

City of Eau Claire *Landscape Manual*



RESOLUTION

IN THE MATTER of adopting the City of Eau Claire Landscape Manual to be used as a guide by the Plan Commission in its review of site plans and other development proposals.

WHEREAS, in the summer of 1986 the Plan Commission held various meetings with area developers that identified the need to provide a consistent resource manual which identifies landscaping standards for the City of Eau Claire;

WHEREAS, the purpose of this manual is to provide guidelines for the Plan Commission, staff, and development community, for the preparation and review of landscape proposals on site plans and other development proposals;

WHEREAS, the purpose of this manual is also to provide a resource tool to the community on the principles and purposes of landscaping and site design;

WHEREAS, the Plan Commission, staff, and representatives of the development community have reviewed the draft “Landscape Manual” at various meetings and have provided comments which were considered, finding it to be a valuable resource tool in the site plan review process;

WHEREAS, Section 18.30.050 (Site Plan Chapter) of the Zoning Ordinance provides that the Plan Commission may adopt additional policies to further its implementation of the Comprehensive Plan or the Zoning Ordinance, which is the purpose of this landscape manual.

THEREFORE, BE IT RESOLVED that the Plan Commission of the City of Eau Claire hereby adopts the “City of Eau Claire Landscape Manual” as a guide in its review of landscape proposals on site plans and other development applications in the City, and further directs that said manual be made available to all persons undergoing landscape design work in the City and others who may request copies.

Dated: March 3, 1987

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PREFACE

The purpose of this landscape manual is to clarify the objectives established by the City Plan Commission in administering its landscape requirements for site plan reviews. Broad interpretations and inconsistent implementation have, in the past, led to misunderstanding of City requirements. This manual provides a uniform resource to all citizens attempting to landscape a site. This manual does not attempt to state specific standards for landscaping requirements of site plans, but rather illustrates the City's policies concerning site development and aesthetic solutions. Because it is impossible to cover every landscape problem, the manual is generalized and offers solutions to a broad range of situations. This manual will be used by the City Plan Commission as a guide in its review of site plans for development proposals within the community.

This manual also serves as a resource book to the community on the principals of landscaping and site design. The manual illustrates the principal considerations involved in developing a landscape plan and provides an explanation of the functions served by landscaping. The minimum landscape standards of the Zoning Ordinance are stated and illustrations and explanations of these standards are provided to further clarify the purpose of these provisions. Additional design alternatives are provided which go beyond the minimum required by the Zoning Ordinance. These are provided to encourage variety, excellence, and imagination in landscaping throughout the community. Landscape design should also

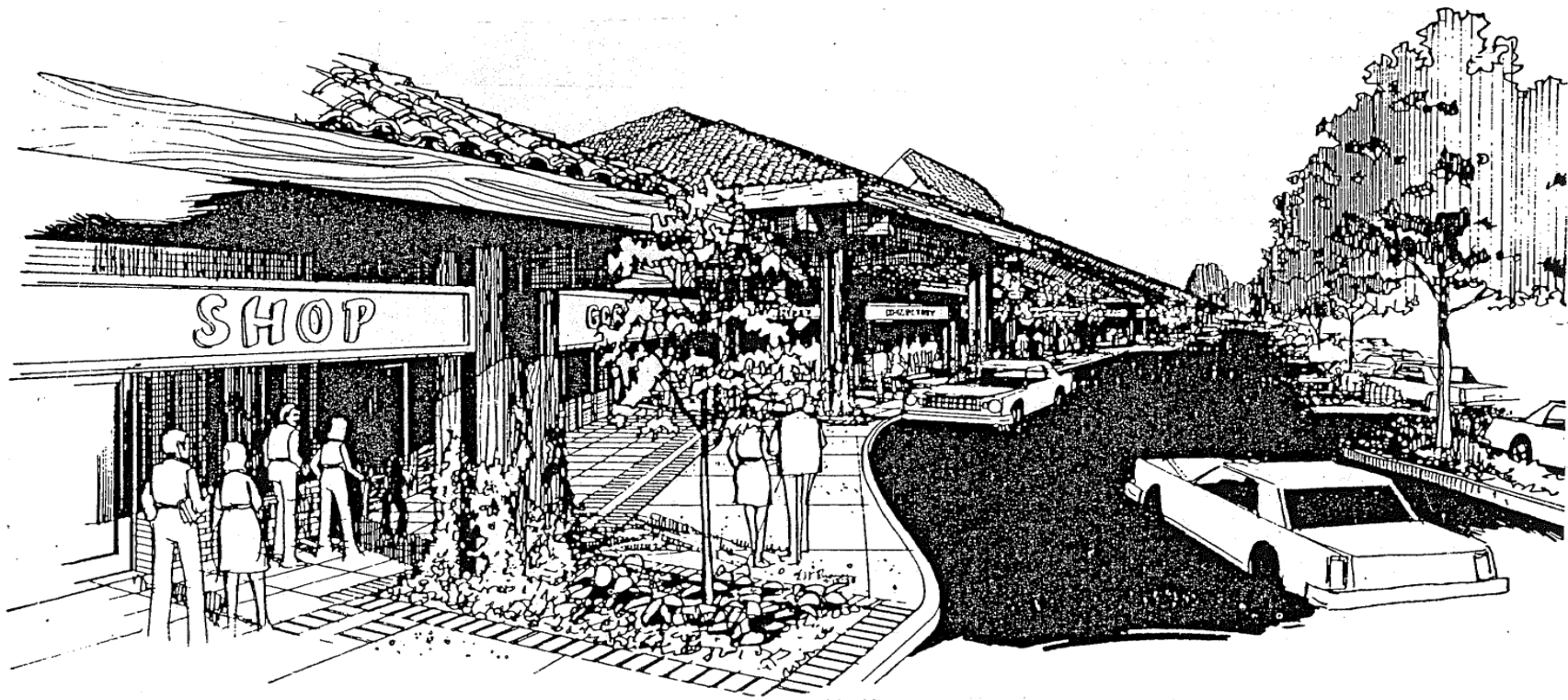


encourage principles of sustainability, such as use of native plants, design that conserves or retains moisture, or reducing the need for chemicals such as pesticides, insecticides, and chemical fertilizer.

INTRODUCTION

The City of Eau Claire is recognized as a “city of trees” with its wooded river valleys and hillsides within and surrounding the community. Development of the City removes much of this natural vegetation, which must be replaced with properly landscaped streets, parking areas, and building sites if the City desires to maintain its landscaped beauty. To accomplish this, the City has established minimum standards for landscaping a proposed development site.

Many businesses, developers, and financiers have realized the benefits of providing beautiful and inviting landscaped spaces for people. Landscaping is a good investment for the present, as well as the future needs of the community. Excellence in design and creative environments sell products better, attract more customers, increase rentals, and accelerate property values faster than mundane and sterile spaces.



1. CREATING A LANDSCAPE PLAN

Landscape architectural design is comprised of many variables that must be carefully considered in creating a landscape plan. Three general categories of data should be evaluated:

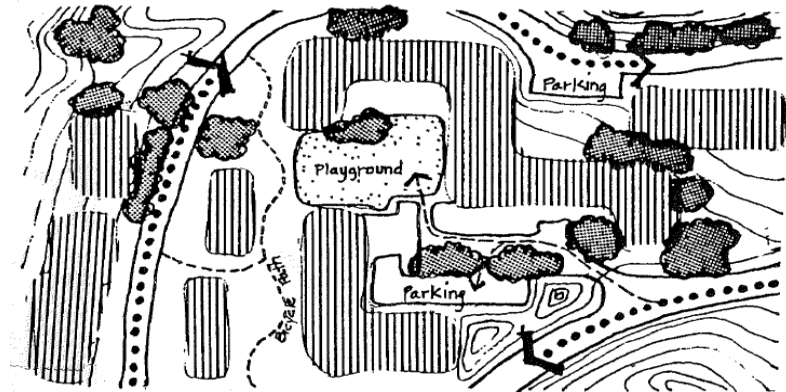
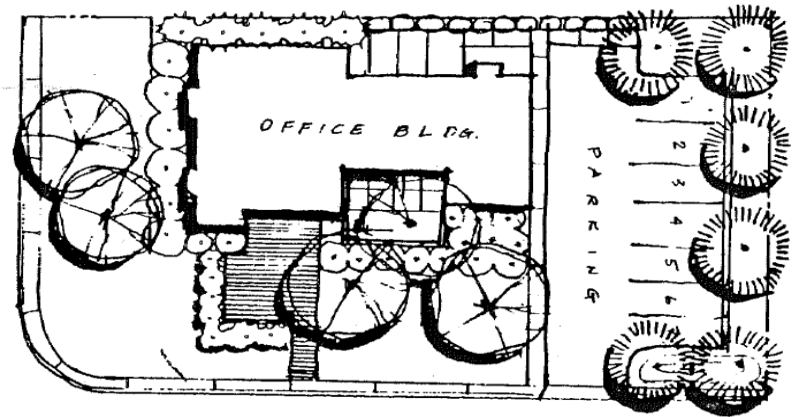
- a) site conditions and adjacent land uses
- b) circulation, structures, and amenities
- c) planting materials

Site Conditions and Adjacent Land Uses

A good designer evaluates the site and its adjacent land uses before determining the landscape plan. Careful attention must be given to soils, vegetation, structures, topography, noise, and climatic conditions. Whether data is mapped or just mentally recorded, the suitability and negative impacts of the site significantly influence the design of its landscape plan.

