Town of Darien

Commercial Design Guidelines

Submitted June 4th, 2009

Overview

Successful development in Darien's commercial districts will be informed by the town's historical vernacular and enhance its quality and character. New buildings of any style should reflect the existing and desired street pattern with regard to rhythm, harmony and scale, as well as pedestrian ease.

- This document suggests guidelines for design elements, building materials and streetscape amenities to enhance Darien's unique architectural and environmental qualities. These guidelines represent an aesthetic overview of the design elements to be considered in conjunction with established ***Darien Zoning Regulations*** which can be found on the town website www.darienct.gov.

- The guidelines were developed by members of the Darien Revitalization Initiative Design Committee, with collaboration from the Architectural Review Board, the Planning & Zoning Department, the Department of Public Works, the Beautification Commission, the Darien Historical Society and local architects. They are intended as a reference source and planning tool for property owners, merchants, developers, town boards and commissions and real estate professionals.

- These are guidelines and suggestions not rules and regulations.

- After reading these guidelines, the next step is to visit the Planning & Zoning Department in Town Hall. An introductory conversation with a P&Z staff member will save time and expense in the planning and development stages of your project.

Design Elements Index

Architecture

Aesthetic design choices can make connections among individual structures in the built environment, the natural landscape, the historical context and the people who experience them.

Successful architecture emerges from many factors, including local climate, topography, history and building practices. Individual projects should link seamlessly with their surroundings, transcending style. Each project should take the following into consideration:

Historical References

- Darien is committed to maintaining its intrinsic character that is derived from its historical origins as a small, New England town.
- Since its incorporation in 1820, Darien has been developed by combining the built environment, historical and new, with its natural assets.
- Preservation and adaptive re-use of structures have an important place in this development, particularly in the **National Register District**, and new building styles should reflect integration, but not necessarily imitation.

Aesthetic Considerations

Massing

- Create compatibility in size and scale with surrounding buildings.
- Design to create interesting and proportional outdoor spatial relationships between buildings, open space and any setbacks on adjacent sites.
- Where appropriate, establish building rhythms with adjacent structures for visual continuity.

It should be noted: Each business zone classification in Darien, Noroton Heights and Noroton has its own setback regulations as to lot frontage and depth; front, side, and rear areas; number of stories and height; as well as parking requirements. ***See Zoning Regulations.***

Façade, Entrance and Roofline Elements

- Observe Darien's historical precedents wherever possible.
- Establish horizontal continuity by referencing adjacent prominent façade detail elevations and rhythms, such as with brick coursing, moldings or fenestration.
- Include architectural detailing and apply it consistently throughout the design. Ensure such details are compatible with the historical context.
- Arrange window patterns with a balanced spacing and conscious rhythm.
- Consider signage needs during the design phase so it becomes an integral part of the building.
- Build elements with protective canopies, stairs, columns, wall or roof projections and recesses to human scale at sidewalk level to encourage pedestrian use.
- Avoid the use of vinyl and aluminum siding.
- Accentuate entrances with strong definition and legibility for individual tenants.
- Create an agreeable pedestrian environment that includes weather protection, convenience and safety features.
- Consider rooflines of adjacent properties in the design to avoid clashes in style and materials.
- Reference adjacent building roof details such as dormers, fascias and roof pitches when applicable.

Material, Color and Surface Texture Elements

- Use natural materials such as wood, stone, brick, glass and metal in their traditional applications.
- Coordinate all exterior elevations of the building using color, materials, architectural form and detailing to achieve continuity.
- Limit the number of different materials on the exterior of the building elevation to avoid visual overload.
- Coordinate color scheme and materials with neighboring buildings, and the town as a whole, to reinforce harmony.
- Avoid large, unarticulated or monolithic façades. Use detailing to add relief and shadow patterns to otherwise flat façades.
- Create visual variety, aid in climate control and establish character by using architectural elements such as overhangs, trellises, projections, reveals and awnings.

Building Lighting

Well-conceived lighting systems enhance the building design, site amenities and site elements while providing a level of illumination sufficient for the safety and security of pedestrians using the commercial areas after sunset.

- Position lighting to reduce or limit glare, distraction or spill-over onto adjacent properties. Light fixtures with canopies or shields help properly direct the light where it is desired.
- Use white light lamps rather than those that cast a yellow or blue light.
- Regulations prohibit the use of neon lights.
- Design lighting systems that include timers, motion or light sensors and other energy saving devices to reduce the overall energy required.
- Consider existing fixtures in adjacent parking lots when determining light fixtures. If none exist, use specified light fixtures for municipal parking lots. ***See Appendix I***
- **All proposed exterior lighting is subject to prior approval by the Planning and Zoning Commission and the Architectural Review Board.**

Building Signs

Signs designed with consideration to size, scale, color and style will complement building design and add to the physical appeal of the commercial area.

- Motorists and pedestrians rely on clearly visible street address numbers and good signage to identify businesses in a well organized commercial area.
- Sign regulations ensure that business identification and street address information for pedestrians and motorists are presented in a clear and aesthetically pleasing manner throughout town.
- Determine the zone in which your property is located as the Sign Regulation Section addresses signage by commercial zone. ***See Appendix II***
- Review the ***Sign Regulations Section 920*** of the Darien Zoning Regulations within your zone to determine the number, type, size, letter height and location of signs permitted on the property.

Signs <u>Not</u> Requiring a Permit

- Permitted Signs**.** ***See Sign Regulations Sub-Section 922.***
- Temporary window signs (less than 30 days) are allowed, provided they occupy less than 25% of the window. ***See Sign Regulations Section 928.i3.***

Signs <u>Requiring</u> a Permit

All signs on the outside of a building or displayed within a window for more than 30 days do require prior review and approval by the Architectural Review Board and a zoning permit.

- Signs in CBD, DC, and NB Zones. ***See Sub-Section 923.***
- Signs in DB-1 and DB-2 Zones. ***See Sub-Section 924.***
- Signs in OB, DOR-1 and DOR-5 Zones. ***See Sub-Section 925.***
- Signs in SB and SB-E Zones. ***See Sub-Section 926.***

Sign Lighting

Sign lighting is regulated within all commercial zones. ***See Zoning Regulations for Sign Regulations Section 920.***

Site Plan

Streetscape and relationships of buildings one to the other are key components to successful site planning for an aesthetically pleasing and pedestrian friendly retail district.

Plans should encompass aesthetics and establish an environment of interest, enjoyment, interconnectivity, activity and safety. The design and development of pedestrian pathways such as breezeways, alleys and gathering spots should encourage foot traffic.

A project's site and landscaping plan are considered part of the building application to be reviewed by the Architectural Review Board, with final approval by the Planning and Zoning Commission.

Building Placement

- Site buildings to frame the street with pleasing, interesting enclosures.
- Structures designed to a human scale will enhance pedestrian interest, aesthetics and comfort. Avoid long, unarticulated facades and ensure neighborhood compatibility and historical awareness.
- Keep front building setbacks in relation to the adjacent buildings, with careful consideration of size, bulk and sunlight. These relationships are much more important than conforming to the allowable zero-front set back in some zoning districts.
- Minimize blank walls and allow for parking in the rear of the building. ***See Zoning Regulations Section 1020.***

Access & Driveway

- Design the main entrance, exits and rear entrances to be welcoming, safe, accessible and clearly marked with appropriate signage.
- Minimize conflicts between pedestrian and vehicle movement through design elements, fewer curb cuts and safe handicapped access. Segregate general traffic movement from service traffic/loading areas.
- Allow for possible bike paths, pedestrian access and coordination with public transit, such as the train station. ***See Zoning Regulations Sections 1024.2, 1025.4.***

Walkways

- Invite pedestrian movement and integrate shopping destinations with easily distinguished walkways constructed of attractive, safe and walkable pavement material. Include landscaping for winter as well as summer, and also appropriate lighting.
- Include bike racks in strategic locations. ***See Zoning Regulations Sections 1025.3, 1025.6.***

Plazas & Pocket Parks

- Create small parks to provide for pedestrian enjoyment and to create a streetscape of aesthetics and rhythm.
- Provide a well designed and maintained green/garden space with pathways of attractive pavement in visually engaging locations, with seating areas for social interaction and rest.
- Design plazas and pocket parks to include benches or low seat walls, lights for security and landscaping for passive recreation only. ***See Zoning Regulations Section 656e.***

Outdoor Dining

- Provide outdoor dining amenities in appropriate approved locations**. The design of outdoor dining furniture and umbrellas needs approval by the Architectural Review Board and the Planning and Zoning Commission.**
- Consult Connecticut Liquor Control Commission for state requirements on outdoor dining that will include serving alcoholic beverages**.**
- Ensure that outdoor dining locations do not impede pedestrian flow or emergency access or egress.
- Design outdoor dining areas to include screening, well maintained landscaping, lighting and pavement appropriate to the adjacent buildings as well as appropriate visual, light and sound screening if immediately adjacent to a residential zone.
- Provide attractive and properly sized trash receptacles near dining areas.
- Signage on umbrellas requires a variance.

Landscaping, Screening & Fencing

- Plant street-side trees and shrubs to enhance design features of the buildings, and to provide shade, visual interest and spatial organization.
- Appropriate plant choices will aesthetically link adjacent areas, as well as existing mature vegetation, and provide year round interest. ***See Zoning Regulations Sections 1024.4, 1025.5, 940.***
- Proportion landscape elements to the scale of the built environment to soften the structure and add human scale to the project.
- Coordinate plantings as design features rather than solely for screening purposes.
- Select the appropriate plant palette with regard to the planned maintenance schedule.
- Low maintenance and self-sustaining projects are suggested.
- Amalgamate mature plantings into new design projects.
- Represent varying year round interest, texture, form and habit in landscape projects.
- Choose native plantings and avoid usual cultivars.
- Use fences to buffer or screen necessary but discordant elements such as HVAC units, transformers and dumpsters. ***See Lighting, Signs and Treescape sections.***

Streetscape

A comfortable place to sit, a convenient place to discard trash, a safe and level sidewalk and effective lighting all contribute to an enjoyable pedestrian experience.

In commercial districts, design elements of the “model block”, including street lamps, benches and trash bins - were selected to create a uniform and harmonious effect. The model block sidewalk design presently exists along significant portions of the Post Road.

Sidewalks

- New **sidewalks**, frequently referred to as the 'model block', are concrete edged with a thin brick band and granite curb along the street. All new construction along the Post Road must include installation of this sidewalk.
- A partnership program is in place for existing building owners who would like to replace an old sidewalk with a model block sidewalk – the town pays 2/3 of the cost, the building owner 1/3.
- Plans and specifications can be obtained from the Department of Public Works. ***See Appendix III***

Streetlamps

- The municipal **streetlamps** have break-away Victorian-style metal poles. Plans and specifications can be obtained from the Department of Public Works.

Benches

- Incorporate **benches** into the building site design where appropriate.
- For benches on town property or in rights of way, the site must be approved by the Department of Public Works (DPW). Benches on private property must be approved by the Planning & Zoning Commission (P&ZC).
- The standard bench is constructed of wood and metal. ***See Appendix IV***

Trash Bins

- Provide **trash bins** where appropriate along the building perimeter.
- The site must be approved by DPW if on town property or in a right of way.
- If the bins are on private property, the site must be approved by P&ZC. Property owners are responsible to empty trash bins on private property.
- The standard trash bin is made of vertical steel slats. ***See Appendix V***

Treescape

Trees add a natural canopy to the streetscape, enhancing the charm and appeal of Darien's commercial areas.

Street trees help create an inviting streetscape and provide shade and respite from inclement weather. They also act as a natural buffer from busy roads and soften the streetscape in the pedestrian environment**. Landscape trees** create attractive outdoor spaces for pedestrians to enjoy and improve the appearance of our town**. Parking lot trees** draw attention away from these built environments and provide a more welcoming atmosphere. Proper **planting, pruning and maintenance** of all trees extend their lifespan and maximize their attributes.

