a. General Requirements

- i. Building passages must be a minimum of 15 feet in width. A width of 30 feet or greater is preferred.
- ii. To provide a visual connection from the street to the riverfront, passages must be designed to maintain views from one end through to the other. Such views must not be obstructed by lighting or other features.
- iii. Inclusion of decorative elements or public art within passages is encouraged.
- iv. For the purposes of calculating a build-to line, build-to zone, and/or build-to percentage, a building passage is considered part of the building façade that meets such requirements.

FIGURE 8: GENERAL REQUIREMENTS FOR BUILDING PASSAGES



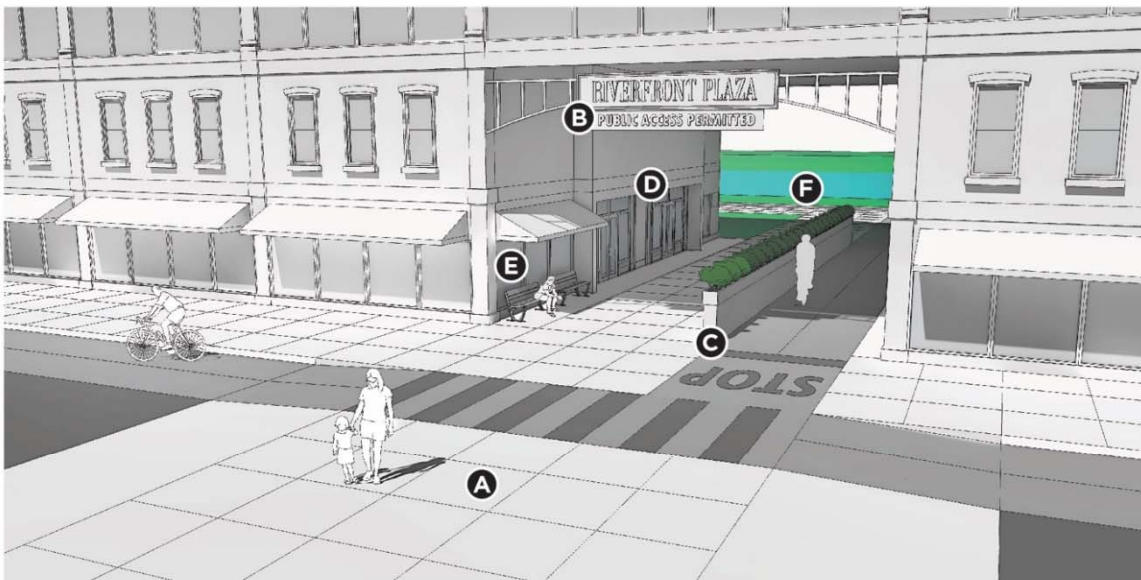
A Building passages must be at least 15 feet in width but a width of 30 feet or greater is preferred.

B Including decorative elements or public art within passages is encouraged.

b. Public Building Passages

- i. To the extent possible, building passages should align with the street grid or other points of access to public open space along the riverfront where feasible.
- ii. Signs that indicate public access are required.
- iii. In nonresidential and mixed-use buildings, ground floor uses must be oriented toward the passage, including public entrances where feasible.
- iv. Ground floor façades facing into public building passages in nonresidential and mixed-use buildings must maintain a minimum transparency of 35% of the wall area of the passage.
- v. Where providing a connection directly to the riverfront, passages must be designed to maintain views from one end through to the other. Such views must not be obstructed by lighting or other features.

FIGURE 9: PUBLIC BUILDING PASSAGES



- | | |
|--|---|
| A Building passages should align with public open space access points and pedestrian crosswalks to the extent possible. | D In nonresidential and mixed-use buildings, ground floor uses and entrances must be oriented toward the building passage. |
| B Signs indicating public access are required. | E Ground floor façades facing into passages in nonresidential and mixed-use buildings must have a minimum transparency of 35%. |
| C Public access allowing both pedestrians and bicyclists must be delineated through distinct markings. | F Passages providing a direct connection to the riverfront may not be obstructed by building or accessory features. |

c. Private Building Passages

- i. Private building passages may be closed off to the public with gates and/or fencing but must be of open design to allow the public a clear view through the passage.
- ii. Private passages should be designed with elements to be used by site users, such as seating areas.
- iii. Ground floor façades facing into private building passages in nonresidential and mixed-use buildings must maintain a minimum transparency of 25% of the wall area of the passage.