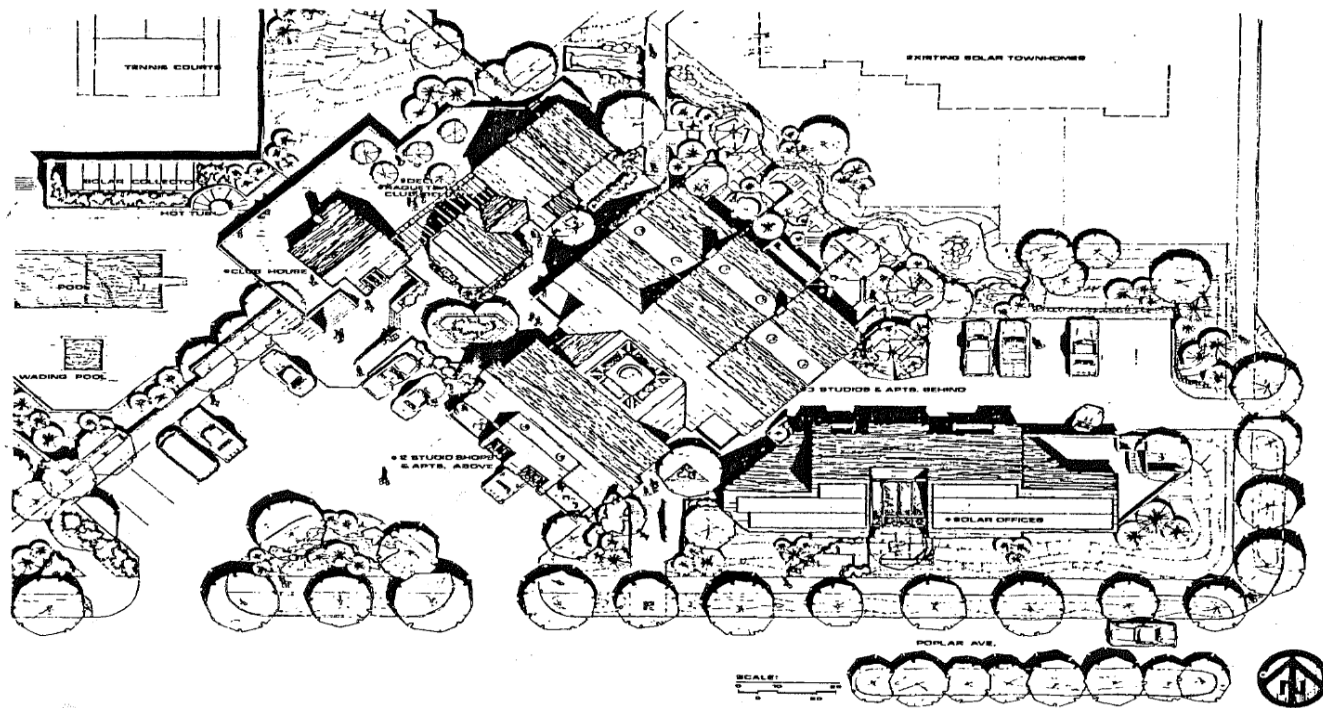
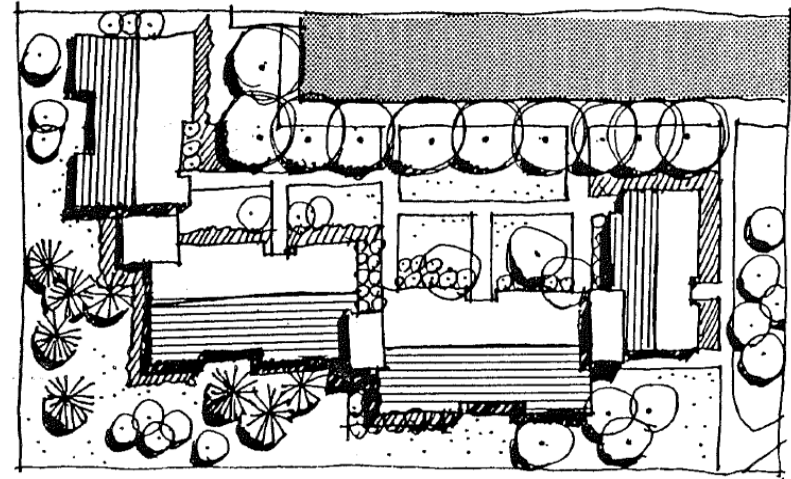
Circulation, Structures, and Amenities

The efficient and safe flow of vehicular and pedestrian traffic through a site is essential to its successful design. Landscape treatment can be used to delineate streets, sidewalks and their intersections, and create a workable plan for automobile and pedestrian movements. With a workable circulation plan, the designer can locate buildings, open spaces, recreational, and people-oriented amenities. Efficiency, economics, and aesthetics must be combined to make a viable site plan.



Planting Materials

Landscape plantings should contribute architecturally to a site plan whether its purpose is for screening, accent, shade, or decoration. For example, many sites are too small in an urbanized area to realistically provide extensive landscape plantings. Thus, a combination of buildings or structures with landscaping plantings work best. The purpose of landscape planting is to create a composition of plants and other materials which enhance the use of the building on the site.



2. SITE APPLICATIONS

When creating a site plan, a developer can apply landscaping to provide several functions, including:

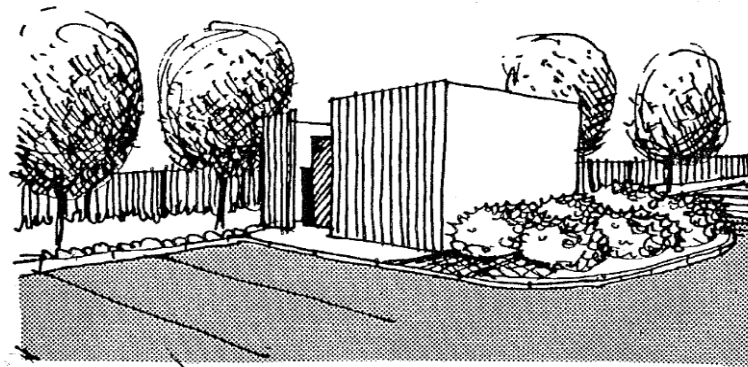
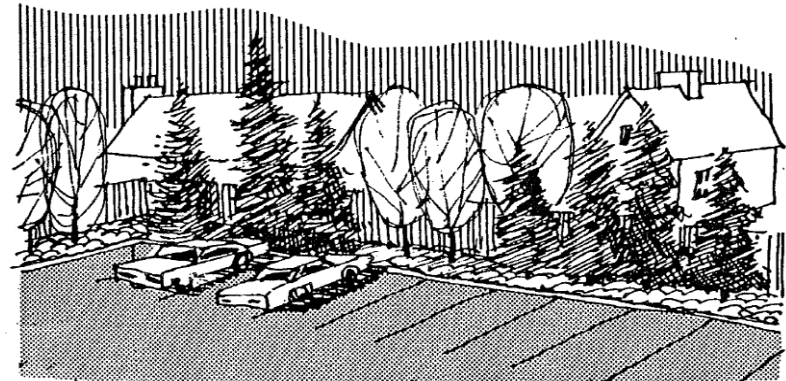
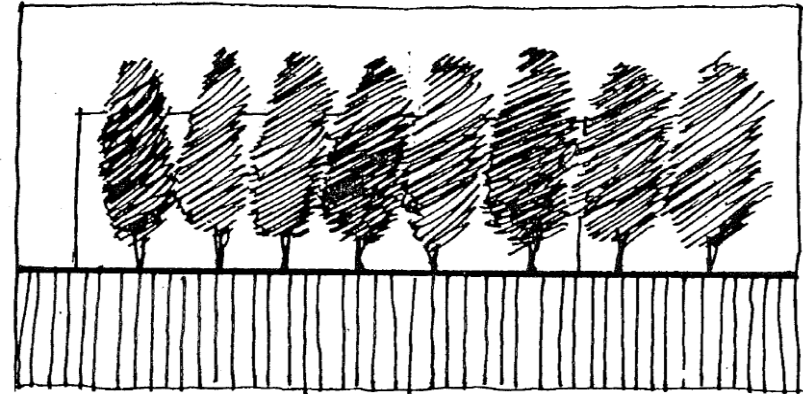
- a) screening
- b) traffic control
- c) building enhancement
- d) parking lot/site enhancement

Screening

An important function of the Eau Claire's landscape policy is to enhance property values and protect privacy through screening requirements. When conflicting or unlike uses are adjacent to one another, functional and aesthetically pleasing screening is required. The types of transitional yards, setbacks, and screens required are dependent on the need for separating the incompatible uses.

The best and most attractive screening can be provided by densely planted evergreens. Such screen should be 5 feet in height and trees should be spaced at 5 foot intervals at time of planting to insure a blocking of any views between the adjacent sites.

Another option for a screen when required for a small area are fences or walls from 5 to 6 feet in height. Screening above 6 feet can be achieved with tree massing. Low screens 3 feet in height for parking areas can be provided with berms, shrubs, or hedges. Other areas where screening is appropriate include trash enclosures, storage yards, loading



docks, or mechanical equipment. The City encourages a variety of screening solutions, such as hedges, fences, berming, walls, and all types of plantings.

Traffic Control

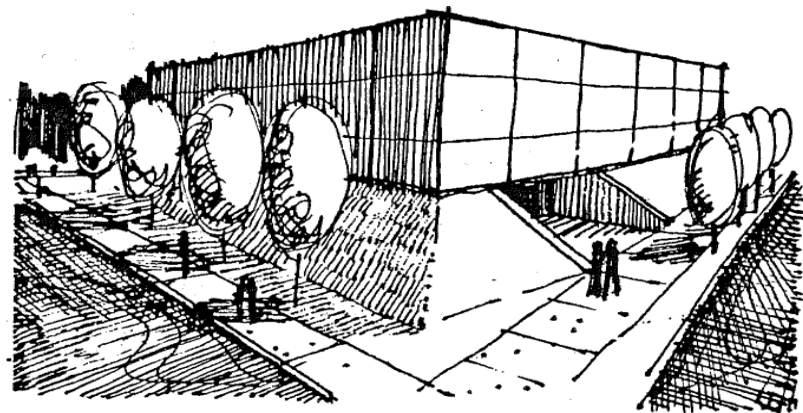
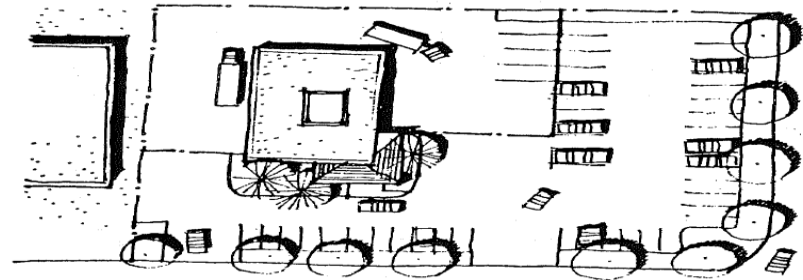
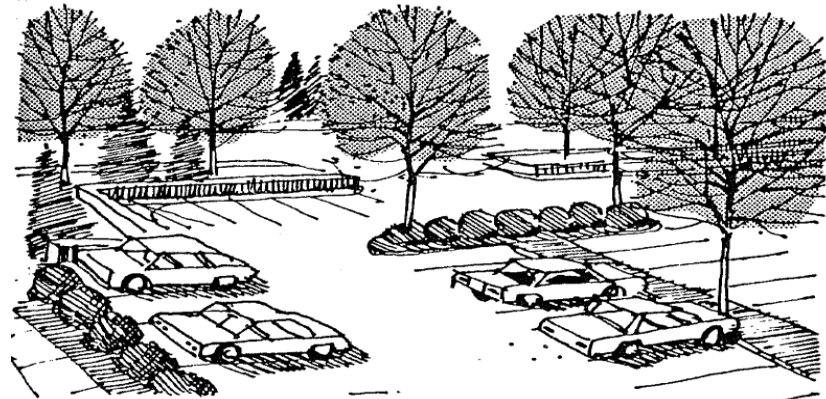
Landscaping should be used to define entrances and exits, to separate passive and active traffic areas, and to delineate traffic flow. When necessary, undesirable foot traffic can be discouraged by shrub massing and desirable circulation encouraged by rows of trees. Plantings should not obstruct clear vision in merging traffic situations.