Street Trees

To create a cohesive aesthetic for downtown Darien, seven species were selected for their year round interest, form, texture and shape at maturity. These species were also chosen to accommodate underground sewer lines, overhead utilities and narrow sidewalks. By implementing this list, the pedestrian environment will be enhanced by a sense of scale, balance and green surroundings. ***Refer to Darien Tree Commission for more information.***

Recommended Street Trees: Red Maple, Trident Maple, Hedge Maple, Thornless Honey Locust, Aristocrat Pear, Japanese Tree Lilac, Japanese Zelkova

- Derive all trees planted in the streetscape from the Recommended Street Tree List.
- Maintain continuity throughout the downtown core. Do not substitute trees on the Recommended Street Tree List with a columnar variety.
- Diversify plantings to avoid an over population and clustering of one species. No one tree species shall be planted where it already exists within two neighboring tree pits.
- Incorporate smaller tree species on both sides of the Post Road to give balance to the two sides of the road. Select an appropriate size of tree according to the Street Tree List when planting a new tree and the built environment surrounding the tree pit remains the same.
- Planting of new and replacement trees is strongly encouraged where appropriate. Reference sewer-safe trees where such obstacles exist below grade.
- Maximize setbacks from building façade to curb in order to increase footage for adequately sized tree pits and trees. To avoid blockage of storefronts and signage of first floor tenants, street trees should be as tall as possible when first planted.

Landscape Trees

Landscape trees refer to all trees found in Darien's commercial areas that are not street or parking lot trees. These trees will transform any built or natural environment into a positive outdoor space.

- Protect and maintain all heritage trees found in the public and private realm.
- Planting of new and replacement trees is encouraged where appropriate.
- Reference sewer safe trees where such obstacles exist below grade.
- Watering and fertilizing trees and landscape plantings is the responsibility of the property owner.
- Follow proper planting practice as per the suggested Planting Details.
  See Appendix VI

Parking Lot Trees

Trees on the Recommended Parking Lot Tree List promote cohesiveness throughout the town's parking facilities using a variety of coniferous and deciduous species. By greening these typically aesthetically harsh environments, the town's landscape will become more inviting and pleasing.

Recommended Parking Lot Trees: Concolor Fir, Trident Maple, Hedge Maple, Fringetree, Kousa Dogwood, Thornless Honey Locust, Eastern Red Cedar, Sweet Gum, Norway Spruce, White Spruce, Serbian Spruce, Colorado Blue Spruce, Japanese Black Pine, London Planetree, Sargent Cherry, Aristocrat Pear, Japanese Tree Lilac, Littleleaf Linden, Japanese Zelkova

- Derive all trees planted in parking areas from the Recommended Parking Lot Tree List.
- Plant trees in all parking environments to enhance the site. For every 6 parking spaces, one tree species must be planted and maintained.
- When selecting and siting parking lot trees, avoid vegetation that could block sight lines of motorists or pedestrians.
- Planting of new and replacement trees is encouraged where appropriate.
- Plant smaller tree species where overhead obstacles are present.

Planting, Pruning & Maintenance

A developed commercial environment presents many obstacles for trees: overhead utilities, below grade sewer lines and narrow sidewalks. Care and upkeep of existing and new trees in Darien's commercial areas are essential to keep the town's landscape healthy and flourishing. ***See Appendix VI***

The town arborist shall oversee all planting, pruning and maintenance practices of town trees in the commercial areas. ***See Appendix VII***

- Derive all trees selected as street trees and parking lot trees from the Recommended Street List and Recommended Parking Lot Trees List respectively.
- Plant and prune street trees to maintain unobstructed sight lines for the driver to the building façade. Use proper planting details when planting each tree species.
- Ensure that the size of the tree pit is large enough to support the tree at maturity.
- Execute appropriate pruning especially around power lines in order to train the tree around these obstacles.
- Maintaining the tree with water and fertilizer will extend the life and beauty of the tree.
- Protect existing trees during construction with a sheeted barrier constructed around the trunk and tagged appropriately.

Parking

Successfully integrated buildings in the commercial areas provide for adequate parking to accommodate employees and customers.

There are well-lit municipal and privately owned parking lots throughout town ensuring everyone a convenient and safe place to park day or night. Effective lighting and attractive landscaping between parking bay blocks enhance the design and function.

There are four ways to address parking:

1. Provide sufficient parking for your property, per Zoning Regulations. ***See Zoning Regulations Section 904 for off-street parking requirements.***
2. Obtain a variance from the Zoning Board of Appeals. *Zoning Board of Appeals can only approve a parking variance if there is a "hardship" inherent in the land.*
3. Establish a "Rear Building Line" and dedicate or "ease" everything to the rear of that line for municipal parking. ***See Appendix A of Zoning Regulations.***
4. Create a shared parking agreement. ***See Zoning Regulations Section 905.***

See Treescape section for recommended tree list when planning the parking lot landscape design.

See Appendix I for light fixture specifications used in municipal parking lots.

Equipment & Service Areas

Visual harmony in building design is achieved when utility features are screened from the streetscape view.

Integrate building equipment, storage and service areas into the site plan and architectural composition in ways that minimize impact.

Utility Wires

- Install new utility service systems underground.
- Bury all existing above ground services when renovating.

Gas, HVAC, Generators, Meters, Transformers

- With the exception of solar panels, conceal all roof mounted equipment such as HVAC, plumbing, exhaust fans and transformers from the public right-of-way using detailing incorporated into the architectural design as opposed to an applied barrier. ***See Zoning Regulations Sections 940, 1020.***
- Screen all ground or concrete pad-mounted equipment such as HVAC, electrical, gas, transformers and meters using evergreen plant materials of different species and size, or architectural detailing complementary to the building. ***See Zoning Regulations Sections 940, 1020.***

Delivery Bays, Trash, Storage

- Locate and screen accessory buildings and functions such as trash containers, storage sheds and emergency generators away from parking areas, walks and adjacent land use. Use either a variety of evergreen plant materials or an architectural enclosure in character with the primary building**.** ***See Zoning Regulations Sections 940, 1020.***
- Conceal garage doors and loading areas from view from surrounding streets. ***See Architecture section.***

Maintenance & Repair

As important as the design of a building is, maintenance is an element frequently overlooked but essential to preserving the physical appeal of a building.

A maintenance program enhances the look and durability of your building and contributes positively to the overall appearance of the streetscape. Building a maintenance plan into your design project will ensure your building and property will always look attractive and well kept for future generations to enjoy.

Building Maintenance

- Secure hanging material, repair holes and replace loose boards and shingles in walls, roofs, gutters and overhangs.
- Re-point brickwork, repair holes and replace loose or missing bricks.
- Regularly paint or replace woodwork on store fronts/facades to prevent rotting, chipping and fading.
- Keep windows clean.

Site Landscaping

- Plant plazas, pocket parks, islands, building sites with appropriate, hardy plant material. Keep areas weeded and litter and debris-free. Be mindful of where snow is piled during the winter and the salt content of that snow.
- Lawn areas should be mowed and trimmed regularly.
- Maintain container plantings, replacing plant material as needed.
- Prune trees to enhance physical appearance and guard against hazards.
- Work with garbage service providers to keep the dumpster and surrounding area litter-free, especially in the case of unpleasant garbage truck leaks in the summer.

Walkways & Sidewalks

- Light walkways to ensure safety and use energy saving measures.
- Sweep regularly to keep free of litter and cigarette butts. Remove leaves in a timely manner.
- Repair broken, loose or uneven walkway material to keep hazard-free.
- Remove snow and ice within 24 hours of snowfall per ***Town Ordinance Section 47.5.***

Private Parking Lots

- Repave lots when needed to eliminate potholes and maintain a safe, hazard free surface.
- Re-line parking spaces and traffic flow arrows as needed.
- Remove litter, leaves, snow and ice.

Lighting, Signs & Awnings

- Replace non-functioning bulbs in a timely manner to maintain the attractiveness and perceived vitality of the business.
- Paint light posts regularly
- Maintain seasonal lighting. Periodically remove and/or replace non-functioning lights on privately owned trees to allow proper tree growth.
- Wherever practical, lighting design shall include installation of timers, light and motion sensors and other energy saving devices to reduce the overall energy required.

- Lighting should follow specifications included in town regulations. ***See Zoning Regulations Sections 928.6, 1025.6.***
- Signs should follow specifications included in the ***Zoning Regulations Section 920*** for all commercial zones.
- All signs, together with their supports, brackets, guys and anchors, shall be kept in good repair and in a safe condition. The owner of a sign, and the owner of the premises on which it stands, shall be responsible for keeping the sign and ground around it in a safe, sanitary, neat and clean condition. ***See Zoning Regulations Section 928.5.***
- Repair holes and tears in awnings in a timely fashion.
- Clean awnings regularly.

Street Furniture

- Replace missing slats on benches and maintain in a safe condition.
- Painted parts of street furniture should be maintained regularly.
- Regularly empty and clean privately owned cigarette and trash receptacles and clean and paint when needed.

Building Application Process

All building plans for commercial development must go before the Planning & Zoning Commission for approval.

Planning & Zoning Department

The Planning & Zoning Department, located in the Darien Town Hall, provides staff support to four separate yet interrelated volunteer town boards and commissions: the Planning & Zoning Commission, the Zoning Board of Appeals, the Environmental Protection Commission and the Architectural Review Board.

- The time needed to proceed through the various land use boards will depend on the nature and complexity of the application.
- A simple tenant fit out may only require administrative approval by the Fire Marshal, Zoning Enforcement Officer and a building department official. A review of any signage is needed by the Architectural Review Board.
- A more complex application may require review and action by any or all of the following: the Zoning Board of Appeals, Environmental Protection Commission, Architectural Review Board and Planning & Zoning Commission.

- Connecticut state statutes require that the Planning & Zoning Commission review come last. The other reviews may occur in any order as stated on the following page.
- Variances from regulations are considered by the Zoning Board of Appeals.
- Any activity within 50 feet of watercourses or wetlands or within 100 feet of named watercourses must go before the Environmental Protection Commission. This includes building activity, paving and planting or removal of trees and other vegetation. ***See Darien Inland Wetland and Watercourses Regulations.***
- The Architectural Review Board reviews design plans for new commercial buildings, exterior renovations of buildings façade changes, awnings and signs.
- The Planning and Zoning Commission has jurisdiction over the use of buildings and property, as well as all site development activities.

Steps & Procedures

In order to facilitate the review and approval process, minimize delay, misunderstanding and therefore cost, all applicants are urged to use the following recommended procedure:

Step 1: Contact the Town of Darien Planning & Zoning Department for discussion and explanation of the process and to obtain application forms.

For establishing a use, changing a use, new construction or significant renovations, the process begins with a review of the proposal between the property owner, developer or architect and the town's professional staff. These early discussions are essential in the design review process to save time and expense. The various applicable regulations and guidelines can be explained more fully as they apply to a specific property before any design plans are finalized.

Step 2: Submit a formal application to the Architectural Review Board.

The Architectural Review Board is the first step in the review process. The material required for the ARB meeting is listed on the ARB application. ***See Appendix VIII.*** Following discussions and comments, the Architectural Review Board will make one of five motions in referring the application to the various land use boards and commissions:

- Accept the application as presented.
- Accept with modifications as noted.
- Recommend not accepting the application for specific reasons and request that the application be revised and resubmitted.
- Take no action pending further discussion or resubmission.
- May need to submit to ZBA and EPC if so required.

Step 3: Submit a formal application for Planning & Zoning Commission review.

- Complete and submit a formal application and pay the application fee to the Planning & Zoning Department. See the town website: www.darienct.gov.

Step 4: Submit approved documentation to the Building Department for a construction permit.

- Completed construction documentation submitted to the Building Department will be checked for conformance with applicable codes and regulations. Certain technical items may require review by other town departments such as the Fire Marshal, Health Department, Department of Public Works and Sewer Services.

Boards and Commissions

The ***Architectural Review Board (ARB)*** is an advisory board to the Planning and Zoning Commission (PZC). They do not have public hearings. Upon submission of a complete site plan application, the applicant meets with the ARB prior to the P&Z Commission taking action. The application deadline is the first Tuesday of each month. ARB meetings are usually scheduled on the third Tuesday of each month in the Darien Town Hall. The applicant and/or their representatives should attend the ARB meeting.

The ***Environmental Protection Commission (EPC)*** decides whether a public hearing is to be held and this will affect timing considerations. Public hearings are optional for this commission. The EPC reviews proposed work in wetlands, within 50 feet of watercourses or wetlands or within 100 feet of a named river or stream. These standards are different for a septic system. According to the state statutes, if an EPC review is needed, the application must be filed prior to, or the same day as, any related Planning and Zoning Commission application. The EPC relies upon the ***Darien Inland Wetland and Watercourses Regulations*** in their reviews. Those regulations are available on the town web site www.darienct.gov or for review or purchase from the Planning and Zoning Department during regular office hours.