FIGURE 10: PRIVATE BUILDING PASSAGES



- A** Non-retractable or permanently closed security gates may not be used to close off private passages.
- B** Private passages should include elements serving the site user, such as seating.

- C** Passages providing a visual connection from the street to the riverfront must be designed to maintain views from one end through to the other.

905.04.H. Accessory Structures and Encroachments

In addition to the requirements of the Zoning Code, the following apply to the RIV District. In the case of conflict with other provisions of the Code, these provisions control in the RIV District.

905.04.H.1. Fences

a. Fences and walls in the RIV District, except in the RIV-GI subdistrict, are permitted as follows:

- i. Fences and walls in the Build-To Zones are permitted to a maximum four (4) feet in height and open design.
- ii. Fences and walls in the rear and interior side yard are permitted to a maximum height of six and one half (6.5) feet and may be opaque, except when adjacent to the riverfront.
- iii. Fences adjacent to the riverfront are permitted to a maximum height of six and one half (6.5) feet and with a minimum of 60% opacity.
- iv. Security fencing that is required by federal or state regulations may exceed height and/or opacity maximums.
- v. Walls greater than 40 feet in length must incorporate some sort of visual relief, including, but not limited to, pattern breaks, varying wall construction, vertical features such as columns, differing construction materials, or a combination of the above.

b. Fences and walls in the RIV-GI Subdistrict are permitted as follows:

- i. Fences and walls are permitted to a maximum height of eight (8) feet and may be opaque.
- ii. Security fencing that is required by federal or state regulations may exceed height and/or opacity maximums.
- iii. Walls greater than 40 feet in length must incorporate some sort of visual relief, including, but not limited to, pattern breaks, varying wall construction, vertical features such as columns, differing construction materials, or a combination of the above.

c. The following materials are prohibited in the construction of fences and walls:

- i. Scrap metal

- ii. Corrugated metal
- iii. Sheet metal
- iv. Pallets
- v. Electrical fences
- vi. Razor or barbed wire, unless required by state or federal regulations. Where permitted, it must be located at least eight (8) feet above the ground.
- vii. Chain link, including chain link with slats. Chain link without slats is permitted in heavy industrial or utility uses within the RIV District.

905.04.H.2. Mechanical Equipment

The following standards apply to mechanical equipment in all subdistricts except the RIV-GI Subdistrict. Mechanical equipment includes heating, ventilation, and air conditioning (HVAC) equipment, electrical generators, and similar equipment. These standards do not apply to wind turbines and solar panels.

a. Ground-Mounted Equipment

Mechanical equipment must be located to the side or rear of the structure. Any mechanical equipment visible from the public realm, including rivers, must be screened from view by a decorative wall or solid fence that is compatible with the architecture of the building and/or landscaping. The wall or fence must be of a height equal to or greater than the height of the mechanical equipment being screened.

b. Roof-Mounted Equipment

Roof mounted equipment visible from the proximal public realm must be screened.

c. Wall-Mounted Equipment

- i. Wall-mounted mechanical equipment is not permitted on any façade abutting a primary street frontage.
- ii. Wall-mounted mechanical equipment on a riverfront or secondary street-fronting façade that protrudes more than 12 inches from the outer building wall must be screened from view by structural features that are compatible with the architecture of the subject building. This does not apply to window-mounted air conditioners.

905.04.H.3. Flat Roof Features

- i. Accessory rooftop features of a flat roof, including green roofs, rooftop decks, rooftop gardens, and stormwater management systems are permitted below the parapet of any flat roof building.
- ii. Accessory rooftop features of a flat roof, including green roofs, rooftop decks, rooftop gardens, and stormwater management systems are excluded from the calculation of maximum building height.

