# Sustainability at Home

## Outdoors Edition

SANDY SPRINGS
GEORGIA

September 30, 2020

## What is Sustainability?

- Being unselfish and aware of your everyday environment
- Development that meets the needs of the present without compromising the ability of **future generations** to meet their own needs.

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- **Landscape Maintenance**
  - Environmental Effects of Pesticides
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- **Development Code**
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## Presenting Team

Lindsay Walker
City Arborist

*Lindsay has been the Arborist for the City of Sandy Springs since June of 2019. She graduated from Chattahoochee Technical College with a degree in Environmental Horticulture. While she always enjoyed gardening and landscaping, she decided to further her career in arboriculture. After college, she focused on earning licenses and certifications through the Georgia Department of Agriculture and International Society of Arboriculture. She managed a plant health program for a local tree care company for five years before joining the City of Sandy Springs.*

# Presenting Team

## Catherine Mercier-Baggett
Sustainability Manager

*Catherine serves as the first Sustainability Manager for the City of Sandy Springs after managing the Planning and Zoning Division for four years. She previously worked as a landscape and urban designer for private consulting firms. She grew up in Montreal, Canada where she studied urban design, landscape architecture and ecology. She is passionate about green stormwater infrastructure, native plant species and sustainable development.*

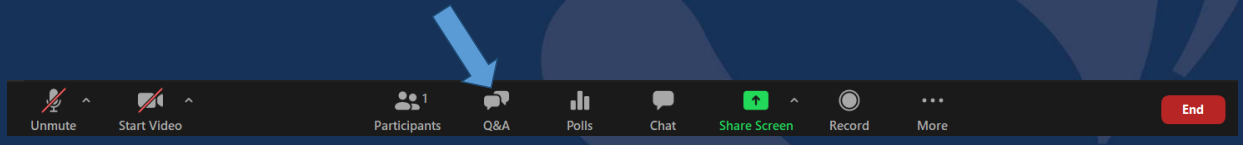
# Presenting Team

## Alexandra Horst
Planner II

*Alexandra is a native of Sandy Springs and has worked in Planning & Zoning with the City of Sandy Springs Community Development department since 2016. She is passionate about planning, zoning, sustainability and all things green! She is a graduate of the University of Georgia with a B.S. in Geography and Water Resources Certificate. She also has a Master's degree in Urban Planning with a Land Use and Environmental Planning Concentration from the University of Michigan and a Master's in Real Estate Development from the Georgia Institute of Technology.*

# Presentation Logistics

- All attendees will be muted during this presentation
- If you would like to ask a question, click on the Q&A button located at the bottom of the screen to ask and view other people's questions. You will also be able to upvote other people's questions.
- We will be monitoring the questions and responding to them throughout the seminar.




# Poll:

## Who is attending this webinar today?

# Landscape Maintenance

## Table of Contents

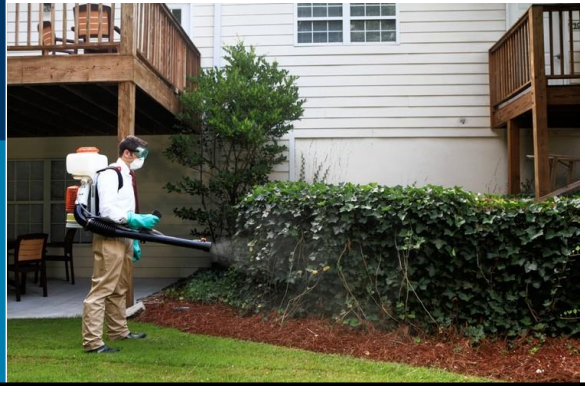

- Environmental Effects of Pesticides
- Integrated Pest Management
- Leaf Management
- Invasive Control Management

## Poll:

# Do you treat your property against mosquitoes?

## Environmental Effects of Pesticides

- Broadcast spraying for mosquitoes doesn't just kill mosquitoes, it kills every insect – including beneficial ones
- Pyrethroid insecticides, which are commonly used by pest control companies, can leach in to groundwater and run off into creeks, killing aquatic life

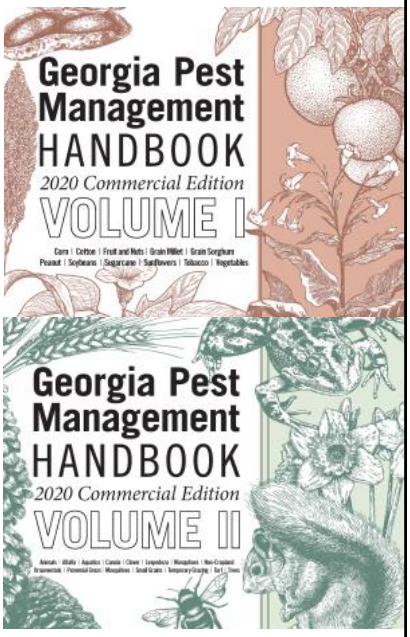


**Alternatives:**

1. Remove standing water from your property (birdbaths, garden fountains that aren't running, buckets, inflatable pools, etc.)
2. Natural or organic chemical sprays (cedarwood, peppermint oil, garlic oil, etc.) – do not to use around sources of water, as they are still dangerous to aquatic life
3. Remove English Ivy and other invasive species – mosquitoes love to hang out there!