The ***Zoning Board of Appeals (ZBA)*** is comprised of five members and three alternates and is required to have a public hearing on all applications that require a zoning variance. State statutes require that a public hearing before the ZBA commence within 65 days of the "date of receipt" of the application, and the ZBA must complete the public hearing within 35 days or get an extension. The ZBA must decide the application within 65 days of closing hearing, or get an extension. Four votes out of five are needed to grant a variance.

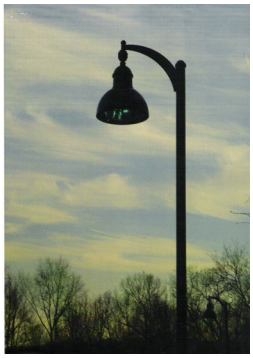
The ***Planning & Zoning Commission (PZC)*** is comprised of six elected members. The statutory deadlines for public hearings and commission action are the same as those for the Zoning Board of Appeals: State statutes require that a public hearing commence hearing within 65 days of the "date of receipt" of the application, and the commission must complete the public hearing within 35 days or get an extension. The Planning & Zoning Commission must decide the application within 65 days of hearing, or get an extension. Planning & Zoning Commission public hearings generally take place the fourth Tuesday of every month, except in August and December. Detailed agendas are available the Friday before a meeting date from the Planning & Zoning Department and on the town web site: www.darienct.gov.

Because of various requirements of the state statutes, the application submittal deadlines for the Planning & Zoning Commission are usually 39 days prior to the public hearing.

The Planning & Zoning Commission is also authorized to review and act upon any changes to the zoning regulations, zoning map and the Town Plan of Conservation & Development.

Guidelines: Appendix

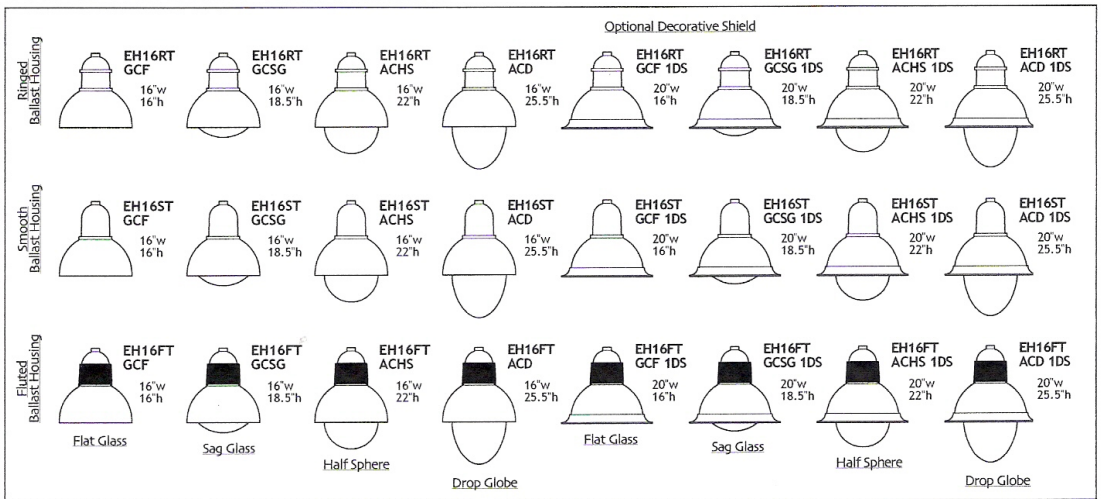
I. Municipal Parking Lot Light Fixtures

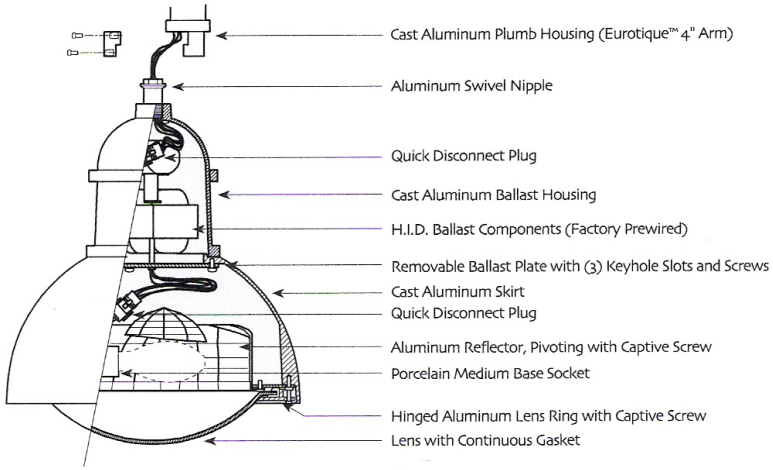


Eurotique – Hanover Series Large Luminaires

- Luminaire: EH 22RT
- GCF (lens material – Glass Clear Flat)
- Arm: EH L5
- Finish: Black anodized
- Pole height per building regulations: 16 feet max.

HANOVER SERIES Small Luminaires — EUROTIQUE™ Architectural Lighting





ORDERING INFORMATION

Choose the **boldface** catalog nomenclature that best suits your needs and write it on the appropriate line.

Example: **EH16RT 150S MED GCSG SR2 120 ANBK DF**

Series	Wattage/Lamp (H.I.D. ballast & socket)	Distribution[3]	Voltage	Finish[2]	Options
EH16RT	50M MED 50 watt Metal Halide	SR2 IES Distribution	120	ANBK Black	HS House Side Shield
EH16ST	70M MED 70 watt Metal Halide	SR3 IES Distribution	208	ANDB Dark Bronze	SF Single Fusing
EH16FT	100M MED 100 watt Metal Halide	SR4SC IES Distribution	240	ANDG Dark Green	DF Double Fusing
	150M MED 150 watt Metal Halide	SR5S IES Distribution	277	ANVG Verde Green	1DS Decorative Shield
	35S MED 35 watt High Pressure Sodium		347	ANPP Prime Painted	
	50S MED 50 watt High Pressure Sodium		480[1]	CM Custom Match	
	70S MED 70 watt High Pressure Sodium		TB[1]	CS Custom Select RAL colors	
	100S MED 100 watt High Pressure Sodium				
	150S MED 150 watt High Pressure Sodium				

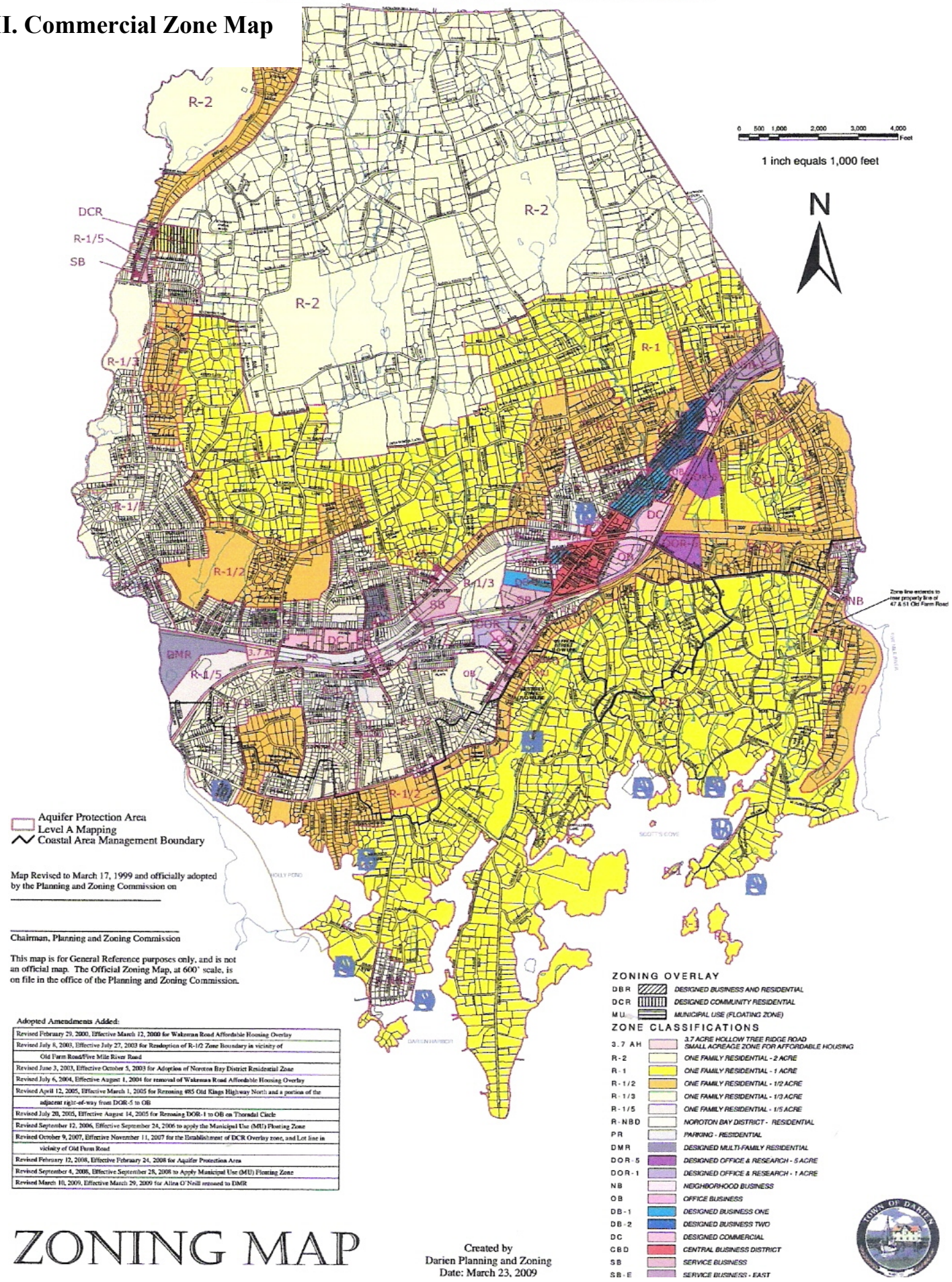
Lens Material

GCF Glass, Clear Flat
GCSG Glass, Clear Sag
ACHS Acrylic, Clear Half Sphere
ACD Acrylic, Clear Drop Globe

NOTES:
1. *Multi-tap Ballast (120, 208, 240, 277v). (120, 277, 347v in Canada). For wattages under 70S or 70M contact ASL for voltage availability.*
2. *For finish and color options, see Finish section in catalog.*
3. *See Photometric tab for IES classifications and Iso Illuminance plots for each lens type and reflector combination.*

ANTIQUE Street Lamps
An AcuityBrands Company
2011-B W. Rundberg Ln. • Austin, TX 78758
Ph (512) 977-8444 • Fax (512)977-9622
www.antiquestreetlamps.com

II. Commercial Zone Map



III. Model Block Specifications

Street light fixtures and poles, cement sidewalk with brick pavers, benches and trash bins