Areas where landscaping can be used to control traffic include the following:

- The ends of long rows of parking stalls to delineate circulation patterns and prevent traffic from “cutting across” parking stalls
- At major entrances/exits to parking lots to identify their location, define traffic routes, and to prevent parked vehicles from backing into and blocking access points to the parking lot
- Along pedestrian routes or sidewalks to separate pedestrian traffic from vehicular traffic and to better define areas for people to walk safely

Building Enhancement

Most buildings can benefit from attractive landscaping around its exterior with greater customer attraction, higher rents, or



accelerated property values. Landscaping around buildings should be provided to compliment and enhance the architecture of the structure. Ideas for such landscaping include the following:

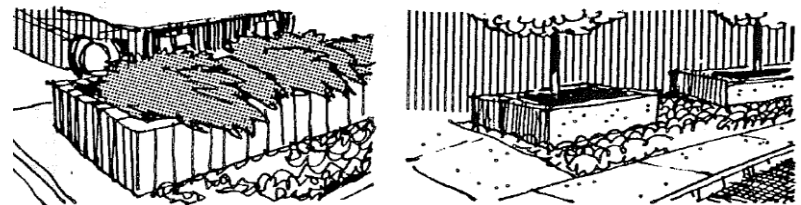
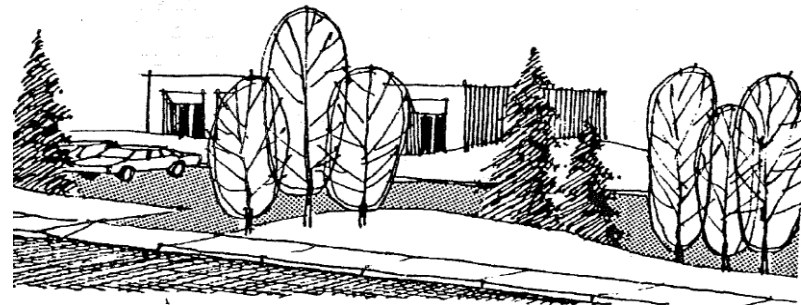
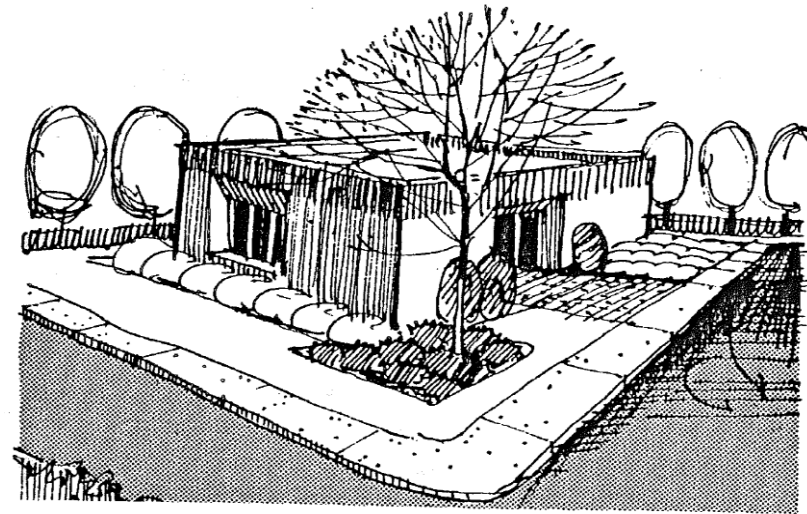
- Enhancing main entrances to buildings
- Screening of building foundations
- Separating sidewalks from building windows
- Enhancing views from inside the building looking out through the windows
- Accenting special design features of the building

Parking Lot/Site Enhancement

Screening and visual softening is necessary in parking areas and can be achieved by peripheral and interior plantings which are appropriately designed. Street trees, hedges, berms, dense evergreens, or masses of shrubs can compliment a building while de-emphasizing the presence of parked automobiles. Trees and shrubs should be planted in multiples of similar types to provide uniformity in textures, colors, and plant types.

Areas where landscaping can be used on the site or around parking lots include the following:

- Areas not used for parking, driveway, or building development
- A 5' to 10' wide area along street rights-of-way and sidewalks
- Corners of parking lots where cars cannot park



- Areas around ground signs or parking lot lighting fixtures
- Side yards or other areas too small for parking lot design or driveways

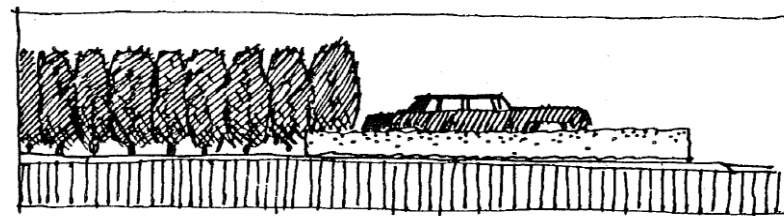
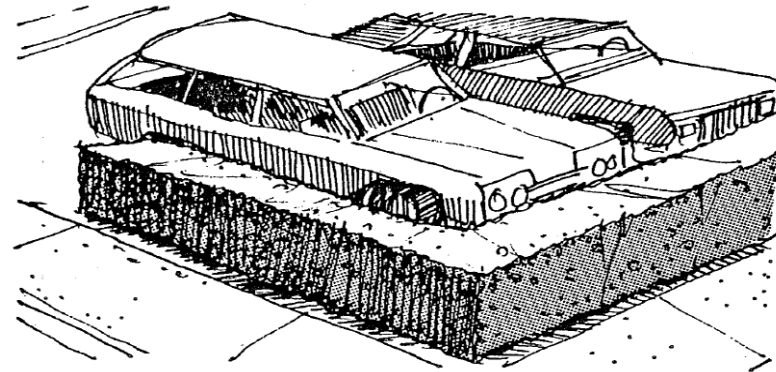
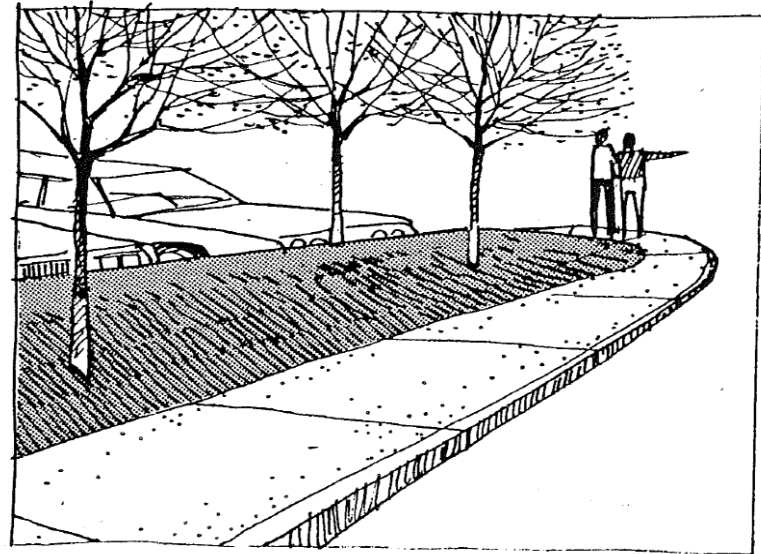
3. LANDSCAPE STANDARDS

Provide in Appendix 1 of this manual is the review criteria for site plan and applications established in Section 18.45.050 of the Zoning Ordinance. To further define this review criteria, the following standards are established by the Plan Commission for their consideration of site plan applications:

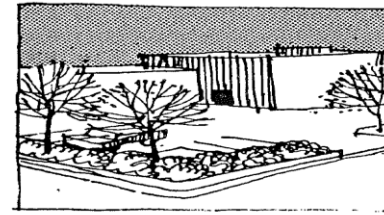
Parking Lot Standards

There are seven basic landscaping standards applicable to most parking situations:

1. Provide a 5 to 6 foot high solid screen to separate parking lots from abutting residential uses or other non-compatible uses.
2. Provide a minimum 3 foot high and 5 foot wide visual relief screen when adjacent to a street in the form of a hedge, fence, planter, berm, dividers, shrubbery, and trees, or any combination. All landscaping to form such a visual relief shall be a minimum height of 2 feet at time of planting. Bark or other loose material should not be placed on berms in these areas since it may be displaced on the street or sidewalk.