# Integrated Pest Management (IPM)

- Ecosystem-based strategy that focuses on long-term prevention of pests through combination of biological control, mechanical (physical) control, cultural control, and chemical control
- Chemical controls are used only after monitoring indicates they are needed according to established guidelines
- Chemical controls should only target pest after it has been correctly identified
- GA Pest Management Handbook at UGA Extension




# Biological Control

- **Predator insects:** Lady beetles and their larvae are known for eating aphids that are common pests on Crape Myrtles and Maples; green lacewing larvae feed on pests, including mealybugs, whiteflies, mites, and thrips
- **Parasitic insects:** Parasitic wasps and flies lay eggs on and inside living targets; once eggs hatch, they feed on pests; then they move elsewhere
- **Carnivorous plants:** If your property has the right conditions, carnivorous plants can help reduce flies, mosquitoes, and other insects; pitcher plants and Venus fly traps thrive in boggy areas; while they don't eat enough insects to control outbreak, they can keep populations down
- **Biological pathogens:** *Bacillus thuringiensis* (Bt) is soil-borne bacterium that fights mosquitoes and insects in larval, caterpillar stage; this and other pathogens are effective biological pesticides for specific pests

# Mechanical Control

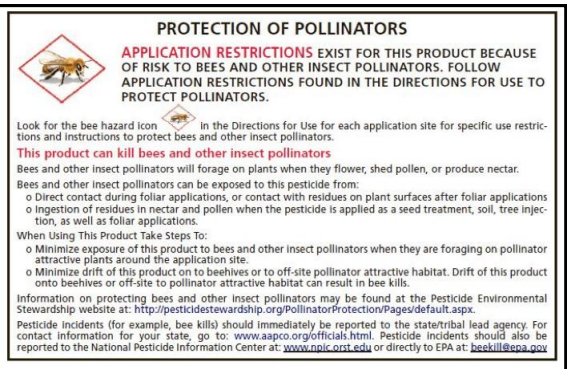
- **Hand-pick pests off plants:** Can help keep pest population under control and prevent outbreak
- **Place collars in soil around susceptible plants like vegetables:** Barriers can prevent hungry crawling pests from reaching plants
- **Prune to allow airflow:** Pests love damp, dark areas; regular maintenance, like pruning, can help prevent these habitats
- **Use sticky traps to catch insects:** Placing sticky card traps in Gardenias can help catch whiteflies to slow reproduction rate
- **Alcohol-based traps:** Many pests are attracted to fermented beverages like beer or wine; placing a small cup outside can draw pests into the cup to drown

# Cultural Control

- **Select disease- and pest-resistant plant varieties:** Plants proven to withstand region's most common pests hold up better under attack
- **Plant at appropriate times:** Fall and winter planting allow roots to establish before summer heat arrives; this is especially important since plants under stress (heat, drought, etc.) are more susceptible to pests
- **Use companion plants:** Basil and Marigolds are excellent companion plants to deter pests from vegetable gardens

# Chemical Control

- Before chemical control is used, all other options should be explored, pest and plant should be accurately identified, and chemical label should be studied
- Chemicals that are less harmful to environment are:



PROTECTION OF POLLINATORS

APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

This product can kill bees and other insect pollinators

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:
- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:
- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: www.npic.orst.edu or directly to EPA at: beekill@epa.gov

- **Neem Oil:** Interferes with insect hormone systems, making it harder for insects to grow and lay eggs; neem can also suffocate chewing insects by coating exoskeleton
- **Diatomaceous Earth:** Absorbs lipids from exoskeleton, resulting in insect dehydrating and dying
- **Insecticidal Soaps:** Suffocates soft-bodied insects by collapsing and desiccating cells
- **Horticultural Oil:** Suffocates insects by coating exoskeleton

- All chemicals should be kept away from water sources to protect aquatic life
- **ALWAYS** read labels prior to use – the label is law!

# Leaf Management

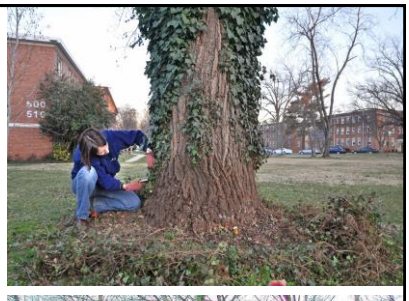
- Keep leaves away from storm drains – not only do they clog drains, which can then cause flooding, but storm drains lead to creeks
- Trash and debris are mixed in with leaves that then end up in waterways
- Keep North Fulton Beautiful and volunteers remove roughly 500 pounds of trash from Chattahoochee River each year!
- Leaves are natural form of nutrients; mowing over them, adding them to compost, or letting them decompose around trees and shrubs will act as fertilizer!

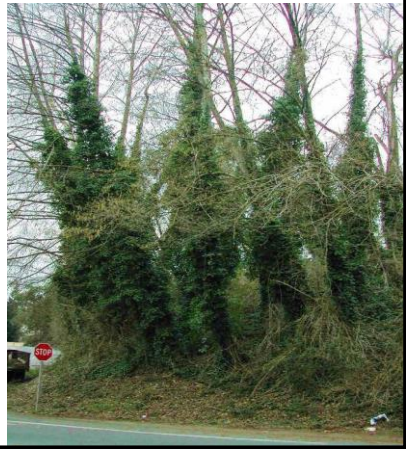
## Pop Quiz:

## True or False?
## English Ivy kills trees and other plants

## Invasive Species Control

- Invasive species are still commonly used; most are advertised as "low-maintenance" or "easy groundcover"
- Invasive species can bring invasive pests
- Invasive species are prohibited by Development Code
- If you remove invasive species, remove all roots, stems, etc. to prevent them from coming back
- English Ivy kills trees and other shrubs! To save trees, remove bottom 12-24"; rest will slowly die off
- Other invasive species to avoid are Liriope, Miscanthus, Chinese and Japanese Wisteria, Honeysuckle, Bamboo, Mimosa, etc.
- GA Exotic Pest Plant Council