- **Luminaire Specifications**

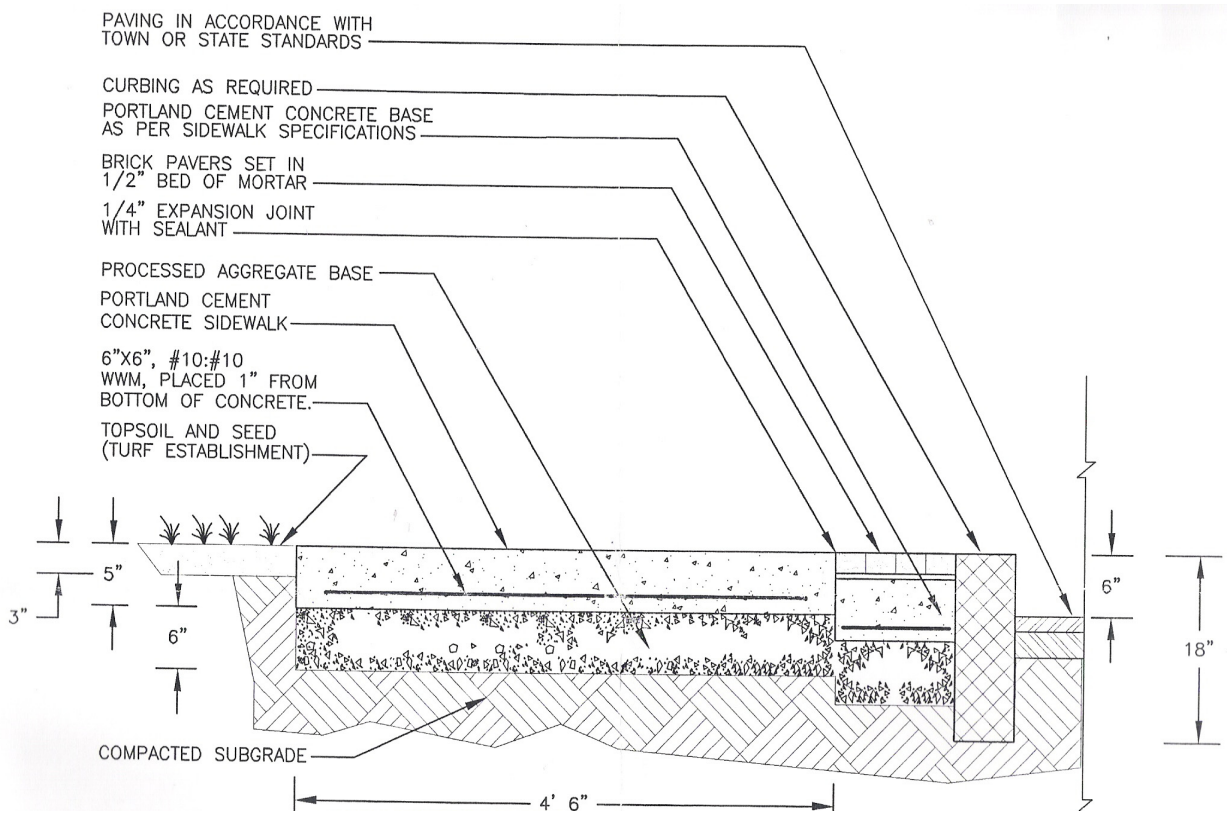
Style: Van Buren with Saratoga Finial
Height: 29 5/8" ±
Width: 16 7/8" ±
Material: Cast Aluminum
Globe: Polycarbonate
Finish: Finish Paint Sherwin Williams Corothane II – Satin Black
Lamping: 150 Watt High Pressure Sodium (Lamp provided wither by Spring City or by others)
Voltage: 120 volts
Socket: Mogul Base

- **Lamp Post Specifications**

Style: Madison Modified (Breakaway anchor type, breakaway couplings by others)
Height: 9'- 8 ½" ± (9'- 3" ± without drum base)
Light Center: 11'- 3 ½" ±
Base: 18 ½" ± - diameter
Material: 1 piece, heavy wall cast iron per A.S.T. M. A 48-83 Class 30
Finish: Prime paint Sherwin Williams 2 part recoatable epoxy primer (B67H5 – Part G and B67V5 – Part H)
Access Door: Located in base secured with tamper proof hex socket security machine screws
Ground stud Provisions: Drill and tap inside wall of base opposite access door to accommodate a ¼"-20 ground stud (ground stud supplied by others)
Anchor Bolts: (4) 1" x 30" = 4" hook (fully galvanized with 1 galvanized washer and 1 galvanized nut per bolt) when required
Bolt Projection: 2 ½" to 3" required
Tenon: 2 7/8" diameter x 2 ½" high

- **Asphalt/Brick Pavers/Curbing**

Note: Contact Planning & Zoning office for additional details and specifications



IV. Bench Specifications

VICTOR STANLEY, INC.®
-Manufacturers of Quality Site Furnishings since 1962-

Classic Series | C-10

Model C-10: A classic beauty, this bench features a gently sloping back and massive ductile iron end frames.

Lengths:
Available as standard in 4, 6 or 8 ft. (1.2, 1.8 or 2.4 meter) lengths with wood slats. Available in 4 or 6 ft. (1.2 or 1.8 meter) lengths with 2nd Site Systems® recycled slats.

Options:
Available with intermediate armrests. Custom lengths are available.

Standard:
All fabricated metal components are steel shotblasted, etched, phosphatized, preheated and electrostatically powder-coated with TGIC polyester powder coatings.

Victor Stanley castings are genuine DUCTILE-IRON and carry our 10-year warranty against breakage.

Classic Series | C-7

Model C-7: A perfect match for the C-9 table and C-10 bench. The gently contoured C-7 backless bench includes elegant armrests integral to its beautiful ductile iron end frames.

Lengths:
Available as standard in 4, 6 or 8 ft. (1.2, 1.8 or 2.4 meter) lengths with wood slats. Available in 4 or 6 ft. (1.2 or 1.8 meter) lengths with 2nd Site Systems® recycled slats.

Options:
Intermediate armrests. Custom lengths are available.

Standard:
All fabricated metal components are steel shotblasted, etched, phosphatized, preheated and electrostatically powder-coated with TGIC polyester powder coatings.

Victor Stanley castings are genuine DUCTILE-IRON and carry our 10-year warranty against breakage.

V. Trash Bin Specifications

Concourse Series

Model RS-12: Concourse Series Litter Receptacle

Model RS-12: Vertical steel slats with open lattice-work and old circular detailing make this Concourse litter receptacle truly distinctive in design and concept.

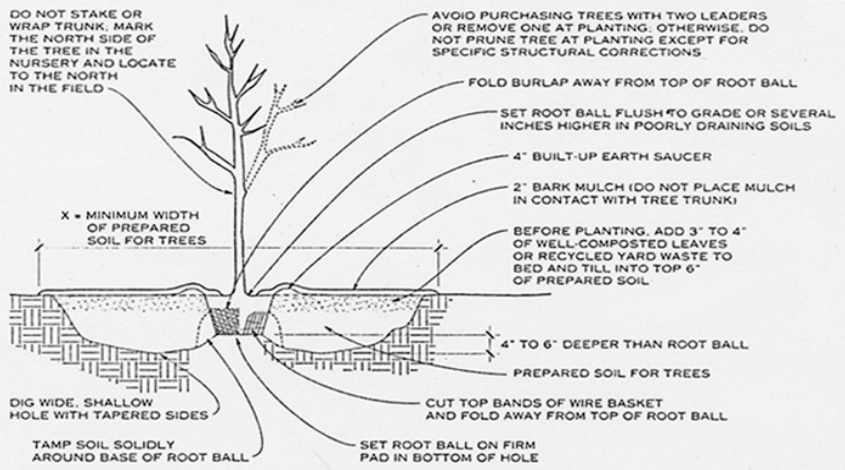
Standard Capacities:
FC-10: 24-gallon (90 liter)
FC-12: 36-gallon (136 liter)
RS-10: 24-gallon (90 liter)
RS-12: 36-gallon (136 liter)
RS-6: Ash urn with stainless steel ashtray
FC-6: Ash urn with stainless steel ashtray

Standard:
All fabricated metal components are steel shotblasted, etched, phosphatized, preheated and electrostatically powder-coated with TGIC polyester powder coatings. Other standard features include a formed lid attached to the frame with two vinyl-coated steel aircraft cables, a high-density plastic liner, and rubber-tipped leveling feet on the base.

Interior plastic liners for our litter receptacles offer substantial value and are produced on molds that we designed and own. These plastic cans are reinforced, ribbed, and molded for durability, ease of use, and greater capacity.

VI. Planting Details

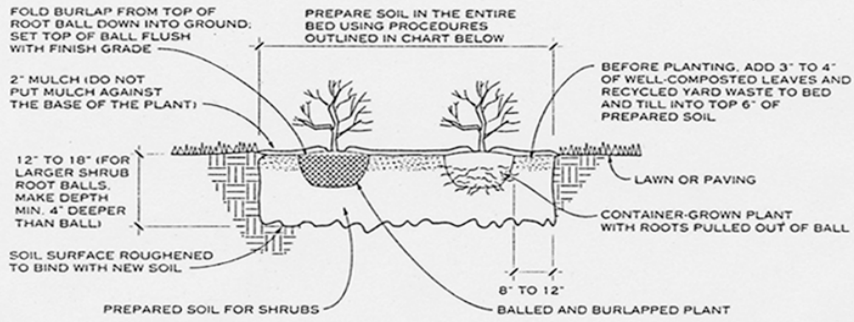
Balled and Burlapped Plants



NOTES

1. For container-grown trees, use fingers or small hand tools to pull the roots out of the outer layer of potting soil; then cut or pull apart any roots circling the perimeter of the container.
2. Incorporate commercially prepared mycorrhiza spores in the soil immediately around the root ball at rates specified by the manufacturer.
3. During the design phase, confirm that water drains out of the soil; design alternative drainage systems as required.
4. Thoroughly soak the tree root ball and adjacent prepared soil several times during the first month after planting and regularly throughout the following two summers.
5. The planting process is similar for deciduous and evergreen trees.

TREE PLANTING DETAIL (BALLED AND BURLAPPED PLANTS)



NOTES

1. For container-grown shrubs, use fingers or small hand tools to pull the roots out of the outer layer of potting soil; then cut or pull apart any roots that circle the perimeter of the container.
2. Incorporate commercially prepared mycorrhiza spores in the soil immediately around the root ball at rates specified by the manufacturer.
3. Confirm that water drains out of the soil during the design phase; design alternative drainage systems as required.

SHRUB PLANTING DETAILS

SOIL IMPROVEMENT

The quality of soil available for planting varies widely from site to site, especially after construction activity has occurred. The nature of construction results in compaction, filling, contamination, and grading of the original soil on a site, rapidly making it useless for planting. Previous human activity at a site can also affect the ability of the soil to support plants.

During the design phase, assumptions must be made regarding the probable condition of the soil after construction is complete. The health of existing or remaining soil determines what types of soil preparation will be required and the volume of soil to be prepared. Conditions will vary from location to location within a project, and details must be condition-specific. For large projects or extreme conditions, it is useful to consult an expert experienced in modifying planting soils at urban sites.

NOTES

1. If site or design constraints prohibit use of the dimensions shown on this page, follow the guidelines for planting in urban areas.
2. Whenever possible, the soil improvement area should be connected from tree to tree.
3. Always test soil for pH and nutrient levels and adjust these as required.
4. Loosen soil with a backhoe or other large coarse-tilling equipment when possible. Tilling that produces large, coarse chunks of soil is preferable to tilling that results in fine grains uniform in texture.
5. The bottom of planting soil excavations should be rough to avoid matting of soil layers as new soil is added. It is preferable to till the first lift (2 to 3 in.) of planting soil into the subsoil.

STANDARD ROOT BALL SIZES FOR NURSERY-GROWN SHADE TREES

CALIPER* (IN.)	HEIGHT RANGE (FT-IN.)	MAX. HEIGHT (FT)	MIN. BALL DIA. (IN.)	MIN. BALL DEPTH (IN.)
1/2	5-6	8	12	9
3/4	6-8	10	14	10-1/2
1	8-10	11	16	12
1-1/4	8-10	12	18	13-1/2
1-1/2	10-12	14	20	13-1/2
1-3/4	10-12	14	22	14-1/2
2	12-14	16	24	16
2-1/2	12-14	16	28	18-1/2
3	14-16	18	32	19-1/2
3-1/2	14-16	18	38	23
4	16-18	22	42	25
5	18-20	26	54	32-1/2

*Up to and including the 4-in. caliper size, the caliper measurement indicates the diameter of the trunk 6 in. above ground level. For larger sizes, the caliper measurement is taken 12 in. above ground level.

NOTES

1. See American Standard for Nursery Stock, ANSI Z60.1, for complete list of nursery standards for other types and sizes of trees and shrubs.
2. See International Society of Arboriculture's "Principles and Practices of Planting Trees and Shrubs," 1997.

GENERAL RANGE OF SOIL MODIFICATIONS AND VOLUMES FOR VARIOUS SOIL CONDITIONS

POSTCONSTRUCTION SOIL CONDITION	MIN. WIDTH PREPARED SOIL FOR TREES (X)	TYPE OF PREPARATION
Good soil (not previously graded or compacted, topsoil layer intact)	6 ft or twice the width of the root ball, whichever is greater	Loosen the existing soils to the widths and depths shown in details above.
Compacted soil (not previously graded, topsoil layer disturbed but not eliminated)	15 ft	Loosen the existing soils to the widths and depths shown in details above; add composted organic matter to bring the organic content up to 5% dry weight.
Graded subsoils and clean fills with clay content between 5 and 35%	20 ft	Minimum treatment: loosen existing soil to widths and depths shown, add composted organic matter to bring organic content up to 5% dry weight. Optimum treatment: remove top 8-10 in. or the existing material, loosen existing soils to the widths and depths shown, add 8-10 in. of loam topsoil.
Poor quality fills, heavy clay soils, soils contaminated with rubble or toxic material	20 ft	Remove existing soils to the widths and depths shown, replace with loam topsoil.