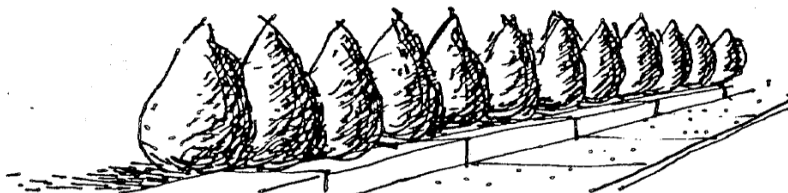
3. Provide street trees within the boulevard area of public rights-of-way as selected from the City Forester's "Recommended Tree List", not less than 2" caliper size and 30' on center spacing at time of plantings. (See Appendix 3 for list of street trees.) A variety of tree species shall be provided to encourage diversity. Trees planted within the boulevard area or right-of-way require approval from the City Forester. If room is not available within the boulevard as determined by the City Forester, front yard street trees may be required.
4. Provide perimeter landscaping appropriate to break up the visual expanse of paving and to provide shade. A combination of shade trees and evergreens is appropriate with a variety of species being provided.
5. Provide landscaped islands at major entrances, at the ends of all parking bays, and other appropriate areas to delineate traffic patterns for vehicular and pedestrian movements. For parking bays in excess of 20 stalls in length, additional landscaped islands should be provided to break up the expanse of asphalt on the site. Such islands should not conflict with snow removal activities.



6. Observe a clear vision triangle for all screening and landscaping. Vision triangles are measured 20 feet back from an access point or intersection.
7. Maintain existing healthy trees and natural vegetation whenever possible. Site plans should be arranged so as to save existing trees and vegetation when possible.

Screening Standards

1. The best screen in terms of aesthetics and maintenance of property values is the use of hedges or solid evergreen plantings.
2. Solid evergreen screening should generally be a minimum of 5 feet in height at time of planting and spaced at 5 foot intervals. Spacing may vary



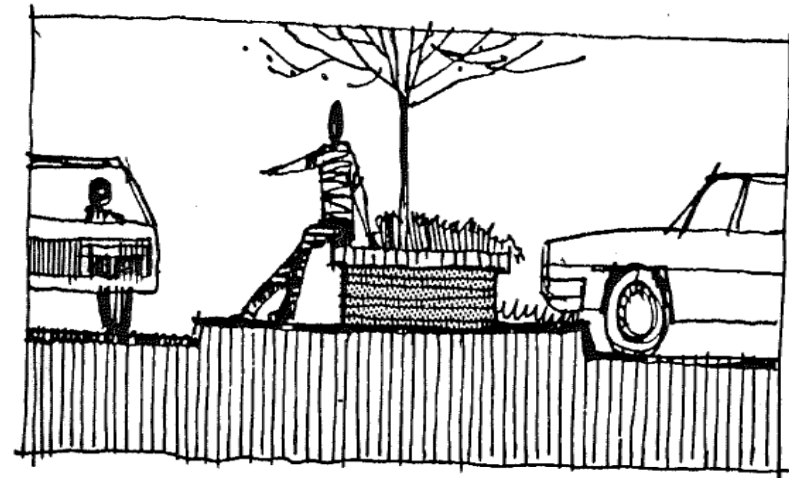
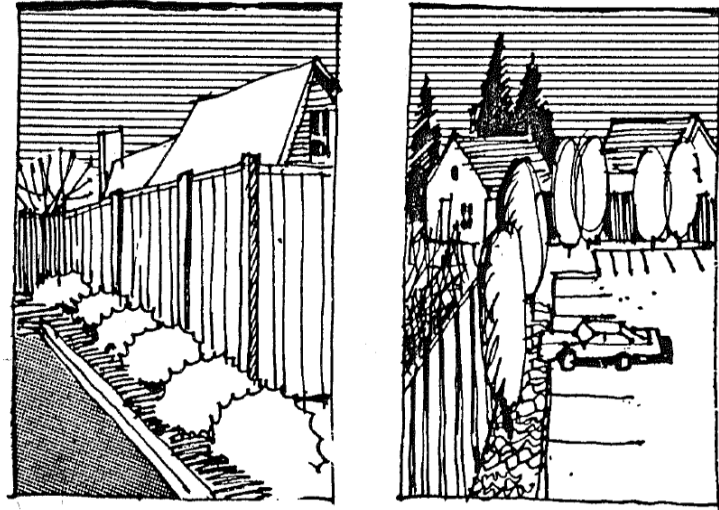
depending on plant variety. (See Appendix 3 for a listing of screening materials.)

3. Fencing may be used for screening in areas where plantings are not appropriate or for temporary solutions.
4. Fencing in residential districts should not be more than 6 feet in height in a rear or side yard and 4 feet in height in a front yard.
5. Trees massing of shade or street trees may be required above fences as a means of heightening the screens effect when necessary.
6. Transition yards or greater setbacks shall be required in addition to screens if needed to better separate incompatible uses and to provide greater area for a denser screen.
7. Regular maintenance and repair of screening, including fences or plantings, is required.
8. Screening should not exceed 3 feet in height in a vision triangle which is the area 20 feet back from an intersection or access point.

Curbing

Curbing should be provided to separate and protect all landscaped areas from vehicular traffic. Curbing is also necessary on many sites to direct drainage run-off to storm sewers. Concrete curbing works best for long-term solutions, while car stops and rolled asphalt curbs are best for temporary solutions where longevity and durability are not important. Plantings or other objects should be placed at

least 3 feet inside a curb so as to provide room for bumper overhang and the door swing of most cars.



Sign Planters

Free-standing signs may be set in a landscaped base of appropriate size to provide shrubs and base plantings that will enhance and compliment the sign. Plantings should be of such type that they will not grow and block the visibility to a sign.

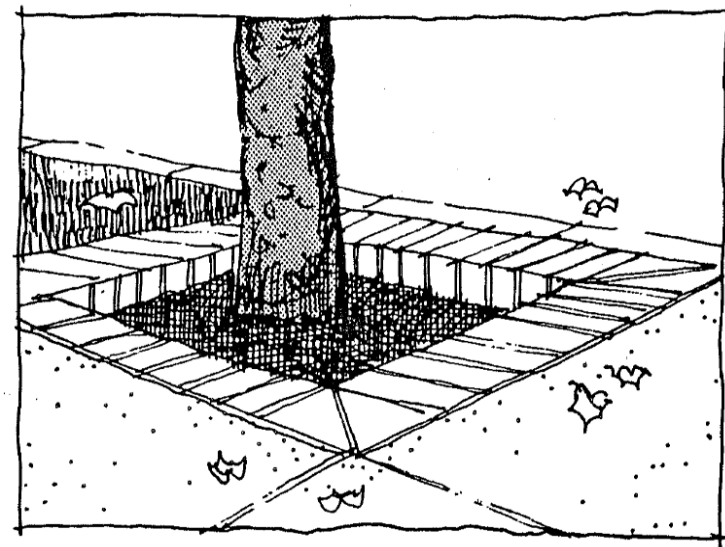
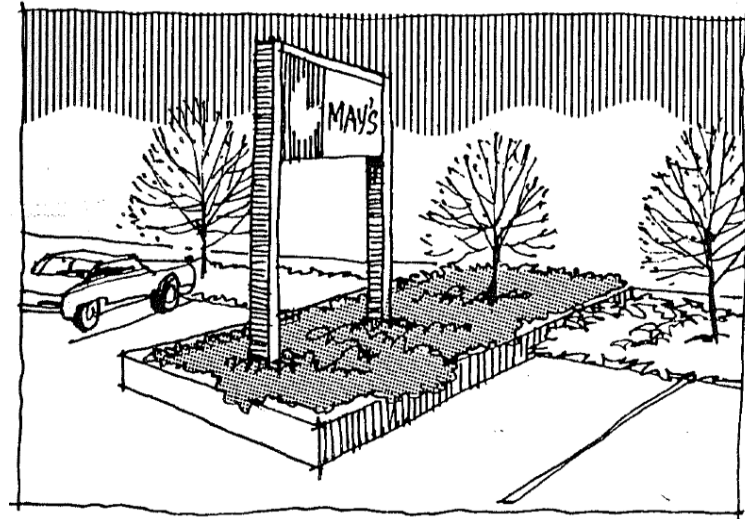
Existing Vegetation

Removal of existing vegetation on site during construction, especially on steep slopes, creates problems with erosion from storm water run-off. Every effort should be made to protect the existing natural topographic and landscape features of a site. Grading and erosion prevention plans will be required by the City Engineer with site plan approval in areas with steep slopes.

Because large trees are expensive to purchase and plant, every effort should be made to save such trees with site plan development. It is also important that the existing grade elevation and soil at the base of existing trees be altered as little as possible to insure their healthy existence.

Retaining Walls

Retaining walls of any significant size should be designed by an architect or engineer and will be inspected by the City to insure their stability.



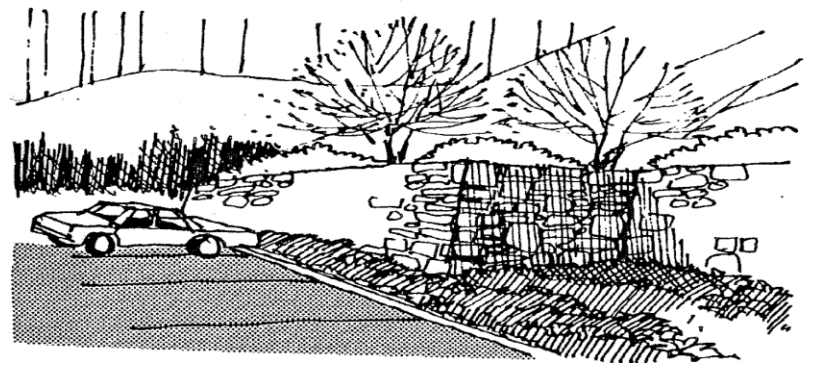
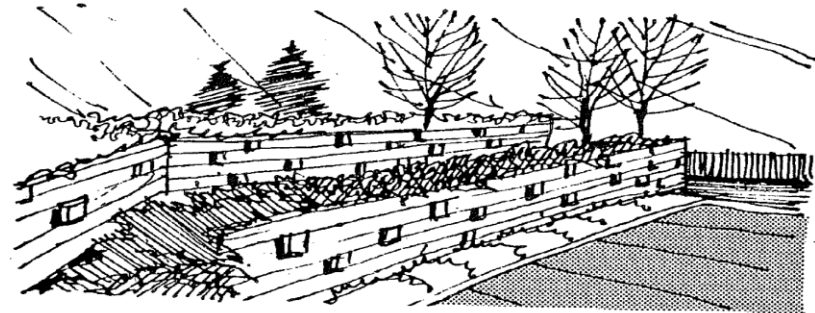
Stacked or dry walls: These include railroad tie, broken concrete, or stone walls that do not require concrete mortar. Railroad ties must be sound, solid, and spiked together with one “deadman” tie per each two “face” ties. Tie walls should not exceed 6 feet in height without terracing.