# Q&A

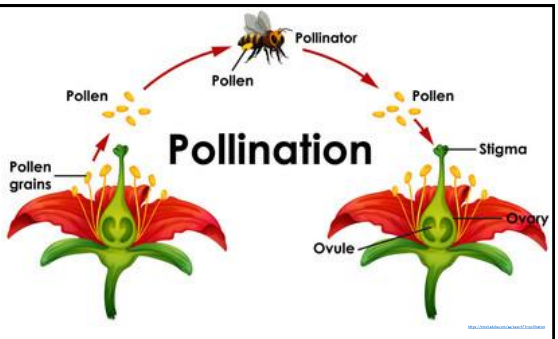
# Attracting Pollinators

# Table of Contents


- Pollination Basics
- Sources of Pollen and Nectar
- Pollinator Habitat Components
- Other Tips


# Pollination Basics

- Many plants rely on animals to move pollen from flower to flower
- Bees, butterflies, hummingbirds, and some beetles and bat species
- Adapted to native plant species – coevolution

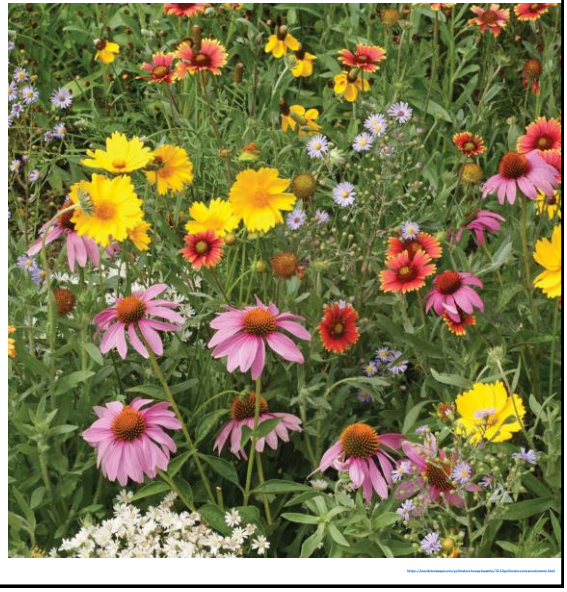


## Trivia:

## Grassed lawns attract which pollinator?

## Sources of Pollen and Nectar

- Shape, color, and scent
- Tubular red flowers for hummingbirds
- Landing platforms for butterflies
- Fragrant, light-colored night blooms for moths



# Pollinator Habitat Components

- Host plants (caterpillars)
- Water:
  - "Zero-entry" to avoid drownings – shallow dish
- Shelter:
  - Fallen branches, piles of twigs
  - Manmade boxes
- Bare spots:
  - For sunning (cold-blooded)
  - For mineral harvesting by butterflies (*puddling*)

# Other Tips

- Mass plantings for visual attraction and economy of scale
- Consider blooming periods to cover all seasons
- Offer variety of plant types to attract variety of pollinators

# Q&A

# Green Infrastructure

# Table of Contents


- Presentation Intent
- Green Infrastructure Basics
- Green Infrastructure Practices


# Presentation Intent

- Green Infrastructure (GI) Manual - Residential Edition will be ready by end of 2020
- Broad-level overview of GI
- For technical details, refer to GI Manual and resources
- Example calculations to meet Code requirements
- Volunteer GI is welcome

# Green Infrastructure Basics

- Stormwater management best practice
- Rainfall infiltrates and is treated close to source
- Mimics natural patterns

- Gray infrastructure:
  - Pipes carry stormwater runoff off-site
  - Degrades streams – water quality and physical alterations
- Infiltration of first 1.2″ of rain required to mitigate impervious surfaces (Sec. 9.6.3. of Development Code)

# Poll:

## Have you experienced stormwater issues recently?

# Glossary

- Drainage area: Contributing area; impervious surface that will drain to GI
- Impervious material: Material that does not allow infiltration (ex.: asphalt, roof shingles, concrete, compacted soil, etc.)
- Infiltration: Process by which water penetrates ground
- Low impact development (LID): Stormwater management approach that includes GI, land planning, site design, etc.
- Practice: Refers to a GI, also called best management practice (BMP)

# Practices

- Conservation of soils and vegetation ← *Natural*

- Rainwater harvesting
- Dry wells
- Modified French drains
- Rain gardens
- Vegetated filter strips
- Pervious pavers

*Constructed*

# Conservation

- Should always be prioritized
- Native soils might provide good infiltration
- Established vegetation prevents erosion
- Requires minimal maintenance

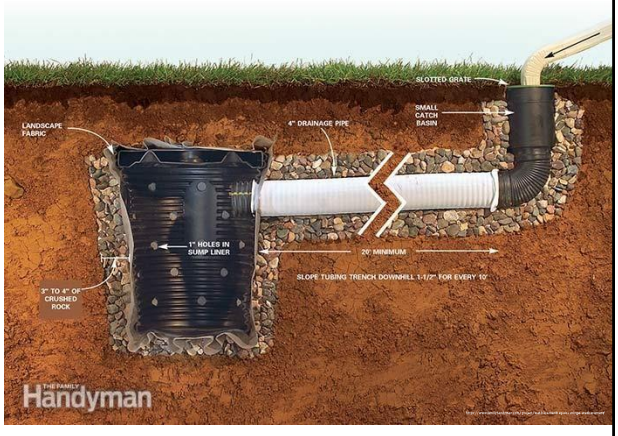
# Rainwater Harvesting

- Cisterns, rain barrels
- Recipient connected to gutter downspout and spigot
- Quick calculations:
  - 1 gal. rain/1 sq. ft. of impervious
  - 3 sq. ft. irrigated/1 sq. ft. of impervious
  - Typical rain barrel holds 50-60 gal.
- Does not itself provide infiltration
- Small footprint, minimal maintenance