905.04.H.4. Wind Turbines

- a. Wind turbines may be designed as either vertical or horizontal axis turbines, with or without exposed blades, including designs that combine elements of the different types of turbines.
- b. Wind turbines are subject to the following height restrictions:
 - i. Maximum height is the total height of the turbine system, including the tower and the maximum vertical height of the turbine blades. Maximum height therefore is calculated measuring the length of a prop at maximum vertical rotation to the base of the tower. The maximum height of any ground-mounted wind turbine is measured from grade to the length of a prop at maximum vertical rotation.
 - ii. No portion of exposed turbine blades may be within 20 feet of the ground. Unexposed turbine blades may be within ten feet of the ground.
 - iii. The maximum height of a ground-mounted wind turbine is 55 feet.
 - iv. The maximum height of a roof-mounted wind turbine is 15 feet where the building structure is less than 60 feet high, and 25 feet where the building structure is 60 feet high or greater.
- c. Ground-mounted wind turbines are permitted only in the rear yard. No part of the wind system structure, including guy wire anchors, may be located closer than ten (10) feet to any lot line.
- d. Ground-mounted wind turbines must be set back a distance equal to the height of the turbine from any primary structures on the lot and adjacent lots, as measured at the nearest external wall or walls.
- e. All wind turbines must be equipped with manual (electronic or mechanical) and automatic over speed controls to limit the blade rotation speed to within the design limits of the wind energy system.

905.04.I. Parking

In addition to the Parking, Loading and Access requirements of Chapter 914, the following limitations on parking shall apply. In the case of conflict with other provisions of the Code, these provisions control in the RIV District.

905.04.I.1. Required Parking

- a. The minimum parking required in the RIV District is 50% of the minimum parking required in Schedule A of Section 914.02.A, unless otherwise provided.
- b. The maximum parking limitation is the minimum parking required listed in Schedule A of Section 914.02.A.
- c. Uses requiring parking demand analysis shall provide parking in accordance with 914.02.E without modification.
- d. Reduction to required parking minimums may be available by contributing to a mobility improvement trust.

905.04.I.2. Surface Parking Lot Restriction

- a. No surface parking shall exceed 75 parking spaces on a single Zoning Lot or group of lots under common ownership.
- b. Any surface parking lot located between a building and the riverfront, including across a street, shall have a maximum of 15 parking spaces.

905.04.J. Landscape and Green Infrastructure

In addition to the Landscaping and Screening Standards of Chapter 918, the following landscape requirements shall apply. In the case of conflict with other provisions of the Code, these provisions control in the RIV District.

905.04.J.1. Site Landscape

- a. Areas of a development that are not covered by structures or impervious surface must be planted and maintained with live landscaping that contributes to the biodiversity of the three rivers, enhancing the wildlife habitat and native plant communities of the Western Pennsylvania region. Such landscaping must consist primarily of species that are native or naturalized to the region. Landscape should incorporate species from the Pennsylvania Department of Conservation and Natural Resources' (DCNR's) Native Wild Plant Species Accounts.
- b. All plant species listed on the Pennsylvania Department of Conservation and Natural Resources (DCNR) Invasive Plants List are prohibited.

- c. River rock, mulch and other permeable landscape material may be exposed for a maximum of 30% of the total landscape area. These materials cannot be used on slopes of 33% or greater.

905.04.J.2. Screening Buffers in the RIV-GI Subdistrict

This section establishes standards for the dimension and required landscape for buffer yards between land uses and/or zoning districts within the rear or interior side yard.

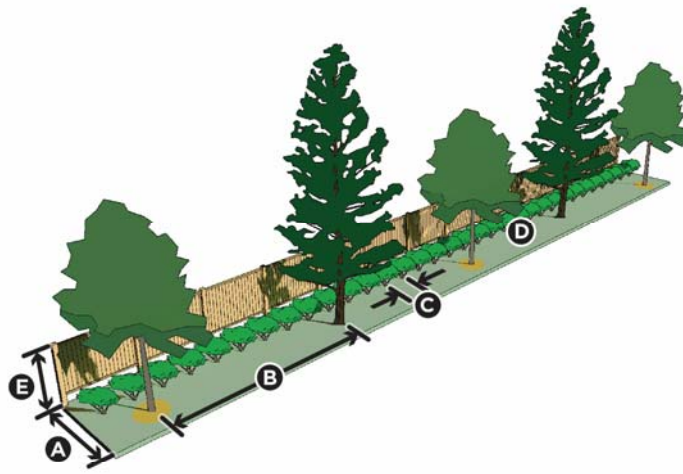
- a. Screening buffers are required where the RIV-GI Subdistrict abuts any other RIV Subdistrict or any other non-industrial zoning district. This does not apply if a public right-of-way is located between districts.
- b. Screening buffer landscape is in addition to any other landscape requirements, such as parking lot landscaping.
- c. Screening buffers must be reserved for the planting of material and installation of screening as required by this section. No parking, sidewalks, accessory structures, or any impervious surfaces are permitted within the screening buffer area.
- d. RIV District screening buffer requirements (See Figure 11):
 - i. A screening buffer must be a minimum of ten (10) feet in width.
 - ii. The minimum number of shade or evergreen trees required to be planted is one tree for every 25 linear feet of screening yard. Trees may be spaced at various intervals, but the total number of trees must be no less than one (1) per 25 linear feet of screening buffer length.
 - iii. The minimum number of evergreen shrubs required to be planted is one shrub for every three linear feet of screening yard. Shrubs may be spaced at various intervals, but the total number of shrubs must be no less than one per three linear feet of screening buffer length.
 - iv. In addition to the shrub and tree masses, 60% of the remaining landscape area must be planted and maintained in live groundcover, perennials, or ornamental grasses.
 - v. Landscape area not covered by shrub and tree masses, live groundcover, perennials or ornamental grasses may be covered by river rock or other permeable natural materials. Impermeable or non-natural materials are not permitted.
 - vi. Required landscaping must consist primarily of species that are native or naturalized to the region. Landscape should incorporate species from the