Durable stone should be used for stone walls. Stones must be carefully fitted into place and stones occasionally cut to fit. The minimum wall thickness should be 12 inches and a maximum height of 6 feet. Both railroad tie walls and dry stone walls must be extended eighteen (18”) inches below grade and vertical joints should be staggered to achieve a “running” rather than a “stacked” bond.

Monolithic or masonry walls: These include exposed concrete, stone or brick over concrete; concrete block; brick or stone with voids and joints reinforced with steel and filled with concrete mortar. These require footings and steel reinforcement.

4. DESIGN ALTERNATIVES

Some property owners or developers may decide to provide additional amenities to their project beyond the minimum landscape requirements. Efforts to enrich a landscape design have been found to provide added economic benefits to most businesses. The following landscape and design standards are recommended for projects desiring exceptional design.

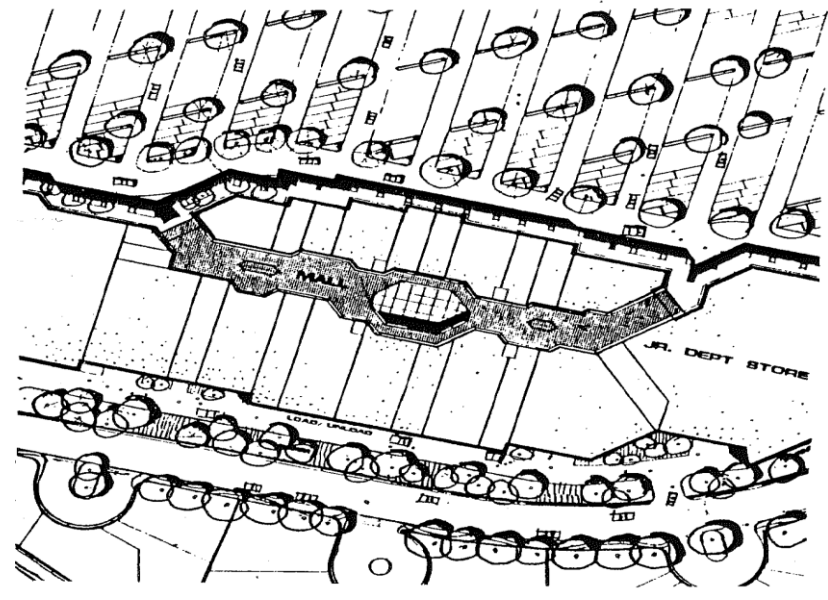


Shopping Centers

The effectiveness of a commercial center to attract business is often reduced by a hostile parking environment. Early shopping centers, for example, were sometimes no more than concrete boxes set in seas of asphalt. Except for cosmetic periphery landscaping to screen parking from the exterior, little was done to make the shopper’s visit interesting and entry inviting.

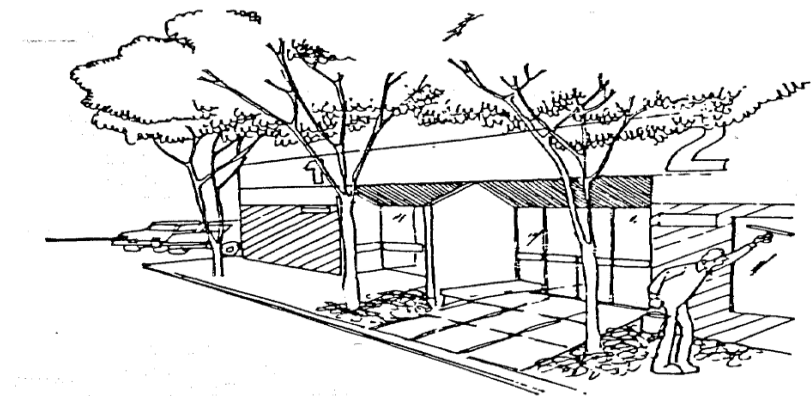
Modern shopping centers incorporate state-of-the-art design and marketing to provide a total shopping experience for its customers. Current marketing strategies stress the importance of the consumer's perception of a retail center as a place to experience, as well as a place to buy goods and services. Pleasant surroundings create environments in which people want to gather.

The shopping center parking lot should provide easy access for shoppers with pickup zones. Interior planters, islands, and sidewalk planters should be planted with trees and shrubs. Benches, courtyards, and entry plazas can direct pedestrians to store entries and can provide transitional space between parking and shopping. Mature landscaping can separate pedestrian areas from vehicular traffic.



Business Districts, Neighborhood Shopping

Small stores located in commercial zones cannot benefit from the convenience and design unity of a planned center. Older businesses can succeed in drawing customers through imaginative remodeling and site improvements. Where appropriate, small, inexpensive improvements such as painting, landscaping, or rear parking areas can increase customer traffic. Developing unified building fronts, signage, and streetscapes with adjacent commercial uses can create a unique business district which attracts customers.



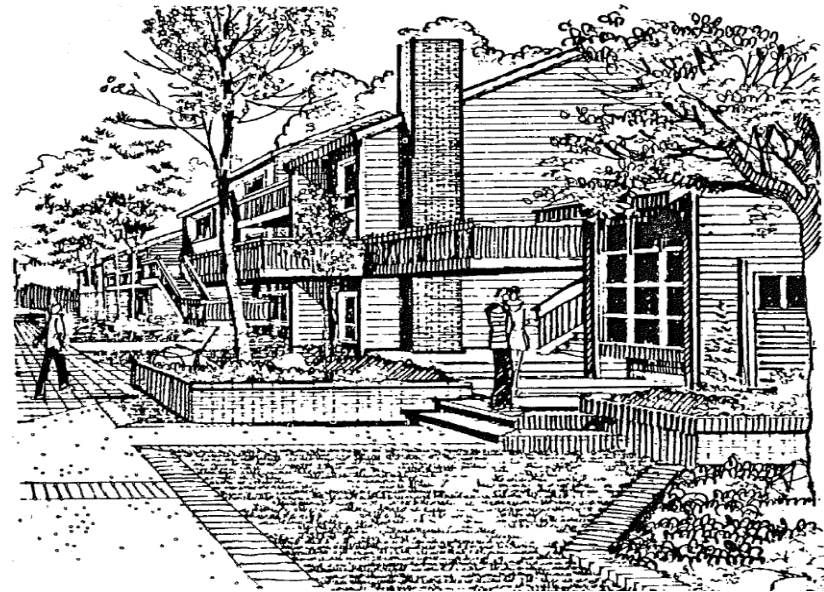
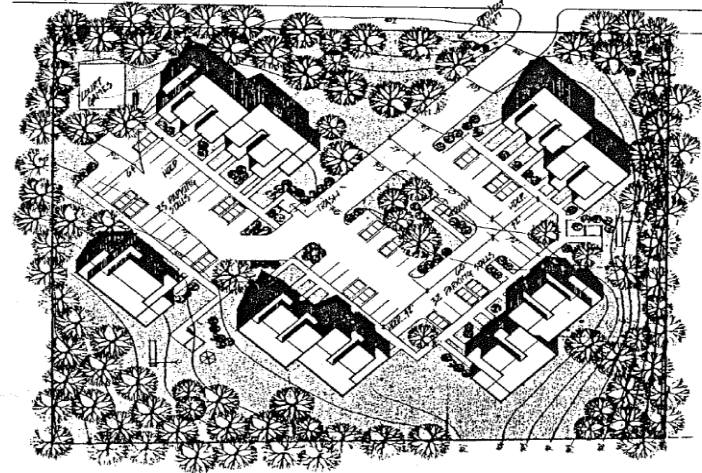
Multi-family Housing

Financial institutions have realized the benefits of recreation and landscaping amenities in housing projects they finance. The initial investment is soon repaid with fewer vacancies, more stability, and increased tenant attention to property maintenance and pride.

The developer should approach a housing project from the resident's point of view by addressing the following:

1. What negative environmental impacts and adjacent land use impacts would degrade living conditions on the site? Noise, traffic, solar exposure?
2. Who are the tenants and what are their needs? Children, teenagers, young singles, married, elderly?
3. Does the existing neighborhood or terrain suggest some special design considerations or present special opportunities?
4. How can "uniqueness" or "sense of place" be created in this project?
5. Does the architectural style of the buildings suggest a particular landscape treatment?

Appendix 2 provides an evaluation checklist for use in considering various design alternatives.



Existing Neighborhoods

Some projects built into existing neighborhoods ignore the dominant character or scale of its surroundings. This frequently draws criticism and resistance from residents.

In landscaping such projects, the designer should observe existing planting materials and styles of adjacent properties. Often, a neighbor's planting can be tied visually to a project by repeating similar trees and shrub types on the proposed site. In older, established neighborhoods, landscaping may include planting formal hedges, installing traditional fences, walls, lamp posts, and replacing street trees. A dominant tree type may be repeated to create overlapping groves throughout the neighborhood.

Business/Office Parks

These parks can benefit from a greater attraction of business by requiring unified building design and landscape standards for development within them. Contemporary business and office parks stress the importance of the public image created by distinctive and well-designed sites. Parks increase their ability to attract tenants by offering an improved amenities package with unified building design, signage, and enhanced landscaping. Generally, standards for these amenities are provided within a protective covenant for the park that sets design, building material, landscaping, signage, and many other standards. The City of Eau Claire encourages development of such parks as an attractive means of drawing business to the community. The City's Planned Development (PD) ordinance provides the appropriate zoning regulations for establishing such a development.