# Dry Wells

- Stone-filled underground infiltration well
- Connected to gutter downspout
- Requires infiltrating soil
- 500 sq. ft. of roof requires 60″Hx30″D well

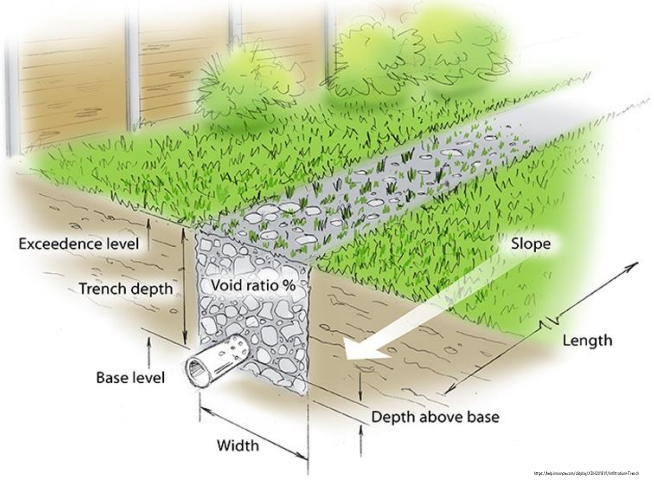
- “Out of sight, out of mind”…



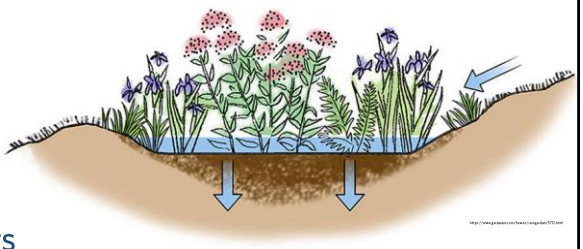

# Modified French Drain

- Stone-filled underground infiltration trench
- Connected to gutter downspout
- Requires infiltrating soil
- 500 sq. ft. of roof requires 42′Lx18″D trench

- “Out of sight, out of mind”…



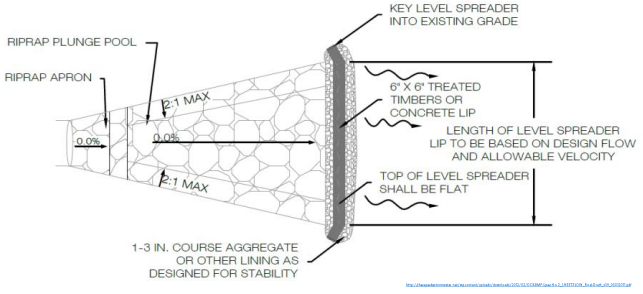
# Rain Garden



- Bioretention; landscaped infiltrating feature
- Up to 6″ ponding depth; drains in 24-36 hours
- Amended soil: 2/3 native soil, 1/3 compost
- 500 sq. ft. of roof requires:
  - 45 sq. ft. rain garden with 18″ of amended soil OR
  - 29 sq. ft. rain garden with 36″ of amended soil
- Requires regular maintenance

# Vegetated Filter Strip

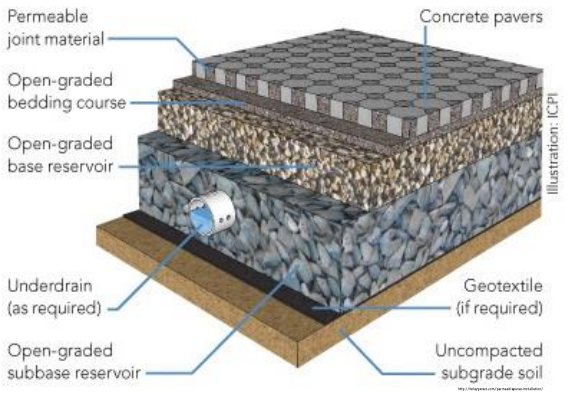
- Landscaped channel that filters pollutants
- Limitations:
  - Max 5,000 sq. ft. of drainage area
  - 50% of runoff reduction
- Advantages:
  - Can be placed over utilities
  - Can be used for sheet flow




- 500 sq. ft. patio requires 225 sq. ft. of filter with amended soil

# Pervious Pavers

- Modular paver installation that allows infiltration
- Installed over stone "reservoir"
- Cannot be used for runoff reduction
- Require regular maintenance



# Q&A

# Development Code

## Table of Contents

- Overview of Sandy Springs Development Code
- Sections Relevant to Sustainability Outdoors
- Overview of Technical Manual

# Development Code

- Combines zoning ordinance and development regulations

- Article 1. Introductory Provisions
- Article 2. Protected Neighborhoods
- Article 3. Urban Neighborhoods
- Article 4. Corridors & Nodes
- Article 5. Perimeter Center
- Article 6. Rules for All Districts
- Article 7. Use Provisions
- Article 8. Site Development
- Article 9. Environmental Protection
- Article 10. Streets & Improvements
- Article 11. Administration
- Article 12. Definitions

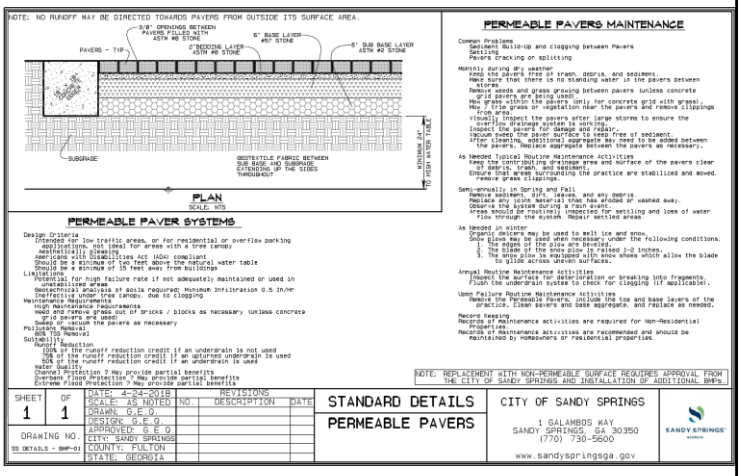
- https://library.municode.com/ga/sandy_springs/codes/development_code
- https://coss.maps.arcgis.com/apps/webappviewer/index.html?id=180137d495094cb790f4846b858b5f26