Pennsylvania Department of Conservation and Natural Resources' (DCNR's)
Native Wild Plant Species Accounts.

vii. Unless otherwise specifically required by this Zoning Code, an opaque fence or wall must be erected along 100% of the screening buffer length, with the exception of ingress/egress points. Fences or walls must meet the following standards:

- (1) Fences or walls must be a minimum of six (6) feet and a maximum of eight (8) feet in height, and a fence and berm may be combined provided the total height meets these requirements. Fences or walls must be erected along 100% of the screening buffer length, with the exception of ingress/egress points.
- (2) Fences or walls must be constructed of wood posts and planks, brick, masonry or stone. Chain link, with or without slats, is prohibited.
- (3) Fences or walls must be compatible with architectural style and building materials of the primary structure.
- (4) Walls greater than 40 feet in length must incorporate some form of visual relief, including, but not limited to, pattern breaks, varying wall construction, vertical features such as columns, differing construction materials, or a combination of the above.

FIGURE 11, SCREENING BUFFERS



- | | |
|---|---|
| A A buffer yard must be at least 10 feet in width. | D 60% of landscape area outside of shrub and tree masses must be planted in live groundcover, perennials, or ornamental grasses. |
| B One shade or evergreen tree must be planted for every 25 feet of buffer yard length. | E A solid fence or wall between six feet and eight feet in height must be erected along 100% of the buffer yard length. |
| C One evergreen shrub must be planted for every three feet of buffer yard. | |

905.04.K. Bonuses Goals and Points

Certain dimensional regulations allow for development bonuses. Bonuses allow for additional building height and a reduction in the riparian buffer zone provided certain conditions are met. Bonus actions are assigned points which allow additional building height above the base height of 55 feet or reduction of the required riparian buffer zone.

905.04.K.1. Performance Points System

New buildings and renovations in this district can utilize the bonus system of Section 915.07. The list below identifies the bonus options available to projects in this district and any modifications to the points earned. Points earned by satisfying the bonus goals can be utilized in this district to achieve the bonus height as identified in Section 905.04.E.1 and/or the structure placement with the Riparian Buffer Zone as identified in Section 905.04.E.3.a . Points are not transferrable to other development projects.

a. On-Site Energy Consumption – New Construction: Section 915.07.D.1.a – 1.c; points as listed.

b. On-Site Energy Consumption – Existing Buildings: Section 915.07.D.2.a – 2.c; points as listed.

- c. On-Site Energy Generation: Section 915.07.D.3.a – 3.c; points as listed.
- d. Affordable Housing: Section 915.07.D.4.a – 4.c; points modified as follows: 4.c is four points; 4.d is six points.
- e. Rainwater: Required native species must be chosen from the Pennsylvania Department of Conservation and Natural Resources' (DCNR's) Native Wild Plant Species Accounts. Section 915.07.D.5; points as listed.
- f. Riverfront Public Access Easements, Trails & Amenities: Section 915.07.D.6; points as listed.
- g. Neighborhood Ecology: Section 915.07.D.7; points as listed.
- h. Public Art: Section 915.07.D.8; points as listed.
- i. Urban Fabric: Section 915.07.D.9; points as listed.