APPENDIX 1

Site Plan Review Criteria Section 18.45.050 of the Zoning Ordinance

When acting upon an application, the Plan Commission shall rely upon generally accepted site planning and design principles. In addition to the provisions and intent of the Zoning Ordinance, Comprehensive Plan, and such policies as may be adopted by the Plan Commission or City Council, the Plan Commission shall also give important consideration during the review process to the following criteria for approval:

- A. The existing natural topographic and landscape features of a site shall be incorporated into a development plan. Such plan shall include all prudent and necessary steps required to protect the natural environment of the site and surrounding areas during and after construction.
- B. Site coverage, building scale, setbacks, and open spaces shall be in proportion with existing and planned structures and spaces in the surrounding area.
- C. Buildings shall be sited in an orderly non-random fashion. Excessively long unbroken building facades shall be avoided. Building materials and design features shall be consistent with the general design theme of the development.
- D. All areas not otherwise occupied by structures or paved areas shall be landscaped or planted with ground cover.
- E. Access to the site shall be provided by curb cuts which are limited and located in a manner to minimize traffic congestion and difficult turning movements.
- F. The interior circulation of the site shall be designed to provide for the convenient and safe flow of pedestrians and non-pedestrian traffic on the site and onto and from public streets or sidewalks.
- G. Sites shall be lighted with fixtures, when required, which relate to the scale and design of the development and which have an intensity high enough to maintain security and low enough to avoid being a nuisance.
- H. Paved areas shall be only as large as necessary to serve parking, circulation, and open space needs. The appearance of paved areas shall be enhanced by landscaping. Monotonous, extended, or unbroken parking areas, driveways, and carport or garage structures shall be avoided. Parking structures and areas shall be separated from residential buildings by landscaped areas.
- I. Outdoor activity areas, parking lots, storage yards, trash areas, and other exterior features or uses shall be landscaped for developments with ground floor areas in excess of 10,000 square feet shall be prepared by an architect, landscape architect, or an experienced landscaper.

adequately landscaped or screened to minimize any potential nuisance features of the use of the site on existing or potential adjacent land uses.

- J. Recyclable materials storage areas will be provided for any use which generates significant amounts of recyclable materials, and such area will be appropriately screened.
- K. The City of Eau Claire Multi-family Housing Design Manual dated March 1, 2006, on file in the office of Community Development, is adopted by reference.

In addition to the above criteria, review of a site plan shall also include consideration of the conformance of the site plan with the ability of the City to provide in a timely and efficient fashion the needed public services and facilities required to adequately serve the proposed development. Public services reviewed shall include, but not be limited to water, sanitary sewer, storm sewer, streets, sidewalks, traffic control, fire, and police protection.

APPENDIX 2

Evaluation Checklist

The following is a list of ideas provided for a site plan applicant to use when preparing a site plan.

GENERAL: ALL DEVELOPMENT

Site Layout and Analysis

The following factors should be analyzed in determining the initial site layout:

- Adjacent buildings, structures, natural features, or other significant elements having a visual or other significant relationship with the site.
- Location and species of trees greater than 6 inches in diameter when measured 5 feet above ground level.
- Topography.
- Natural drainage.
- Information about climatic variables, such as sun angles and wind direction.
- Access to site from adjacent rights-of-way, streets, and arterials.
- Parking and circulation areas.
- Location and design of buildings and signs.

- Orientation of windows and doors.
- Entrances and shared outdoor recreation spaces.
- Pedestrian circulation.
- Outdoor play areas.
- Service areas for uses such as mail delivery, trash disposal, above-ground utilities, loading, and delivery.
- Areas to be landscaped.
- Exterior lighting.
- Special provisions for handicapped persons.
- Other site elements and spaces which will assist in the evaluation of site development.
- The size, species, and approximate locations of plant materials to be retained or placed on the site.
- Proposed site contouring.

Energy Conservation

- Are buildings oriented to take advantage of natural energy-saving elements such as the sun, landscape, and land form?
- Are plant materials selected and located and land formed, designed, and located to enhance energy conservation?

Crime Prevention

- Are areas vulnerable to crime designed to allow surveillance?
- Is lighting selected and oriented to discourage crime?
- Are parking and loading areas designed for each patrol by police?
- Is there an identification system which easily locates on-site buildings and structures?

Provisions for the Handicapped

- Is the site free of barriers to the handicapped?
- Are smooth surfaces provided from the parking lot to the building for wheelchair access?
- Have ramps been provided where changes of grade occur?
- Have parking spaces been appropriately designed and located near entries for the handicapped?

Protection of Existing Trees

- Have buildings and other site elements been designed and located to preserve and enhance existing trees, topography, and natural drainageways, wherever possible?
- Have provisions been made to protect existing trees during construction?

Design and Layout of Parking and Circulation Areas

- Does the parking layout correspond to the intensity of development?
- Does the parking area correspond to the maneuvering space needed by cars and service vehicles?
- Does the parking layout allow the driver to maneuver entirely on-site?
- Are parked vehicles separated from moving vehicles?
- Are parking areas broken up to reduce seas of asphalt?
- Is there access and turning area for fire trucks and other emergency service vehicles?
- Are paved areas kept to a minimum?
- Are circulation patterns clear?
- Is illumination provided?
- Is the parking area surface all-weather and dust-free?
- Have landscaped areas been located to control traffic, screen headlights from dwellings, and lessen the visual dominance of parking areas?
- Is vehicle and pedestrian movement separated?
- Is there a safe and convenient pedestrian system from the street and parking area to the entry?
- Do parking areas and pedestrian paths provide for the physically handicapped?

Design of Service and Delivery Areas

- Has appropriate space been provided for garbage collection?
- Is the garbage collection area convenient, screened, and accessible to garbage men?

- Have provisions been made for emergency and service vehicles?
- Have areas for deliveries been provided?

Surface Drainage

- Are natural drainageways preserved, where possible?
- Are abrupt grade changes designed to control erosion?
- Is surface run-off handled so that on-site areas will not be eroded and adjacent areas are not flooded?

Buffering and Screening

- Have buffer zones been provided to decrease noise levels and separate incompatible uses?
- Is the size of the buffer zone area adequate to perform its function?
- Have screening elements been selected and located in consideration of the following factors:
 - the things or areas to be screened
 - from which direction screening is needed
 - how much or how dense a screen is needed
 - whether the viewer is stationary or mobile
 - what the viewer's angle of approach is to the unpleasant view
 - the impact of seasonal change
 - whether the view can be directed to an alternative view in addition to or instead of screening
 - whether the screening will create an area vulnerable to crime

Signs and Graphics

- Have signs and graphics been designed and located to be compatible with surrounding developments and contribute to a sense of community identity?
- Do the graphics successfully announce, inform, and designate the particular function or service?
- Have symbols been utilized and information on signs been simplified wherever possible?
- Has the type of lettering been chosen for legibility and function?
- Have signs been designed and located with respect to driver safety?

Functional Landscaping, Plant Lists

- Have plant materials been selected and located to deter sound, filter dust and particles, curtail erosion, articulate space, give privacy, and lessen the effects of solar radiation?
- Have landscaping in parking areas been designed to lessen the visual dominance of parking?
- Have plants been selected with regard to maintenance requirements?
- Has a system to water and maintain landscaped areas been established?
- Are landscaped areas protected from vehicles?

RESIDENTIAL ONLY

The following categories apply to residential development:

Dwelling Design

- Does the design of the structure respond to site topography, location of trees, and climate orientation?
- Are the windows and attached outdoor areas located to protect privacy and take advantage of sun exposure, where desirable?

Crime Prevention

- Have defensible spaces been created providing transition zones from private to public areas, zones of influence, and surveillance opportunities?
- Are distances from parking areas to the entry minimized?
- Are laundry areas and shared recreation areas, including play areas for children, located, and designed so that they may be watched by residents?

Privacy

- Does the layout and design of proposed development subdivide the site into various zones of privacy: semi-public, semi-private, private?
- Are symbolic barriers utilized to define these zones, where real barriers are not feasible?

Connection to the Street and Parking Areas

- Have safe and convenient pedestrian-ways been provided from the street and parking areas to each unit?
- Is the pedestrian system separated from the automobile?
- Does the site layout inform the visitor when he is entering zones of privacy?

Entry Areas

- Is each dwelling provided with an outdoor entry area?
- Does the entry area function as a transition from public areas, filtering dust and noise?

Private Outdoor Areas

- Is each ground level dwelling provided with an attached, private outdoor recreation area?

Shared Outdoor Areas

- Are shared outdoor spaces designed to provide for recreation activities?
- Are shared areas easily watched by residents?
- Does the design of these areas encourage usage?
- Are these areas reached by the sun most of the day?

Storage

- Is convenient storage provided for bicycles, garden equipment, outdoor furniture, and similar belongings?

Play Areas for Children

- Are there provisions for children to play where they can be easily supervised?
- Is the play area scaled to the level of children, and does it provide variety?
- Is the play area sufficient for the scale and type of development?
- Are planting materials within the play area hazardous to children?

COMMERCIAL ONLY

The following categories apply to commercial development:

Site Character

- Is the site dominated by shops, malls, and landscaping, rather than parking?

Meeting Places

- Have provisions been made on-site for people to meet, sit, talk, and wait?

- Have safe play areas been provided for children to wait while their parents shop?
- Have safe places to wait at bus stops been provided?

Loading and Delivery

- Where frequent deliveries coincide with customer hours, are loading and delivery areas and circulation separate from parking and pedestrian areas?
- Are these areas screened?

Buffering and Screening

- Are activity areas buffered and screened from adjacent residential areas?
- Are all outdoor storage areas entirely screened?

INDUSTRIAL ONLY

The following categories apply to industrial development:

Site Layout

- Does the site layout efficiently provide for the industry's functional needs?

Building Design

- Layout. Does the building layout satisfy operation functions?

- Materials. Have building materials been selected with regard to climate, soil and topography conditions, and maintenance factors?
- Form. Does the building form respond to the functional space needed?
- Entry. Is the entrance area located so that it can be easily identified?

Lunch and Recreation

- Have outdoor lunch areas been provided for employees and considered as a part of the landscape program?

Loading and Delivery

- Are loading and delivery areas separated from employee and customer parking?
- Are loading and delivery areas oriented to avoid driving winds and rains, as well as excessive afternoon sun exposure?

Buffering and Screening

- Are activity areas buffered and screened from adjacent residential and commercial areas?
- Are all outdoor storage areas screened from off-site views?

APPENDIX 3

Reliable Plant Material for the Eau Claire Area

KEY FOR SYMBOLS
D = Deciduous
E = Evergreen
F = Full Sun
P = Half Shade
S = Total Shade
* = City Forester Approved Street Trees

Note: This list is not a complete list of plant materials available in the Eau Claire area. Persons should contact any local landscape establishment for additional information.