# Poll:

# Are you planning major house renovations?

# Lot Parameters & Building Placement (Articles 2.-6.)

- Lot coverage:
  - Amount of lot covered by building(s) + impervious surfaces
  - 100% credit for pervious pavers constructed to City's standard detail
  - In RE- and RD-, base max lot coverage may be supplemented 5% with mitigation (stormwater infiltration)


NOTE: NO RUNOFF MAY BE DIRECTED TOWARDS PAVERS FROM OUTSIDE ITS SURFACE AREA.

PLAN
SCALE: NTS

PERMEABLE PAVER SYSTEMS

PERMEABLE PAVERS MAINTENANCE

NOTE: REPLACEMENT WITH NON-PERMEABLE SURFACE REQUIRES APPROVAL FROM THE CITY OF SANDY SPRINGS AND INSTALLATION OF ADDITIONAL BMPs.

STANDARD DETAILS
PERMEABLE PAVERS

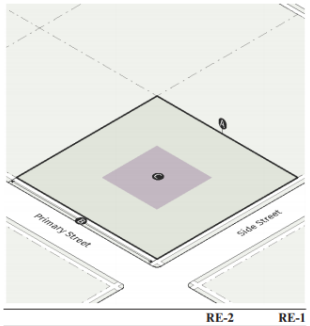
CITY OF SANDY SPRINGS
1 GALAMBOS WAY
SANDY SPRINGS, GA 30350
(770) 730-5600
www.sandyspringsga.gov

# Lot Parameters & Building Placement (Articles 2.-6.)

- Canopy coverage
- Building setbacks
- Low impact stormwater features are allowed setback encroachments:
  - Rain gardens, bioretention areas, rain barrels, cisterns

**Div. 2.2. Residential Estate (RE-2, -1)***

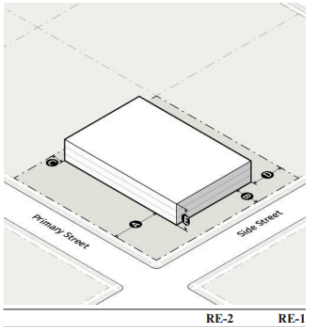
**SEC. 2.2.1. LOT PARAMETERS**




| | RE-2 | RE-1 |
|---|---|---|
| **Lot** | | |
| Ⓐ Area | | |
| Single unit detached | 2 acre min | 1 acre min |
| All other allowed uses | 10,000 SF min | 10,000 SF min |
| Ⓑ Width | | |
| Single unit detached | 200' min | 150' min |
| All other allowed uses | 100' min | 100' min |
| **Coverage** | | |
| Ⓒ Lot coverage | | |
| Residential use | 25% max | 25% max |
| All other principal uses | By use permit | |
| Ⓓ Canopy coverage | | |
| Residential use | 35% min | 35% min |
| All other uses | 40% min | 40% min |

(Ord. of 4-17-2018(3), § 2-3)

**SEC. 2.2.2. PLACEMENT AND HEIGHT**

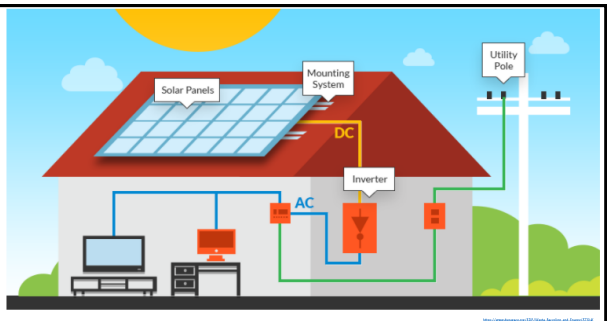


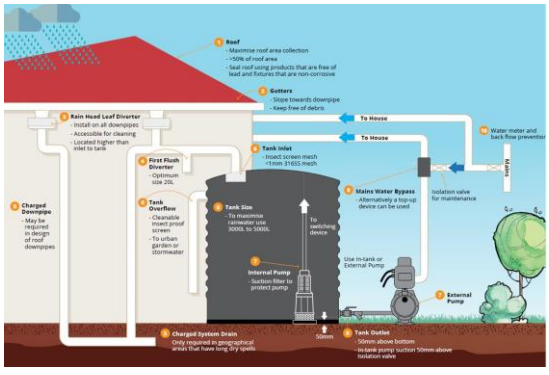

| | RE-2 | RE-1 |
|---|---|---|
| **Building Setbacks** | | |
| Ⓐ Primary street | 60' min | 60' min |
| Ⓑ Side street | 40' min | 30' min |
| Ⓒ Side: common lot line | 25' min | 15' min |
| Ⓓ Rear: common lot line | 50' min | 40' min |
| **Building Height** | | |
| Ⓔ Single-unit detached dwelling | 3 stories/40' max | |
| All other principal uses | By use permit | |

(Ord. of 4-17-2018(3), §§ 2-4, 2-5)