James Urban, ASLA; James Urban Landscape Architecture; Annapolis, Maryland
American Nursery & Landscape Association (formerly AAN); Washington, D.C.

James Urban, ASLA, James Urban Landscape Architecture, Annapolis, Maryland

VI. Planting Details – continued

Construction Around Existing Trees, Tree and Root Protection

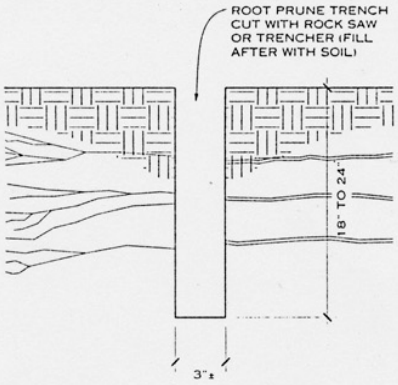
CONSTRUCTION AROUND EXISTING TREES

Great care should be taken not to compact, cut, or fill the earth within the crown area of existing trees. Most tree roots are located in the top 6 to 18 in. of the soil and often spread considerably farther than the drip line of the tree. Compaction can cause severe root damage and reduce the movement of water and air through the soil. To avoid compacting the earth, do not operate equipment or store materials within the crown spread.

Before construction begins, inject the soil within the crown area of nearby mature trees with commercially prepared kelp-based fertilizer and mychorrhiza fungus developed to invigorate tree roots. Prune tree roots at the edge of the root save area, as roots pulled during grading can snap or split well into the root save area. Rot and disease that enters dying roots in compacted or filled areas can move into the tree if root pruning has not been carried out. Install tree protection fencing and silt protection at the limits of construction activity near trees.

During construction, apply additional water in the canopy area to compensate for any root loss beyond the crown spread. Have all mature trees inspected by a certified arborist before construction begins to identify any special problems. Remove all deadwood and treat all trees for existing insect and disease problems. When possible, begin fertilization and problem treatments at least one full growing season before construction.

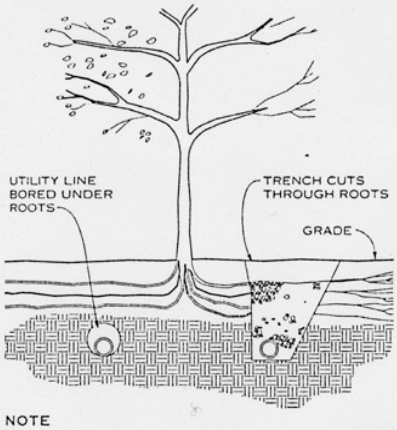
Removal of significant portions of the crown will affect the health of a tree by reducing its ability to photosynthesize in proportion to the mass of its trunk. Younger, healthier trees withstand construction impacts better than older trees.



NOTE

A root prune trench severs roots with a clean cut, protecting remaining roots from cracking, rot, and disease.

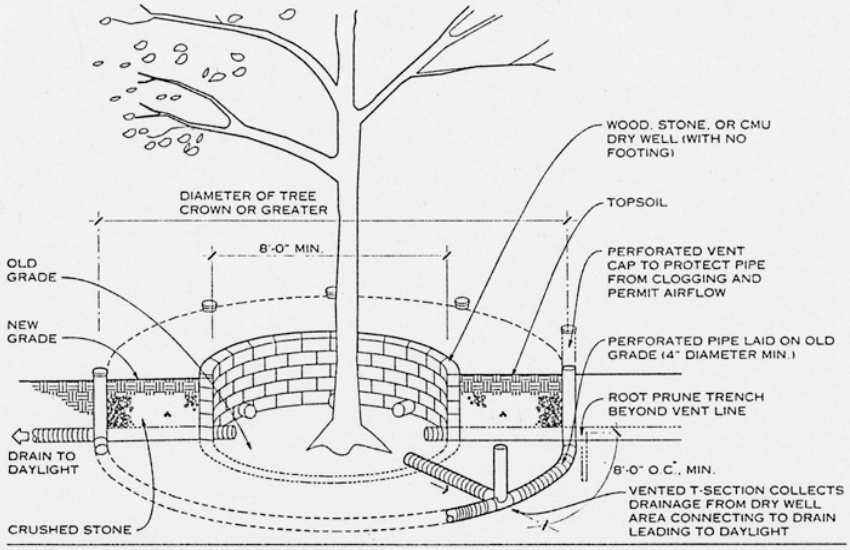
ROOT PRUNE TRENCH



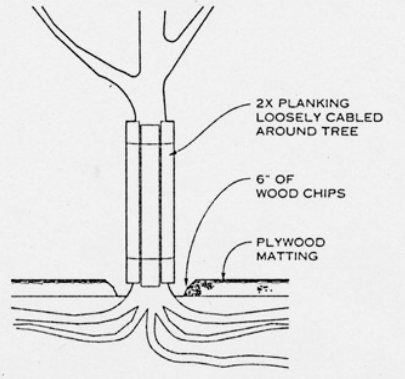
NOTE

Fewer roots are severed by tunneling under a tree than by digging a trench beside it.

UNDERGROUND UTILITY LINE NEAR EXISTING TREES

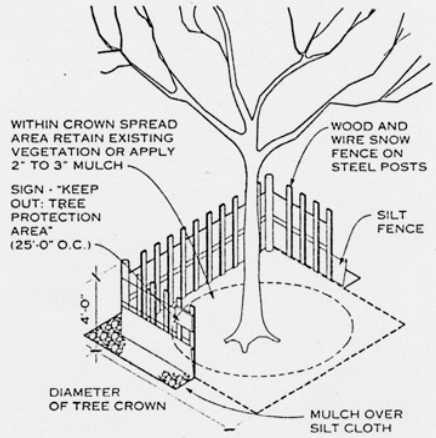


FILLING AROUND EXISTING TREE



NOTE

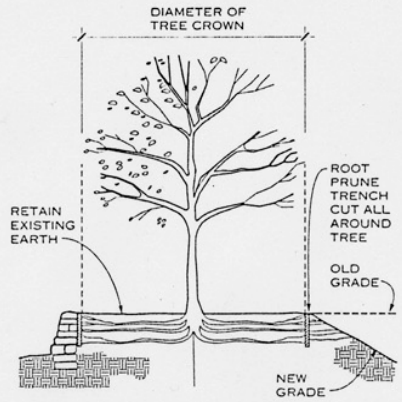
If construction operations must take place within the crown spread area, install 6 in. of wood chips on top of the soil to protect it. Use plywood matting over mulch in areas where equipment must operate. Protect the trunk of the tree with planking loosely cabled around the tree to reduce scarring by equipment. Remove planking, matting, and mulch as soon as operations are finished.



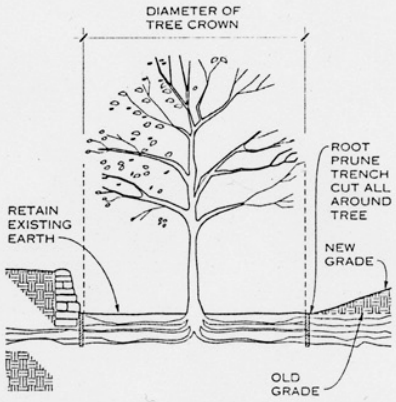
NOTE

A barrier such as that illustrated can keep construction equipment and personnel from compacting the soil around tree roots.

TREE AND ROOT PROTECTION



CUTTING GRADE AROUND EXISTING TREE

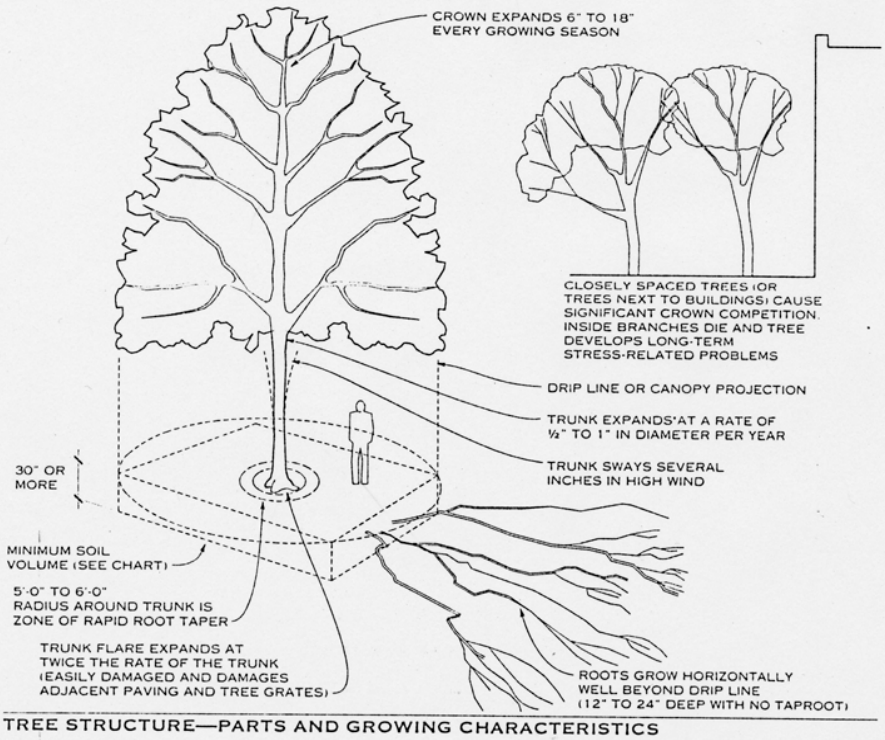


FILLING GRADE AROUND EXISTING TREE

James Urban, ASLA; James Urban Landscape Architecture; Annapolis, Maryland

VI. Planting Details – continued

Tree Planting in Urban Areas: Soil Volume, Soil Protection from Compaction and Degradation, Tree Structure – Parts and Growing Characteristics



TREE STRUCTURE—PARTS AND GROWING CHARACTERISTICS

GENERAL

Areas of dense urban development leave little room for tree roots to develop. Large areas of pavement, competition with foundations and utilities for space below ground, and extensive soil compaction and disruption limit the amount of soil available for trees. When the area of ground around the tree open to the rain and sun is less than 400 to 500 sq ft per tree, the following design guidelines should be followed to encourage the growth of large healthy trees.

Five major parts of the tree structure must be accommodated in the design process:

CROWN GROWTH: The tree crown expands every growing season at a rate of 6 to 18 in. per year. Once the crown reaches a competing object such as a building or another tree canopy, the canopy growth in that area slows and then stops. Eventually the branches on that side of the tree die. As the canopy expansion potential is reduced, the overall growth rate and tree health are also reduced.

TRUNK GROWTH: The tree trunk expands about ½ to 1 in. per year. As the tree increases in size, the lower branches die and the trunk lengthens. Tree trunks move considerably in the wind, especially during the early years of development, and are damaged by close objects.

TRUNK FLARE: At the point where the trunk leaves the ground, most tree species develop a pronounced swelling or flare as the tree matures. This flare grows at more than twice the rate of the main trunk diameter and helps the tree remain structurally stable. Any hard object placed in this area, such as a tree grate or confining pavement, will either damage the tree or be moved by the tremendous force of this growth.

ZONE OF RAPID ROOT TAPER: Tree roots begin to form in the trunk flare and divide several times in the immediate area around the trunk. In this area, about 5 to 6 ft away from the trunk, the roots rapidly taper from about 6 in. in diameter to about 2 in. Most damage to adjacent paving occurs in this area immediately around the tree. Keeping the zone of rapid taper free of obstructions is important to long-term tree health. Once a tree is established, the zone of rapid taper is generally less susceptible to compaction damage than the rest of the root zone.