Listed by
Preference

BOTANICAL NAMES	COMMON NAME	HEIGHTS	SYMBOLS & REMARKS
<u>Ornamental & Shade Trees</u>			
Acer Freemanni	Armstrong		A maple with excellent columnar growth habit. Good tree for areas where space is limited.
Acer Freemanni	Autumn Blaze Maple		A silver maple/red maple cross. Exhibits best traits of each tree: faster growth rate, hardy, and good branching structure.
Acer Ginnala	Amur Maple	15' – 20'	F, P, D Fine textured twiggy tree or shrub; brilliant fall color. Good tall hedge plant.
Acer Platanoides*	Norway Maple	50' – 60'	F, P, D Urban, dense canopy; late yellow fall color.
Acer Platanoides* "Cleveland"	Cleveland Norway Maple	50'	F, P, D Urban, dense canopy; yellow fall color (late).

BOTANICAL NAMES	COMMON NAME	HEIGHTS	SYMBOLS & REMARKS
Acer Platanoides* Columnare	Columnar Norway Maple	50'	F, P, D Uniform, dense foliage; narrow plant for tight areas.
Acer Plantanoides* "Emerald Queen"	"Emerald Queen" Norway Maple	50' – 60'	F, P, D Vigorous, crisp foliage.
Acer Platanoides* Schwedleri	Schwedler Maple	40' – 60'	F, P, D New foliage reddish; bronze by summer.
Acer Platanoides* "Superform"	Superform Maple	50' – 60'	F, P, D Urban, dense foliage; yellow fall color.
Acer Rubrum*	Red Maple	50'	F, P, D Moist, acid soils tolerates poor drainage; orange or red fall color.
Acer Rubrum* "Red Sunset"	"Red Sunset" Maple	50'	F, P, D Early, scarlet fall color.
Acer Saccharum*	Sugar or Hard Maple	50' – 75'	F, P, D Rich soil; salt sensitive, orange to scarlet fall color.
Acer Saccharum* "Green Mountain"	Green Mountain Sugar Maple	50' – 75'	F, P, D Scorch resistant, leathery leaves, more adaptable.
Acer Tataricum	Tatarian Maple		Small specimen tree, for limited landscaped areas. Tolerant of adverse conditions. Candidate for planter boxes.
Aesculus Octandra	Horsechestnut Baumann		pH adaptable; impressive double white flowers, no fruit.
Amelanchier Grandiflora	Robin Hill Serviceberry		Low growing tree used under overhead utility lines.
Amelanchier Laevis	Allegheny Serviceberry	20' – 25'	F, P, S, D Moist soil, shade white flowers, orange to red fall color.
Betula Nigra	River Birch	20' – 40'	F, P, D Wet to dry, intolerant of alkaline soils, tolerates poor drainage, pinkish peeling bark.
Celtis Occidentalis*	Common Hackberry	50' – 75'	F, D Tolerates alkaline soils, "pebbled" bark, yellowish fall color.
Corylus Corluna	Turkish Filbert		Excellent formal character. After establishment in 2 years, one of the most drought tolerant trees available.

BOTANICAL NAMES	COMMON NAME	HEIGHTS	SYMBOLS & REMARKS
Crataegus Crusgalli Inermis	Thornless Cockspur Hawthorn	15' – 20'	F, D Urban, persistent red fruit; orange to red fall color. Use thornless variety.
Crataegus Phaenopyrum	Washington Hawthorne	20' – 25'	F, D Urban, orange-red fruits in clusters. Leaf spots may affect appearance.
Ginkgo Biloba	Ginkgo		Excellent salt tolerant urban tree, interesting leaf, light smooth bark when young. Slower growth rate.
Gleditsia Triacanthos Inermis*	Thornless Honeylocust	50'	F, D Urban, tolerant of poor drainage, salt tolerant, fine textured foliage, yellow fall color.
Gledsia Triacanthos Inermis "Imperial"	Imperial Honeylocust	30' – 35'	F, D Same as Thornless Honey-locust; low-growing, flat topped. Golden fall color.
Tricanthos Inermis* "Skyline"	Skyline Honeylocust	50'	F, D Same as Thornless Honeylocust, forms central leader, golden fall color.
Gymnocladus Dioicus	Kentucky Coffeetree	50' – 60'	F, D Moist, rich soil, coarse and rugged texture, no fall color. May want to consider a sterile cultivar such as Espresso (no seed pods).
Malus "Flame"*	Flame Crab	15' – 20'	F, D All crabs require sun and well drained soil. White blossoms, dark red fruit.
Malus "Flowering Crab"	Golden Raindrops		Good branching habit and disease resistance.
Malus "Flowering Crab"	Prairie Fire		Excellent disease resistance.
Malus "Radiant"	Radiant Crab	15'-18'	F, D Light red blossoms, fruit bright red.

BOTANICAL NAMES	COMMON NAME	HEIGHTS	SYMBOLS & REMARKS
Malus "Red Splendor"	Red Splendor Crab	15' – 18'	F, D Abundant, bright red fruit; irregular shape with rose red blossoms.
Malus "Royalty"	Royalty Crab	15' – 18'	F, D Dark purple summer foliage, red flowers, reddish purple fruit.
Malus "Snowdrift"	Snowdrift Crab	20'	F, D Red to white blossoms. Small orange to red fruit.
Malus "Sparkler"	Sparkler Crab	12' – 15'	F, D Deep red flowers, dark red flowers.
Malus Zumi Calocarpus	Redbun Crabapple	15' – 18'	F, D Tiny, bright red fruit; pink to white flowers. Good fall color.
Ostrya Virginiana	Ironwood		A shade tolerant under-story plant. Medium size and growth rate.
Populus Tremuloides	Quaking Aspen	40' – 50'	F, D Native trees that form thickets, nice in naturalized areas.
Prunus Maackii*	Amur Chokecherry	30' – 40'	F, D Amur, peeling bark, very hardy attractive form.
Quercus Bicolor	Swamp White Oak	50' – 60'	F, D Moist to well-drained conditions, difficult to transplant.
Quercus Borealis*	Red Oak	60' – 80'	F, D Subject to oak wilt, pyramidal when young, easiest oak to transplant. Tolerates urban conditions.
Quercus Palustris	Pin Oak	40' – 60'	F, D Moist acid soils, pendulous lower branches, subject to oak wilt.
Quercus Robur	Regal Prince Oak		Columnar variety of Swamp White Oak. Good for limited spaces.
Syringa Reticulata	Japanese Tree Lilac		Low growing; used under overhead utility lines. Hardy and salt tolerant. Late white showy bloom.

BOTANICAL NAMES	COMMON NAME	HEIGHTS	SYMBOLS & REMARKS
Tilia Americana*	American Linden	40' – 60'	F, D Does well in moist soil condition; salt sensitive, coarse textured.
Tilia Cordata*	Littleleaf Linden	35' – 45'	F, D Does well in moist soil conditions. Urban plant.
Tilia Cordata* “Greenspire”	Greenspire Linden	40' – 50'	F, D Has improved branching habit.
Tilia x Euchlora* “Redmond”	Redmond Linden	40' – 60'	F, D Does well in moist soil conditions. Urban tree, dark green foliage.
Ulmus Homestead	Homestead Elm		Hardy, medium growth rate
Ulmus New Horizon	New Horizon Elm		Hardy, medium growth rate
Ulmus Accolade	Accolade Elm		Hardy, medium growth rate
Ulmus Valley Forge	Valley Forge Elm		Hardy, growth habit best represents the true American Elm.

Ornamental Shrubs

Acer Ginnala	Amur Maple Shrub form	15' – 20'	F, P, D Fine textured twiggy tree or shrub; brilliant fall color. Good tall hedge plant.
Amelanchier Canadensis Shadblow	“Shadblow” Serviceberry	30' – 35'	F, P, D Large shrub with good display of flowers and fall color; edible fruit.
Amelanchier	Regent Serviceberry or Juneberry	4' – 6'	F, D Spreading, lower growing form of serviceberry
Aronia Melanocarpa	Black Chokecherry	3'	F, P, D Wet soil, shade, white flowers, black fruit, red fall color. Good informal hedge plant.
Berberis Korcana	Korean Barberry	6'	P, D Dry soils, shade thorns, good hedge plant. Largest of species.
Berberis Koreana	Japanese Green Leaf Barberry	3' – 5'	F, P, D Dry soils, thorns. Good hedge plant.

BOTANICAL NAMES	COMMON NAME	HEIGHTS	SYMBOLS & REMARKS
Berberis Thunbergi "Atropurpurea"	Japanese Red Leaf Barberry	3'	F, D Red leaf variety, good hedge plant, thorns.
Berberis Thunbergi "Crimson Pygmy"	Crimson Pygmy Barberry	1' – 2'	F, D Dwarf variety of Red Leaf Barberry. Good low hedge plant, thorns.
Cornus Alternifolia	Pagoda Dogwood	15' – 20'	S, D Cool soil, shade, white flowers. Horizontal branches, oriental appearance, specimen plant.
Cornus Sericea "Bailey"	Bailey Red Twigged Dogwood	8' – 10'	F, P, S, D Wet, moist soils. Shade, red twigs, erect. White flowers, red fruit.
Cornus Racemosa	Gray Dogwood	8' – 10'	F, P, D Dry to wet soils. White flowers, white fruit.
Cornus Stolonifera Coloradoensis	Colorado Red – Osier Dogwood	8' – 10'	F, P, S, D Wet to moist conditions. Red twigs, large spreading plant.
Cornus Stolonifera "Isanti"	"Isanti" Dogwood	5' – 6'	F, P, S, D Smaller variety of Redosier Dogwood. Good hedge plant, red twigs.
Cotoneaster Acutifolia	Peking Cotoneaster	8' – 10'	F, D Dry soils, shade, excellent hedge plant.
Diervilla Lonicera	Dwarf Bush – Honeysuckle	4'	F, D Dry soil, shade yellow flowers; good bank cover.
Euonymus Alatus	Winged Euonymus	10'	F, P, D Sun or part shade, well drained soil. Often called "Burning Bush" because of bright pink to rose fall color. Good large hedge plant.
Euonymus Alatus Compactus	Dwarf Winged Euonymus	5' – 6'	F, D Smaller variety of Euonymus. Excellent medium hedge plant.
Forsythia Viridissima Broxensis	Dwarf "Bronx" Forsythia	2' – 3'	F, P, D Small, fine textured plant; purple fall color.