# Use Provisions (Article 7.)

- Solar panels
- Wind turbines
- Rainwater collection systems



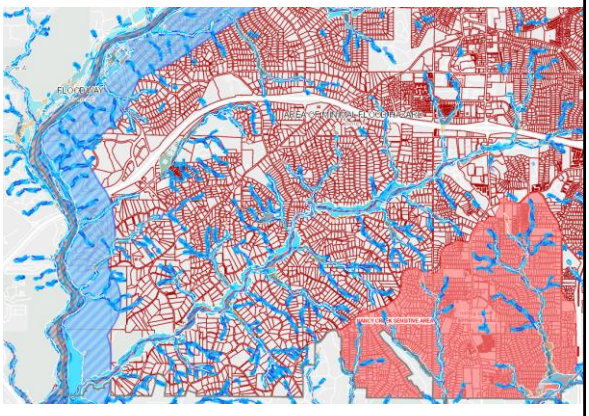



# Site Development (Article 8.)

- Residential front yard trees:
  - 1 shade tree planted in front yard for every 40’ of lot frontage
- Planting and landscaping:
  - Plant materials must be hardy to Zone 7b (USDA Plant Hardiness Zone Map) and able to survive on natural rainfall
  - No artificial plants, trees, or vegetation
  - Landscaped areas must be kept free of weeds and trash
  - Planting areas must be immediately stabilized from soil erosion and maintained
  - Pruning must be in accordance with International Society of Arboriculture’s ANSI A300 Standards
  - Topping is prohibited except where necessary to maintain utilities

# Environmental Protection (Article 9.)

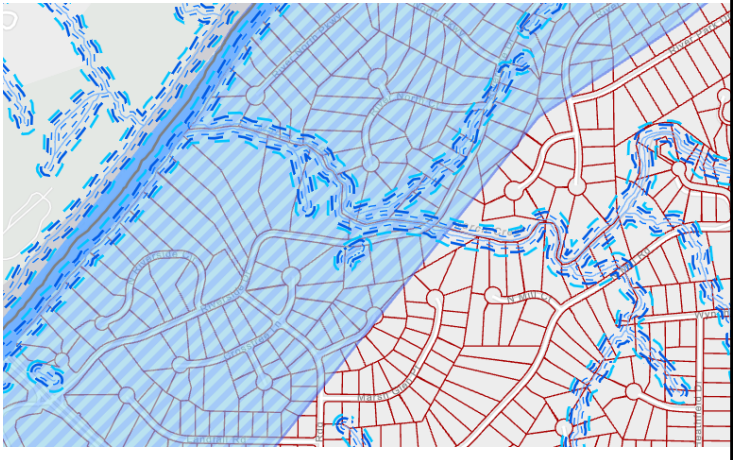
- Wetlands
- State Waters Buffers Protection
- Tree Conservation
- Natural Grade Protection
- Floodplain Management
- Stormwater Management
- Soil Edition and Sedimentation Control
- Illicit Discharge and Connection



- https://coss.maps.arcgis.com/apps/webappviewer/index.html?id=180137d495094cb790f4846b858b5f26

# State Waters Buffer Protection

- Undisturbed natural vegetative buffer for 50′ as measured from point of wrested vegetation + additional impervious surface setback of 25′ (impervious prohibited)
- MRPA requires undisturbed vegetative buffer of 50′ + impervious surface setback of 150′ extending 2,000′ from Chattahoochee River



- https://coss.maps.arcgis.com/apps/webappviewer/index.html?id=180137d495094cb790f4846b858b5f26

# Tree Conservation

- All residential properties must maintain 35% canopy coverage of Protected Trees (trees measuring 18″+ in diameter)
- Removal of healthy trees that brings canopy below 35% requires trees to be replaced and payment to be made to Tree Bank
- Recommended species are in Section 1 of Technical Manual

| Land Use | Canopy Required |
|---|---|
| Residential | 35% |
| Nonresidential, Commercial, Industrial | 40% |

**Table 1-3. Recommended Species List**
(Species not listed may be considered for City Arborist approval)

**Large Canopy Shade Trees (1,000 sf credit)**

| Common Name | Botanical Name | Height | Width | Native | EvGrn | Urban | Riparian | Utility |
|---|---|---|---|---|---|---|---|---|
| Maple, Sugar | *Acer saccharumIA. barbatum* | 60 | 30 | y | | | y | |
| Hickory, Bitternut | *Carya cordiformis* | 50 | 50 | y | | | | |
| Hickory, Pignut | *Carya glabra* | 60 | 40 | y | | | | |
| Hickory, Shagbark | *Carya ovata* | 70 | 50 | y | | | | |
| Hickory, Mockernut | *Carya tomentosa* | 60 | 40 | y | | | | |
| Chestnut, Chinese | *Castanea mollissima* | 50 | 50 | | | y | | |
| Ash, White | *Fraxinus americana* | 60 | 40 | y | | | y | |
| Ash, Green | *Fraxinus pennsylvanica* | 50 | 30 | y | | | y | |
| Ginkgo (male only) | *Ginkgo biloba* | 60 | 40 | | | y | | |
| Sweetgum | *Liquidambar styraciflua* | 75 | 50 | y | | | y | |
| Poplar, Tulip or Yellow | *Liriodendron tulipifera* | 70 | 40 | y | | | y | |
| Southern Magnolia | *Magnolia grandiflora* | 70 | 40 | y | y | | | |
| Dawn Redwood | *Metasequoia glyptostroboides* | 75 | 25 | | | y | | |
| Blackgum or Tupelo | *Nyssa sylvatica* | 50 | 30 | y | | y | y | |
| Pine, Shortleaf | *Pinus echinata* | 60 | 20 | y | | | y | |
| Pine, Slash | *Pinus elliotii* | 60 | 20 | | | | | |
| Pine, Longleaf | *Pinus palustris* | 60 | 20 | | | | | |
| Pine, Loblolly | *Pinus taeda* | 80 | 20 | y | | | y | |
| Sycamore | *Platanus occidentalis* | 75 | 75 | y | | | y | |
| Planetree, London | *Platanus x acerifolia* | 75 | 60 | | | y | | |
| Oak, Swamp White | *Quercus bicolor* | 60 | 50 | y | | | y | |
| Oak, Scarlet | *Quercus coccinea* | 60 | 40 | y | | | | |
| Oak, Overcup | *Quercus lyrata* | 50 | 50 | y | | | y | |
| Oak, Nuttall | *Quercus nuttalli* | 50 | 40 | y | | | | |
| Oak, Willow | *Quercus phellos* | 60 | 50 | y | | y | y | |
| Oak, Shumard | *Quercus shumardii* | 50 | 40 | y | | | | |