ROOT ZONE: Tree roots grow radially and horizontally from the trunk and occupy only the upper layers (12 to 24 in.) of the soil. Trees in all but the most well-drained soils do not have taproots. A relationship exists between the amount of tree canopy and the volume of root-supporting soil required (see the accompanying chart). This relationship is the most critical factor in determining long-term tree health. Root-supporting soil is generally defined as soil with adequate drainage, low compaction, and sufficient organic and nutrient components to support the tree. The root zone must be protected from compaction both during and after construction. Root zones that are connected from tree to tree generally produce healthier trees than isolated root zones.

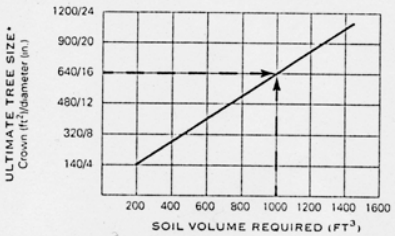
SOIL MODIFICATIONS

Thoroughly till organic matter into the top 6 to 12 in. of most planting soils to improve the soil's ability to retain water and nutrients. (Do not add organic matter to soil more than 12 in. deep.) Use composted bark, recycled yard waste, peat moss, or municipal processed sewage sludge. All products should be composted to a dark color and be free of pieces with identifiable leaf or wood structure. Recycled material should be tested for pH and certified free of toxic material by the supplier. Avoid material with a pH higher than 7.5.

Modify heavy clay or silt soils (more than 40% clay or silt) by adding composted pine bark (up to 30% by volume) and/or gypsum. Coarse sand may be used if enough is added to bring the sand content to more than 60% of the total mix. Improve drainage in heavy soils by planting on raised mounds or beds and including subsurface drainage lines.

Modify extremely sandy soils (more than 85% sand) by adding organic matter and/or dry, shredded clay loam up to 30% of the total mix.

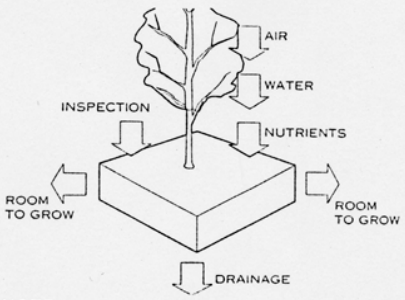
SOIL VOLUME FOR TREES



*The ultimate tree size is defined by the projected size of the crown and the diameter of the tree at breast height.

NOTE

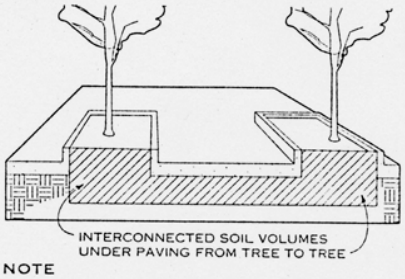
For example, a 16-in. diameter tree requires 1000 cu ft of soil.



NOTE

Soil volume provided for trees in urban areas must be sufficient for long-term maintenance.

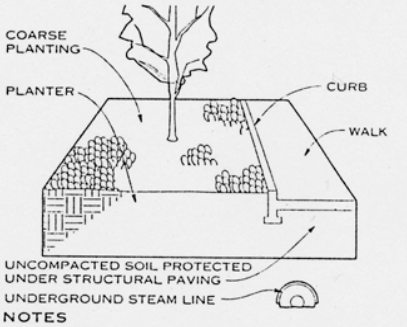
SOIL VOLUME—REQUIREMENTS FOR TREES



NOTE

The interconnection of soil volumes from tree to tree has been observed to improve the health and vigor of trees.

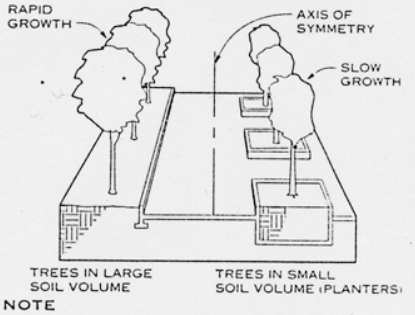
SOIL VOLUME—INTERCONNECTION



NOTES

1. Coarse plantings keep pedestrians out of planters.
2. Curbs protect planters from pedestrians and deicing salts.
3. Underground steam lines must be insulated or vented to protect planter soil.

SOIL PROTECTION FROM COMPACTION AND DEGRADATION



NOTE

If visually symmetrical tree planting is required, symmetrical soil volumes are also required to produce trees of similar crown size.

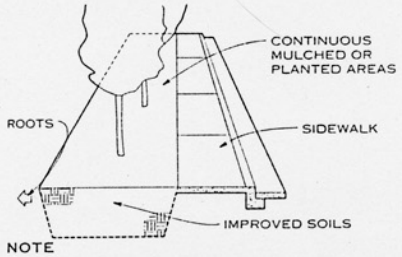
VISUALLY SYMMETRICAL TREES

VI. Planting Details – continued

Sidewalk and Plaza Tree Planting Options

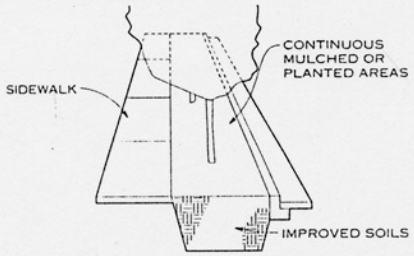
GENERAL

Traditional urban designs in which trees are regularly spaced in small openings within paved areas generally result in poor tree performance. This is because such designs generally do not provide adequate soil for root growth and ignore the fact that trees must significantly increase trunk size every year. As well, competition for space, both at ground level and below, is intense in urban areas.



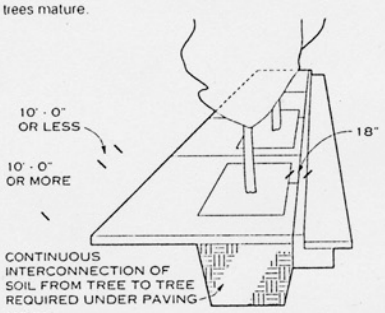
NOTE

Best design option: Planting trees between sidewalks and buildings creates the fewest conflicts between roots and paving by permitting rooting activity on adjacent property.



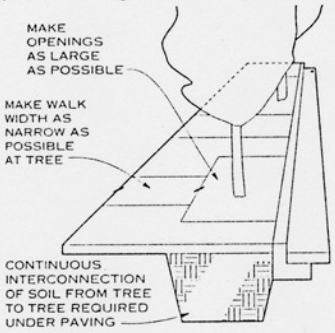
NOTE

Acceptable design option: Planting between curbs and sidewalks in a continuous unpaved planting bed provides good soil levels for trees but contributes to root/paving conflicts as trees mature.



NOTE

Difficult design option: In highly developed areas with parking adjacent to the curb, planting in long narrow tree openings with an 18-in. wide walk along the curb accommodates pedestrians exiting cars. Root/paving conflicts are probable.

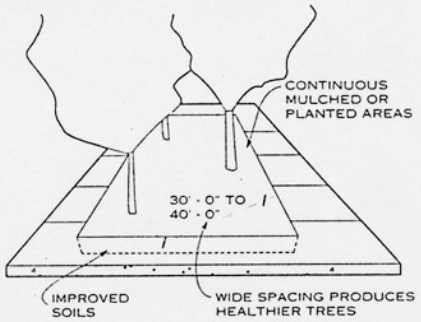


NOTE

Most difficult (and most expensive) design option: Tree openings are undersized for future trunk/root development. Severe root/paving conflicts are very likely.

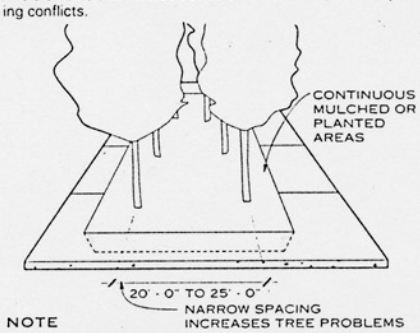
SIDEWALK PLANTING OPTIONS

Although it is possible to design uncompacted soil volumes for trees under pavement, this is very expensive and the soil is never as efficient as that in open planting beds. Increasing trunk size can only be accommodated by using flexible materials that can change configuration over time. Urban designs that have flexible relationships between trees, paving, and planting beds and large areas of open planting soil offer the best opportunity for long-term tree health and lower maintenance costs.



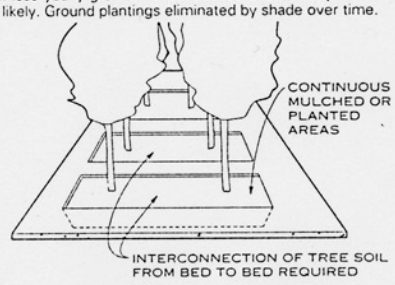
NOTE

Best design option: Separate planting and walking areas. Avoid small disconnected soil volumes to minimize root/paving conflicts.



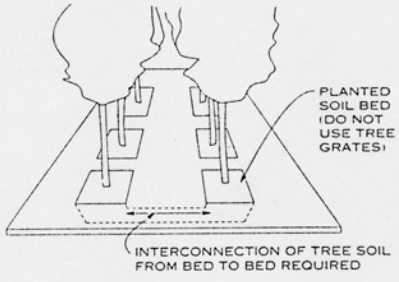
NOTE

Acceptable design option: Each tree has a smaller canopy with less yearly growth. More disease and insect problems are likely. Ground plantings eliminated by shade over time.



NOTE

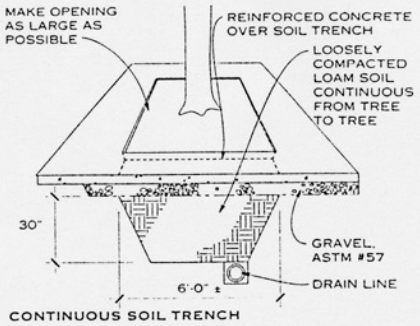
Difficult design option: Shading, slow tree growth, and poor health are problems. Root/paving conflicts are likely.



NOTE

Most difficult (and most expensive) design option: Slow tree growth and severe root/paving conflicts are to be expected.

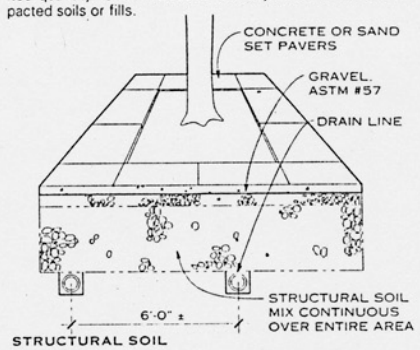
PLAZA TREE PLANTING OPTIONS



CONTINUOUS SOIL TRENCH

NOTE

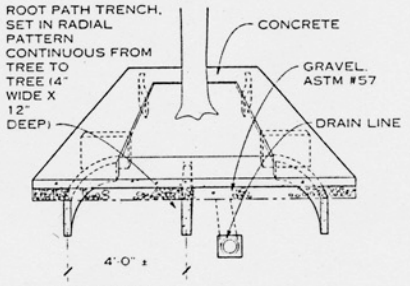
A continuous soil trench provides very good soil but in limited quantity. Use in areas where adjacent backfill is compacted soils or fills.



STRUCTURAL SOIL

NOTE

Structural planting soils replace subgrade material with a fill that can be compacted to meet normal engineering compaction requirements and still support root growth below the pavement. The principle is that when the gravel is compacted, the soil is not because the amount of soil in the mix is insufficient to fill all the voids. Hydrogel, a cross-linked potassium copolymer, is used to help bind the mixture during the mixing process. The soil mix includes ASHTO #4 gravel (100 lb calculated dry weight), shredded clay loam (15-18 lb), hydrogel (0.03 lb), and water ±10 (including the water calculated in the gravel and the soil). For further information, contact the Urban Horticulture Institute at Cornell University (Ithaca, NY).