BOTANICAL NAMES	COMMON NAME	HEIGHTS	SYMBOLS & REMARKS
Lonicera Xylosteum Claveyi Nana	"Clavey's" Dwarf Honeysuckle	4' – 6'	F, D Very compact clipped hedge plant. Grayish green foliage.
Lonicera Claveyi Xylosteum Compacta	"Emerald Mound" Honeysuckle	2' – 3'	F, D Small compact variety of Honeysuckle with emerald green foliage.
Potentilla Fruticosa "Coronation Triumph"	"Triumph" Potentilla	2' – 3'	F, D Dry soil, blooms all summer with yellow flowers. Very hardy.
Potentilla "Gold Drop"	"Gold Drop" Potentilla	2'	F, D Same as Coronation Triumph with lemon yellow blooms.
Potentilla Fruticosa "Jachmanni"	Jackmanni Potentilla	3' – 4'	F, D Coarser textured. Larger variety with gold yellow bloom.
Potentilla Fruticosa "Katherine Dykes"	"Katherine Dykes" Potentilla	2' – 3'	F, D Soft yellow flowers.
Prunus Tomentosa	Manchu Cherry	8' – 10'	F, D Rounded form plant with white flowers and edible red fruits.
Prunus Triloba	Double Flowering Plum	6' – 10'	F, D Double pink flowers and no fruit.
Rhododendron x "Northern Lights"	Rhododendron "Northern Lights"	4' – 5'	P, S, D Winter hardy variety of Rhododendron with pink flowers in spring.
Rhus Aromation	Fragrant Sumac	5' – 6'	F, P, S, D Dry soil, red fruits, aromatic foliage.
Ribes Alpinum	Alpine Currant	3' – 5'	F, P, E Urban, excellent 3' – 4' hedge plant.
Spiraea Bumalda "Anthony Waterer"	Anthony Waterer Spirea	3'	F, D Dry soils, raspberry red flowers, maroon fall color.
Spiraea Bumalda "Goldflame"	"Goldflame" Spirea	2' – 3'	F, D Dry soils, yellowish foliage during summer, maroon fall color.

BOTANICAL NAMES	COMMON NAME	HEIGHTS	SYMBOLS & REMARKS
Spiraea Japonica Alpina	"Daphne" Spirea	1'	F, D Dwarf plant, good ground cover plant when planted 10" on center; pale pink flowers.
Syringa Amurensis Japonica	Japanese Tree Lilac	2' – 5'	F, D Clusters of white flowers in June; tan fruits, cherry-like bark; small tree or large shrub.
Syringa Meyeri	Dwarf Korean Lilac	3' – 5'	F, D Purple flowers. Dense fine textured, purple fall color.
Syringa Reflexa x Syringa Villosa	"James MacFarlane" Lilac	8'	F, D Late blooming variety with pink single flowers.
Syringa Velutina	"Miss Kim" Lilac	3' – 5'	F, D Small lilac variety with small leaves and blue blossoms. Burgundy fall color.
Syringa Vulgaris X HV	French Hybrid Lilac	6' – 12'	F, D Upright plants with wide range of blossom color with single or double flowers.
Syringa Vulgaris Purpurea	Common Purple Lilac	12' – 15'	F, D Common purple lilac. Very hardy, with fragrant flowers.
Viburnum Dentatum	Arrowwood Viburnum	10' – 12'	S, D Moist soils, white flowers, blue fruits, maroon fall color.
Viburnum Lantana	Wayfaring Tree Viburnum	10' – 15'	S, D Dry soil, white fragrant flowers, interesting buds. Late maroon fall color.
Viburnum Lentago	Nannyberry Viburnum	20'	F, P, S, D Moist or dry soil, white flowers, maroon fall color. Tends to be open at base of plant.
Viburnum Opulus Compactum	Compact European Cranberry Bush	5'	S, D White flowers, persistent, red fruit, dense habit.
Viburnum Trilobum	American Cranberry-bush Viburnum	10' – 12'	S, D Moist soil, lacy white flowers, persistent red fruit.

BOTANICAL NAMES	COMMON NAME	HEIGHTS	SYMBOLS & REMARKS
Viburnum Trilobum "Bailey Compact"	"Bailey Compact" American Cranberry Bush Viburnum	5' – 6'	S, D Denser, compact variety of American Cranberry Viburnum.
Viburnum Trilobum "Alfredo Compact" American	"Alfredo American" Cranberry-bush Viburnum	5' – 6'	P, S, D Moist soils, compact variety.

Ground Cover

Aegopodium Podagraria var. variegatum	Silveridge Goutweed	6"-14"	P, S, F Very aggressive; can become a nuisance.
Coronilla Varia "Penngift"	Penngift Crown Vetch	24"	F, D May become a vicious weed in a garden-like setting. Of use mainly in out-of-the-way areas, especially with steep banks. Overwintering plant debris give the appearance of being burnt.
Euonymus Fortunei "Colorata"	Purpleleaf Wintercreeper	12" – 14"	F, P, E In full sun some winter damage can be expected, but the plant recovers quickly in spring. Even in shade the plants are not completely evergreen because of the severity of our winter climate.
Hosta Species	Plantain – Lily	Low, varies according to selection	P, S, D
Juniperus Species	Junipers	Low, varies according to selection	F, P, E While slow to start, they will be well worth the work and wait. The cultivars of Juniperus Horizontalis are most suitable. Other low-growing Juniper cultivars recommended: "San Jose", "Kallay" var. <u>sargentii</u> , var. <u>procumbens</u> .
Pachyandra Terminalis	Japanese Spurge	10"	P, S, E Slow to start. Prefers a rich moist soil.
Paxistima Canbyi	Canby Pachistima	12"	P, E Very slow to start. Should be mulched. Does not like a dry site.

BOTANICAL NAMES	COMMON NAME	HEIGHTS	SYMBOLS & REMARKS
Phlox Divaricata	Wild Blue Phlox	8" – 12"	F, P Available from wildflower vendors.
Polygonum Cuspidatum var. Compactum	Low Japanese Fleece – Flower	30" (lower in shade)	F, P, D Spreads rapidly by underground shoots whereby it can become a nuisance.
Sedum Species	Sedums or Stonecrops	2" – 4"	F, P, E Many different species exist. Probably the most useful is <u>Sedum Kamtschaticum</u> . Kamtschatca Sedum with rosy flowers and very low growth.
Vinca Minor	Common Periwinkle	6"	P, S, E Must have winter shade. Purplish blue flowers are highly attractive.
Waldsteinia Fragaroides	Barren-Strawberry	4"	F, P, E Inedible showy fruits look like tiny strawberries and the showy yellow flowers bloom early. Good for dry parched locations.
Athyrium Filix-femina	Lady Fern	18" – 36"	P, S, F, D Probably the most serviceable and attractive of the easily cultivated ferns. Spreads easily by means of long, half-buried root stocks.
Matteuccia Pensylvanica	Ostrich Fern	18" – 60"	P, F, D Throughout the winter the fertile fronds remain upright having a dark brown plum-like appearance. Spreads easily by means of long half-buried root stocks.

Climbing Vines

Campsis Radicans Bignonia	Trumpetvine	--	F, D Moist soil, orange to red trumpet-shaped flowers, suchering; attaches with aerial roots.
Parthenocissus Quinquetolia "Engelmanni"	Engelman Ivy or Virginia Creeper	--	F, P, S, D Hardy vine attaches with holdfasts and tendrils; blue fruits, red fall color.

BOTANICAL NAMES	COMMON NAME	HEIGHTS	SYMBOLS & REMARKS
Parthenocissus Tricuspidata	Boston Ivy	--	S, D Attaches to with holdfasts. May die back in exposed situations.
Evergreens			
Abies Concolor	White Fir	60'	F, E Prefers dry soil; tolerates heat; soft gray green foliage.
Juniperus Sea Green	Sea Green Juniper	4' – 5'	F, E Loose informal plant with mint green foliage. Establishes easily.
Juniperus Horizontalis "Bar Harbor"	Bar Harbor Juniper	1'	F, E Creeping form; tolerates dry conditions. Bluish green; slate color in winter.
Juniperus Horizontalis "Hughes"	Hughs Juniper	1' – 2'	F, E Creeping form; tolerates dry conditions. Silvery blue foliage.
Juniperus Horizontalis "Prince of Wales"	"Prince of Wales" Juniper	6"	F, E Lower, spreading juniper, green foliage.
Juniperus Horizontalis Plumosa Compacta	Andorra Compact Juniper	2'	F, E Radial creeping horizontal juniper; use only compact variety. Nice plum color in winter.
Juniperus Horizontalis "Witoni"	Wilton Blue Rug Juniper	6"	F, P, E Flat trailing juniper, carpet affect; silvery blue foliage.
Picea Glauca Conica	Dwarf Alberta Spruce	5'	F, E Very small scale spruce, dense form, slow growing; protect from winter sun.
Picea Glauca Densata	Black Hill Spruce	20' – 25'	F, E Small variety of spruce; dense narrow habit; superior to white spruce.
Picea Pungens	Colorado Green Spruce	60'	F, E Urban stiff formal habit; crisp green foliage.
Picea Pungens Glauca	Colorado Blue Spruce	60'	F, E Urban stiff formal habit, bluish foliage.

BOTANICAL NAMES	COMMON NAME	HEIGHTS	SYMBOLS & REMARKS
Pinus Mugho Mughus	Mugho Pine	6' – 8'	F, E Tight, mounded pine. Dry soil.
Pinus Nigra	Austrian Pine	50'	F, E Urban; stout, dark green needles.
Pinus Sylvestris	Scotch Pine	60'	F, P, E Dry soil; orange bark, bluish needles.
Thuja Occidentalis Pyramidalis	Pyramidal Arborvitae	12' – 25'	F, P, S, E Moist soil; light green, soft scale-like foliage.
Thuja Occidentalis "Techy"	"Techny" Arborvitae	12' – 15'	F, P, S, E Improved variety with dark green foliage. Excellent evergreen hedge.
Thuja Occidentalis	"Techy" Globe Arborvitae	4' – 5'	F, S, E Same as "Techny" arborvitae with central leader removed. Excellent clipped hedge.