# Tree Removal Permit

- Tree Removal Permit required for removal of any tree measuring 18″+ in diameter
- Tree Removal Permit required for removal of *any size tree* within 75′ of state waters or within River Corridor (2,000′ from Chattahoochee River)
- Unsure if permit is required? Contact *Arborist@sandyspringsga.gov*

# Sandy Springs Tree Bank

- Sandy Springs Tree Bank:
  - For maintenance and disbursement of tree funds
  - For replacing tree canopy or canopy preservation
  - $1,200/1,000 sq. ft. for removals that bring canopy below requirements
  - $5,000/1,000 sq. ft. in lieu of replacing canopy

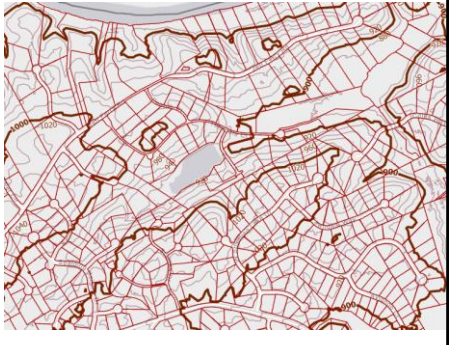
- Escrow:
  - Funds for Boundary Trees measuring 10"+ that are impacted by any proposed construction shall be escrowed for min of 3 years

# Natural Grade Protection

- Grading = altering the shape of ground surfaces to a predetermined condition; includes stripping, cutting, filling, stockpiling, and shaping, as well as land in its cut or filled condition

- Land disturbance must not exceed 1/4 of area containing slopes of 35%+ in areas of 1,000+ sq. ft.

- If there is construction on slopes of 15%+:
  - Stormwater runoff must be reduced and minimized
  - Stabilization must be provided to restrain erosion
  - Vegetation must be reestablished
  - Exposed soil must be planted with species that survive without irrigation
  - Ground cover must be maintained



# Grading

- Grading setbacks in side and rear setbacks:

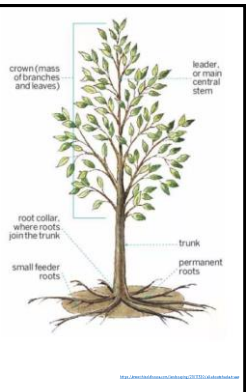
| Zoning District | Side Setback Grading Encroachment |
|---|---|
| RE- | Up to 10′ |
| RD-, RU- | Allowed |

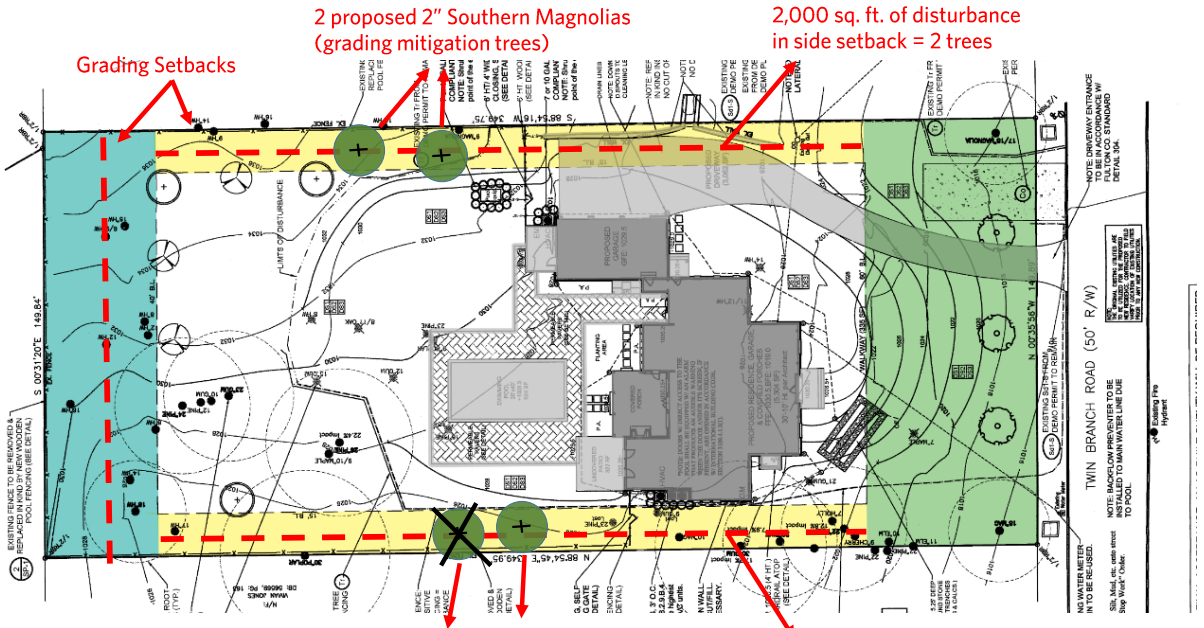
| Zoning District | No Grading Allowed within ___′ of Rear Lot Line |
|---|---|
| RE- | 20′ |
| RD-27, -18, -15 | 15′ |
| RD-12, -9, -7.5, RU- | 10′ |