ROOT PATH TRENCH

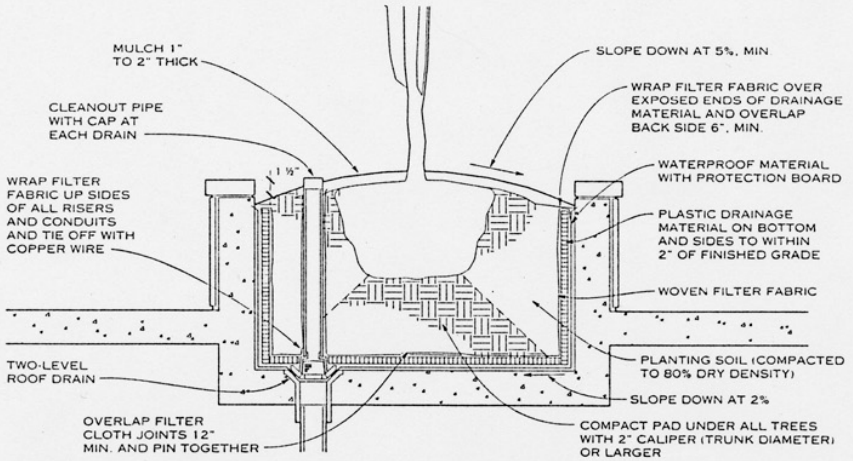
NOTES

1. In urban areas where the pavement subgrade is compacted soil that is free from rubble, toxic, or poorly drained fills, a system of root paths can be installed to guide roots under the pavement, where they have room to grow. These roots grow deeper in the soil, causing fewer root/paving conflicts than roots left to exploit the normal minor weaknesses in paving and subgrades.
2. A root path trench is made by installing a length of strip drain material (a 12-in. wide x 1-in. thick plastic drain core wrapped in filter fabric) in a narrow trench and backfilling with loam topsoil. This allows air and water to flow more freely into the soil under the pavement. Install geotextile fabric and the gravel base material and then the paving.
3. Root paths cannot replace larger soil trenches or structural planting soil in areas in which existing soil conditions are extremely poor for root exploration.

TREE SOIL INTERCONNECTION OPTIONS UNDER PAVING

VI. Planting Details – continued

Tree Guards, Tree Grates, Tree Base Protection



ROOFTOP PLANTER

SELECTING PLANTS FOR ROOFTOP PLANTING

When choosing plants for a rooftop setting, consider the factors outlined below:

WIND TOLERANCE: Higher elevations and exposure to wind can cause defoliation and increase the transpiration rate of plants. High parapet walls with louvers can reduce wind velocity and provide shelter for plants.

HIGH EVAPORATION RATE: The drying effects of wind and sun on the soil in a planter reduce soil moisture rapidly. Irrigation, mulches, and moisture-holding soil additives (diatomaceous earth or organic matter) help reduce this moisture loss.

RAPID SOIL TEMPERATURE FLUCTUATION: The variation in conduction capacity of planter materials results in a broad range of soil temperatures in planters of different materials. Cold or heat can cause severe root damage in certain plant species. Proper drainage helps alleviate this condition.

TOPSOIL: Improve topsoil in planters to provide optimum growing conditions for the plants selected. A general formula calls for adding fertilizer (determined by soil testing) and one part peat moss to five parts sandy loam topsoil. More specific requirements for certain varieties of plants or grasses should be considered.

ROOT CAPACITY: Choose plant species carefully, considering their adaptation to the size of the plant bed. If species with shallow, fibrous roots are used instead of species with a coarse root system, consult with a nursery advisor. Consider the ultimate maturity of the plant species when sizing a planter.

PLANTING DETAILS

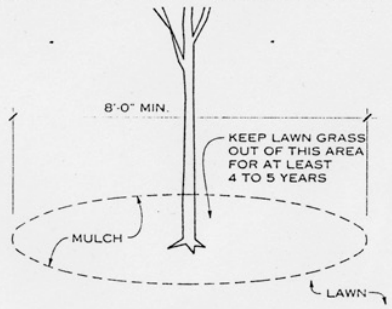
SOIL DEPTH: Minimum soil depth in a planter varies with the plant type: for large trees, the soil should be 36 in. deep or 6 in. deeper than the root ball; for small trees, 30 in. deep; for shrubs, 24 in. deep; and for lawns, 12 in. deep (10 in. if irrigated).

SOIL VOLUME: To determine sufficient soil volume, see chart on Soil Volumes for Trees (on another AGS page in this section).

SOIL WEIGHT: The saturated weight of normal soil mix ranges from 100 to 120 pcf, depending on soil type and compaction rate. Soils can be made lighter by adding expanded shale or perlite. Soils lighter than 80 pcf cannot provide structure adequate to support trees.

DRAINAGE FABRIC: Plastic drainage material should be a minimum of $^1/_2$ in. thick. Most drainage material comes with a filter fabric attached, but the overlap joints provided are not wide enough for the unconsolidated soils found in planters. A second layer of woven filter fabric, delivered in rolls greater than 10 ft in width, should be installed. Tuck the fabric over the exposed top of the drainage material to keep soil out of the drainage layer.

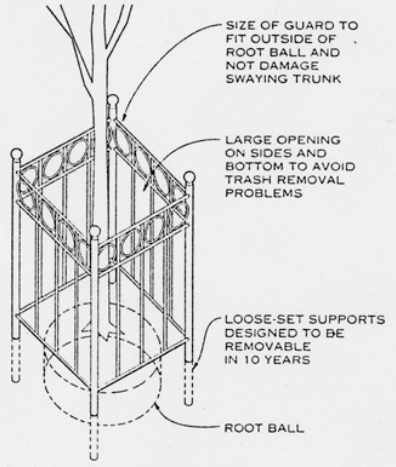
INSULATION: Most planters do not require insulation; however, in colder climates planters with small soil volumes located over heated structures may require insulation. Consult local sources for a list of cold-hardy plants.



NOTE

Young trees planted in lawn areas face substantial competition from the roots of grasses.

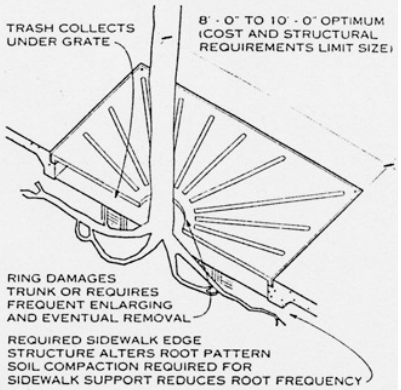
TREES PLANTED IN LAWNS



NOTE

Tree guards can protect young trees from trunk damage caused by bicycles. If made too small, however (less than 30 in. in diameter), they can damage the tree as it grows and are difficult to remove. The high cost and potential harm to trees outweigh the minor protection tree guards afford a trunk. They should only be used in areas with particularly high traffic.

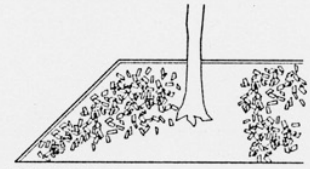
TREE GUARDS



NOTE

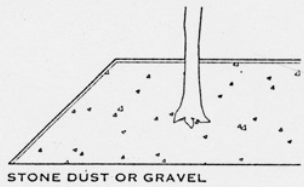
Tree grates decorate the base of a tree but provide no significant benefit. Many aspects of tree grates can damage a tree or reduce its potential for growth.

TREE GRATES

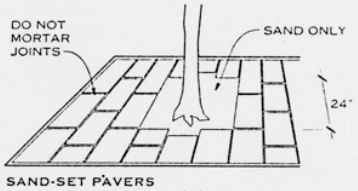


BARK MULCH

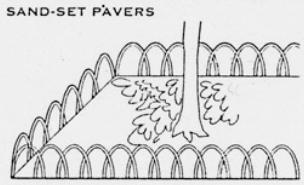
GROUND COVER PLANTS



STONE DUST OR GRAVEL



SAND-SET PAVERS



LOW FENCE AND GROUND COVER

NOTE

Alternatives to tree grates (and guards) include softer, organic coverings that suit the purpose better, are less expensive, and require less maintenance over the life of the tree.

TREE BASE PROTECTION

James Urban, ASLA; James Urban Landscape Architecture; Annapolis, Maryland

James Urban, ASLA, James Urban Landscape Architecture, Annapolis, Maryland

VI. Planting Details – continued

Recommended Street Tree List for Darien Commercial Centers

Scientific Name	Size (Height/Spread)	Use	Characteristics
1. Acer rubrum Red Maple	M (H 40′-60′/S 25′-45′)	Gateway	Red flowers in spring/winged fruit/vibrant fall color
2. Acer buergeranum Trident Maple	S (H 20′-30′/S 20′-30′)	Street Tree	Slow growth/greenish-yellow flower/fruit samaras/fall colors late for maple
3. Acer campestre Hedge Maple	S (H 30′/S 30′)	Street Tree	Slow growth/green flower in May/fruit samaras/dark green leaves in summer-yellow in fall
4. Gleditsia triacanthos Inermus - male Thornless Honey Locust	L (H 30′-70′/S 30′-70′)	Street Tree Sewer Safe	Yellow flower early spring/brown pod/autumn foliage
5. Pyrus calleryana "Aristocrat" Aristocrat Pear	S (H 40′/S 30′-35′)	Street Tree	Small fruit/flowers in March/fall color
6. Syringa reticulata Japanese Tree Lilac	S (H 20′-30′/S 15′-25′)	Street Tree	Flowers in early summer/fruit capsules/poor fall color
7. Zelkova serrata Japanese Zelkova	M (H 50′-60′/S 40′)	Street Tree	Flowers in April/kidney-bean small drupe/yellow-orange-brown in fall

NOTES:

1. Red Maple species are to be planted at designated "gateway" sites only.
2. No species on the Street Tree List should be substituted for a columnar or fastigiated variety.
3. Setbacks from buildings to curb should be maximized to increase space for tree pits and trees.
4. Diversity should be practice when selecting street tree species. No one species shall be planted within 2 tree pits of the same species.

Compiled by Lesley MacAulay Kroll B.A., B.E.D., M.L.A. *2008*

Recommended Parking Lot Tree List for Darien Commercial Centers

Species Name	Size (Height/Spread)	Use	Characteristics
1. Abies concolor Concolor Fir	M (H 30′-50′/S 15′-30′)	Parking Lot	Cones/conical and branched to the base/some bluish needles/year round interest
2. Acer buergeranum Trident Maple	S (H 20′-30′/S 20′-30′)	Street Tree Parking Lot	Slow growth/greenish-yellow flower/samaras fruit/fall colors late for maple
3. Acer campestre Hedge Maple	S (H 30′/S 30′)	Street Tree Parking Lot	Slow growth/green flower in May/samaras fruit/dark green leaves in summer, yellow in fall
4. Chionanthus retusus Fringetree	S (H 20′/S 20′)	Sewer Safe Parking Lot	Pure white flowers/blue drupe fruit in Sept-Oct/brown bark in winter
5. Cornus kousa Kousa Dogwood	S (H 20′-30′/S 15′-20′)	Sewer Safe Parking Lot	Pointed white bracts/raspberry-like drupe in Aug-Oct/sympodial branching in winter
6. Gleditsia triacanthos inermis Thornless Honey Locust-male	L (H 30′-70′/S 30′-70′)	Street Tree Parking Lot Sewer Safe	Yellow flower early spring/brown pod/autumn foliage
7. Juniperus virginiana Eastern Red Cedar	M (H 50′)	Parking Lot	Cones/female for blue cone berries/dense columnar crown/scaled branches
8. Liquidambar styraciflua Sweet Gum	L (H 60′-75′/S 40′)	Parking Lot	Bristly, rounded syncarp fruit/grayish brown bark in winter/attractive star-shaped leaves
9. Picea abies Norway Spruce	L (H 40′-60′/S 25′-30′)	Parking Lot	Cylindrical cones/pyramidal with pendulous branches/stiff when young and graceful at maturity
10. Picea glauca White Spruce	L (H 40′-60′/S 10′-20′)	Parking Lot	Narrow dense spire at maturity/cylindrical cones/year round interest/better salt tolerance
11. Picea omorika Serbian Spruce	L (H 50′-60′/S 20′-25′)	Parking Lot	Cones are oblong/slender trunk with short ascending or drooping branches/excellent salt tolerance
12. Picea pungens Colorado Blue Spruce	M (H 30′-60′/S 10′-20′)	Parking Lot	Cones/dense, pyramidal with horizontal stiff branches to ground/good salt tolerance
13. Pinus thunbergii Japanese Black Pine	M (H 20′-80′/S 20′-40′)	Parking Lot	Cones/at maturity, spreading with pendulous branches. Very salt tolerant
14. Platanus acerfolia London Planetree	L (H 70′-100′/S 65′-85′)	Parking Lot	Bristly, rounded syncarp fruit/cream and olive bark in winter
15. Prunus sargentii Sargent Cherry	M (H 40′-50′/S 40′-50′)	Parking Lot	Single pink flower, inconspicuous fruit ripening in June-July/red-bronze bark with horizontal lenticels in winter
16. Pyrus calleryana "Aristocrat" Aristocrat Pear	S (H 40′/S 30′-35′)	Street Tree Parking Lot	Small fruit/flowers in March/fall color
17. Syringa reticulata Japanese Tree Lilac	S (H 20′-30′/S 15′-25′)	Street Tree Parking Lot	Flowers in early summer/fruit capsules/poor fall color/single or multi stem
18. Tilla cordata Littleleaf Linden	L (H 60′-75′/S 30′-40′)	Parking Lot	Fragrant yellow flowers in late June/nutlet fruit/shiny green leaves in summer/durable
19. Zelkova serrata Japanese Zelkova	M (H 50′-60′/S 40′)	Street Tree Parking Lot	Flowers in April/kidney-bean small drupe/yellow-orange-brown in fall

Compiled by **Lesley MacAulay Kroll B.A., B.E.D., M.L.A.**

Notes: 1. No species on the Parking Lot List should be substituted for a columnar or fastigiated variety.