- Graded slopes must not exceed 3:1

# Grading Mitigation

- Grading mitigation in RE-, RD-, RU-:
  - For each tree of 10″+ DBH (diameter at breast height) removed or damaged by grading in side setback, 1 tree must be planted
  - If no tree of 10″+ DBH is removed or damaged, at least 1 large canopy shade tree must be planted for every 1,000 sq. ft. of area disturbed in side setback
  - Trees must be of comparable canopy size at maturity to those removed or damaged
  - Trees must be 2″+ caliper at time of planting
  - Planting must take place in graded area
  - Trees must come from Recommended Large Canopy Shade Trees Species List
  - No mitigation required for grading in rear setback






# Retaining Walls

- Building foundations as RWs are encouraged to retain slopes
- Must be separated horizontally by 4'+ to capture stormwater
- Each tier must be vegetated and maintained with mix of native, evergreen, and deciduous shrubs (1 every 4 linear ft.)

- RW setbacks in side and rear setbacks:

| Zoning District | Side Setback RW Encroachment |
|---|---|
| RE- | Up to 10' |
| RD- | Up to half the depth of side building setback |
| RU- | None |

| Zoning District | No RWs Allowed within ___' of Rear Lot Line |
|---|---|
| RE- | 20' |
| RD-27, -18, -15 | 15' |
| RD-12, -9, -7.5, RU- | 10' |

# Floodplain Management

- FEMA Flood Insurance Rate Maps
- No development allowed within any area of special flood hazard or area of future-conditions flood hazard that could result in:
  - Raising base flood elevation or future-conditions flood elevation equal to or more than 0.01'
  - Reducing base flood or future-conditions regulatory flood storage capacity
  - Changing flow characteristics as to depth and velocity of waters of base flood or future-conditions flood as they pass upstream and downstream property boundaries
  - Creating hazardous or erosion-producing velocities or resulting in excessive sedimentation

# Floodplain Management

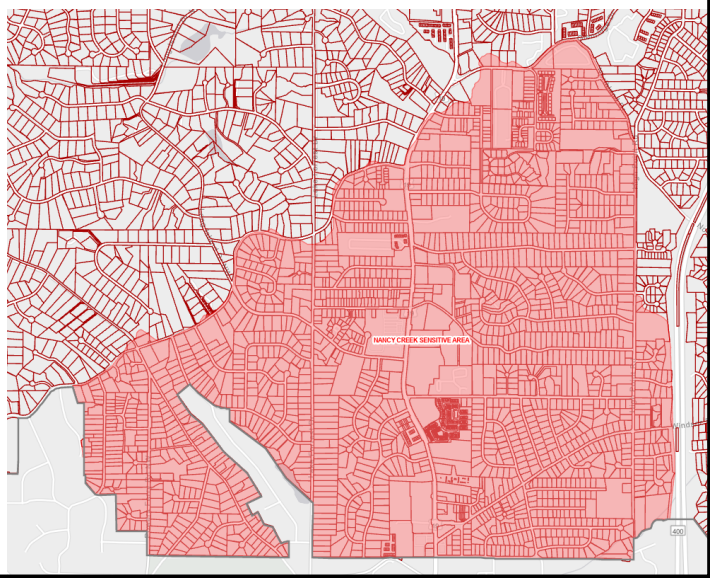
- Development within area of special flood hazard or area of future-conditions flood hazard shall meet certain requirements
- Floodways must remain free of encroachment to allow for discharge of base flood without increased flood heights
- Property owner is responsible for maintenance within floodplain so that flood-carrying or flood storage capacity is maintained
- Standards in areas of special flood hazard and future-conditions flood hazard apply

- https://coss.maps.arcgis.com/apps/webappviewer/index.html?id=180137d495094cb790f4846b858b5f26

# Nancy Creek Declared Sensitive Area

- Water quality (runoff reduction) is required on all new residential construction

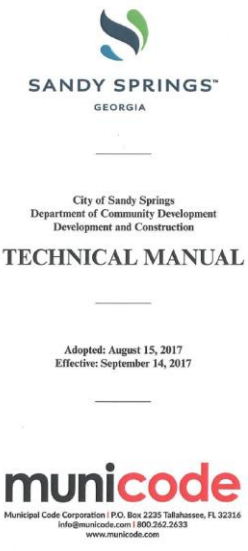
- https://coss.maps.arcgis.com/apps/webappviewer/index.html?id=180137d495094cb790f4846b858b5f26




# Technical Manual

- Development regulations
- Landscape, Tree, and Buffer Submittal Plans and Planting Standards:
  - Recommended Species List
- Grading & Drainage
- Water Conservation

- https://library.municode.com/ga/sandy_springs/codes/technical_manuals


SANDY SPRINGS
GEORGIA

City of Sandy Springs
Department of Community Development
Development and Construction

TECHNICAL MANUAL

Adopted: August 15, 2017
Effective: September 14, 2017

municode
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www.municode.com

# Q&A

# Conclusion

# Resources Available from City Website

- http://www.sandyspringsga.gov/business/building-and-construction/build-sandy-springs/build-sandy-springs-seminars

- PDF copy of *Sustainability At Home – Outdoors Edition* seminar
- Public resource handout with links
  - General Landscape Maintenance
    - Pest Management, Invasive Species, etc.
  - Attracting Pollinators
    - Importance of Pollinators, Plant Selection, etc.
  - Green Infrastructure
    - Protecting Water Quality, Rain Barrels, Rain Gardens, etc.
  - Sandy Springs Development Code
    - Development Code, Community Development GIS Map, Streams & Creeks, FEMA, etc.

# Final Questions?

Stay in touch!
sustainability@sandyspringsga.gov