2. Diversity should be practiced in selecting parking lot trees.

VII. Arborist Information

Department of Public Works - Darien Town Hall, 2 Renshaw Road, 656-7346

VIII. Architecture Review Board (ARB)

ARCHITECTURAL REVIEW BOARD
TOWN OF DARIEN
Town Hall, Darien, CT 06820
INFORMATION SHEET
FOR
APPLICATION FOR ARCHITECTURAL REVIEW

All applicants must complete the application form for preliminary review. This Board will then notify the applicant of any additional information that may be required and will add the application to the agenda of the next regularly scheduled meeting. In addition to the information supplied below, the applicant may submit other supporting facts or documents which may assist the Board in its evaluation of this proposal.

Next Meeting Date_____ Application Deadline _____

APPLICATION CHECKLIST

1. The following must be submitted by the application deadline. The ARB may defer action on the application until all of the requested information has been received.

_____ 12 copies of completed Application Form.

_____ 12 copies of scaled and dimensioned drawings showing the design, materials, typefaces, all colors, and any other pertinent information regarding the proposed sign(s), awning(s), or building modifications.

_____ Application Fee - $30.00 per sign, awning and/or facade change, plus $30.00 required State fee.

The following materials are to be submitted at the Meeting.

_____ Photograph(s) of subject property/business and neighboring properties/businesses (one set).

_____ Samples of proposed colors and materials to be used (one set).

2. Applications received after the application deadline may be placed on the following month's agenda.

3. Applicants or their representatives should plan on attending the meeting to present the application to the Board, to answer questions from the Board and/or discuss possible modifications to the proposed designs.

4. If a request is approved, the applicant must then file for appropriate Zoning and Building Permits as necessary.

NOTE: The Architectural Review Board is acting in an advisory capacity. Any approval or denial by the ARB does not in any way constitute an approval or denial of the application before the Planning and Zoning Commission. The final decision rests with, and is subject to, the schedule of the Planning and Zoning Commission.

ARCHITECTURAL REVIEW BOARD
TOWN OF DARIEN
2 Renshaw Road, Town Hall, Darien, CT 06820
APPLICATION FORM

1. Applicant _____
Address_____ Zip_____
Telephone: Home #_____ Business # _____
E-mail address:_____

2. Applicant's Representative (if not applicant)

Address _____Zip_____
Telephone: Home #_____ Business #_____
E-mail address:_____

3. Applicant's interest in the property
__Owner __Lessee __Lessor __Tenant __Other (Describe)_____

4. Property Owner (if not applicant)
Address _____Zip_____
Telephone: Home # _____Business #_____
==========

5. Subject Property Address: _____
This property is located on the north/south/east/west side of _____(street name) approximately _____feet north/south/east/west of its intersection with _____ _____(street name). Use an additional sheet to draw a sketch showing the property in relation to surrounding roads, businesses and/or landmarks.

Assessor's Map #: ____ Lot #: ____ Zone: ____

APPLICATION FOR NEW BUILDING and/or FACADE CHANGE: Please review the appropriate information sheet prior to submission.

1. Attach a detailed narrative description of the proposed structure. This is to include:
   - the square footage of the structure;
   - the number of units and/or stories;
   - the architectural style or character of the proposed structure and existing nearby structures;
   - the exterior building materials and colors;
   - information regarding any mechanical equipment and screening; and
   - any other appropriate items.

2. Submit a site plan in accordance with Section 1020 of the Darien Zoning Regulations and 12 sets of architectural plans. Colored renderings of the elevations of the proposed structure are particularly helpful and are to be presented at the meeting.

3. The ARB operates in accordance with Subsection 1023.4 of the Darien Zoning Regulations when makings its decisions - reviewing the architectural design to ensure harmony with the neighborhood and surrounding uses, and to preserve and improve the appearance and beauty of the community.

APPLICATION FOR SIGN OR AWNING PERMIT: Please review Section 920, Sign Regulations, of the Darien Zoning Regulations and the appropriate information sheets prior to submitting an application for sign or awning permit.

1. Check all that apply for proposed:
____Awning ____Window Sign ____Ground Sign ____Wall Sign ____Hanging Sign
____Pole Sign ____Other (describe) _____

2. Number of existing signs _____ Number of proposed signs _____.

3. Length of Building Frontage occupied by the business (refer to Subsection 928.9 of the Darien Zoning Regulations): _____L.F.

4. Allowable Square Footage of wall sign (divide business frontage by 3): _____ S.F.

5. Area of Proposed Sign (refer to Subsection 929 of the Darien Zoning Regulations): _____S.F.
Sign height _____width _____.

6. Size of lettering and figures on sign (ten-inch maximum for most signs): _____inches.
Style of type face (font) of lettering: _____

7. Description of Colors:
Background: _____

Lettering:_____

8. Description of Materials:
Background:_____

Lettering:_____

9. Will Sign be illuminated? YES NO. If yes, describe how it will be illuminated without causing traffic safety or other glare problems _____

10. Size of proposed awning: Height _____ Width _____
Projection from wall of building (depth): _____.

11. Distance from sidewalk or ground to bottom of awning: _____.

12. Submit additional information on separate sheets if appropriate.

The undersigned swears that the information supplied in the completed application is accurate, to the best of his/her knowledge and belief.

_____ _____
Date Application Filed Signature of Applicant

If the ARB approves the submitted designs and plans, the applicant is responsible for obtaining the Zoning and Building Permits AND approval from the Zoning Board of Appeals and/or Planning and Zoning Commission if necessary.

SCHEDULE OF FEES
ARCHITECTURAL REVIEW BOARD

APPLICATION FEES

	FEE**	WITH REQUIRED STATE FEE INCLUDED
SIGN, AWNING OR FAÇADE CHANGE PERMITS (FEE IS PER SIGN, AWNING OR FAÇADE CHANGE)	**$30 PER SIGN, AWNING OR FAÇADE CHANGE**	**$30 PER SIGN, AWNING OR FAÇADE CHANGE PLUS $30**

NOTE: The Town of Darien and its agencies shall not be liable for payment of any of the above fees.

***All fees specifically exclude any fee required by the State of Connecticut per Section 22a-27j of the Connecticut General Statutes, which must be collected by the Town. As of July 1, 2004, the State fee was $30.00 per application.*

*The Staff Inspection Fee is per visit and is paid in advance, and returned to the applicant if the project is denied or withdrawn in its entirety. A separate check is recommended.

Revised 6/29/2008

Sample Building Elements: **Façades**

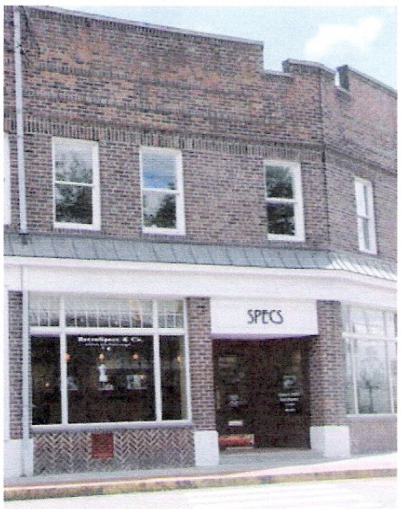









Photo Credit: Jonathan Olmsted

Sample Building Elements: **Doors**

Photo Credit: Jonathan Olmsted

Sample Building Elements: **Windows**

Photo Credit: Jonathan Olmsted

Sample Building Elements: **Awnings**

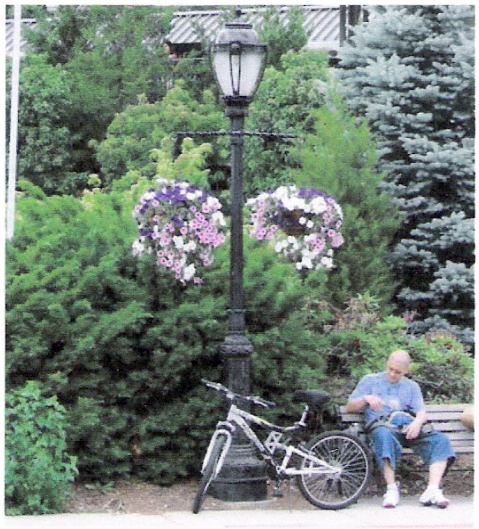
Photo Credit: Jonathan Olmsted

Sample Building Elements: **Lights**









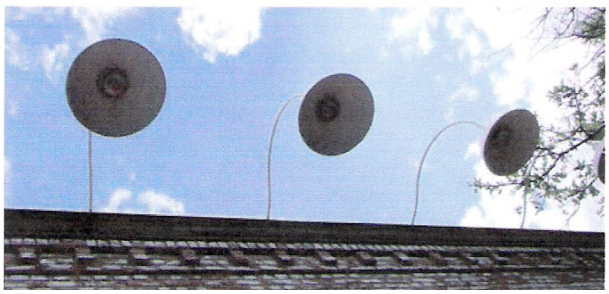
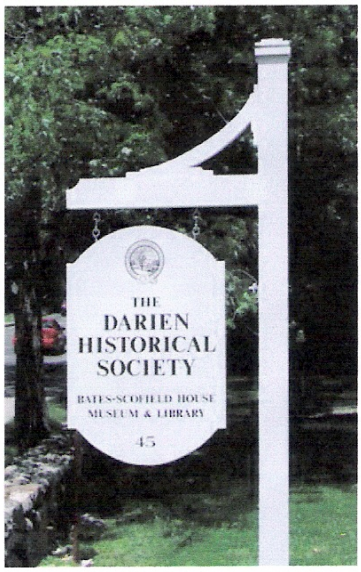
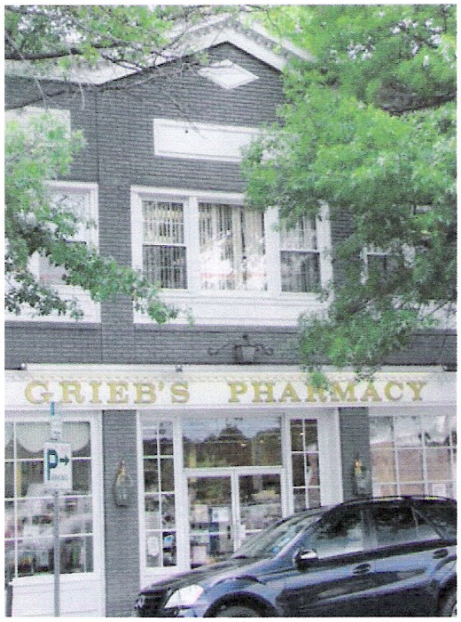


Photo Credit: Jonathan Olmsted

Sample Building Elements: **Signs**





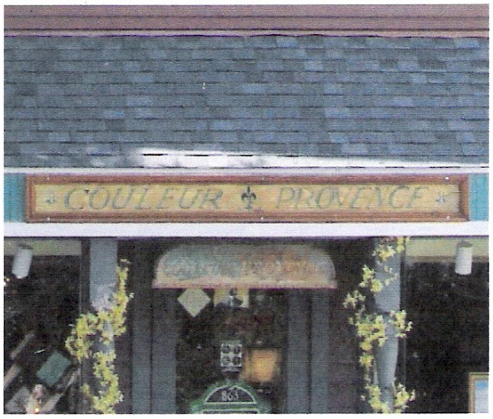


Photo Credit: Jonathan Olmsted