Chapter 1.00
REQUEST FOR WAIVER, PROCEDURE

Section 1. PURPOSE

The following design standards are adopted for the purpose of establishing the technical specifications, engineering requirements, and similar matters which property owners, subdividers, and permittees must meet when constructing or installing public and private improvements authorized or required by the various provisions of Chapter 14.75, Chapter 24.38, Title 26, and Title 27 of the Lincoln Municipal Code. All such improvements shall substantially conform to design standards, as determined by the appropriate department, except that the City may approve ~~Nothing contained herein shall prevent the City from approving~~ a deviation from any of the standards as set forth herein upon a satisfactory showing that such deviation will not materially and adversely affect the public welfare and that the general intent and spirit of these design standards are preserved.

Section 2. PROCEDURE

2.1 ~~Design Standards for Subdivision Regulations~~ General

Any request for a deviation from the City of Lincoln Design Standards ~~for Subdivision Regulations~~ except as otherwise provided in these regulations shall be filed with the Planning Director. Such request shall set forth the specific modification requested and all supporting reasons and documentation as to why the modification should be granted, how the public welfare will be preserved, and why the modification will not detract from the intent and spirit of these design standards. The Planning Director shall distribute a copy of the requested modification and the applicant's statement and accompanying data to the director of the department designated as primarily responsible for the design standards from which the modification is sought. Such director shall, within fifteen days from receipt of a copy of the requested modification, file with the Planning Director notice of his recommended approval of the requested modification or a report stating why the modification should not be granted. Within thirty days from the filing of the request for modification, the Planning Director shall approve or deny the request in accordance with such director's recommendation and shall notify the applicant in writing of the ~~recommended~~ approval or ~~disapproval~~ denial of the request. ~~The request for modification will then be scheduled on the Planning Commission agenda for public hearing and action as provided below.~~

~~(1) (a) If the requested modification is recommended for approval by the director of the department designated as primarily responsible for the design standards from which the modification is sought, the Planning Commission, after holding at least one public hearing on the requested modification, may modify such design standards so that the applicant may develop the land in a reasonable manner, but so that at the same time, the public welfare and interests of the City and surrounding area are protected and the general intent and spirit of these regulations are preserved.~~

2.1.1 Appeal to Planning Commission. Any aggrieved person may appeal any approval or denial of the request for modification by the Planning Director to the Planning Commission by filing notice of appeal with the Planning Director within fourteen days following such action by the Planning Director. Upon receipt of the appeal by the Planning Director, the Planning Commission shall hold a public hearing thereon within forty-five days from the date of appeal. In exercising its appellate jurisdiction, the Planning Director's action shall be deemed advisory and the Planning Commission may make such decision as ought to be made. Notwithstanding the above, if the appeal is associated with an application to be heard by the Planning Commission, the appeal shall be scheduled on the Planning Commission agenda for public hearing and action on the same date as the associated application is scheduled for public hearing and action.

2.1.2 Appeal to City Council. ~~(b)~~ Any aggrieved person may appeal ~~any~~ the action of the Planning Commission on the request for modification to the City Council by filing a notice of appeal with the City Clerk within fourteen days following the action of the Planning Commission. Upon receipt of the appeal by the City Council, the Council shall hold a public hearing thereon within thirty days from the date of appeal. ~~Notice of the public hearing shall be given as provided in Section 26.11.036.~~ In exercising its appellate jurisdiction, the Planning Commission's action shall be deemed advisory and ~~T~~the City Council may, after public hearing in conformity with the provisions of this title, ~~reverse or affirm, wholly or partially, or may modify the action of the Planning Commission appealed from~~ make such decision as ought to be made.

~~(2) If the director of the department designated as primarily responsible for the design standards for which the modification is sought recommends denial of the requested modification, the Planning Commission shall hold a public hearing on such request and make a report and recommendation to the City Council regarding whether the modification should be granted or denied and, if approved, how the public welfare will be preserved and why the modification, if granted, will not detract from the intent and spirit of these design standards. The findings of the Commission after public hearing shall be submitted to the City Clerk within seven days from the action by the Planning Commission. After submittal of the findings of the Planning Commission to the City Clerk, the City Clerk shall cause the requested modification to be placed on the agenda of the City Council for approval by the City Council by resolution. The City Council, after holding at least one public hearing on the requested modification, may modify such design standards so that the applicant may develop the land in a reasonable manner, but so that at the same time, the public welfare and interests of the City and surrounding area are protected and the general intent and spirit of these design standards are preserved.~~

~~Notice of~~ For public hearings required to be held under this section, notice shall be given as provided in ~~shall be provided pursuant to Section 26.11.036 of the~~ Lincoln Municipal Code Section 27.81.050, subsections (a), (b) and (c), provided that no decision shall be void or invalidated or effected in any way for any irregularity, defect, error or failure on the part

of the City Clerk to cause notice to be given as required in subsection (c). The minimum improvements set forth in Chapter 26.27 of the Lincoln Municipal Code shall be required unless specifically and individually waived by the Planning Commission or City Council as provided above. *(Resolution A-82320; 9-15-03).*

2.2 ~~Design Standards for Zoning Regulations~~ Capitol Environs and Neighborhood Design Standards

~~Any request for a deviation from the Design Standards for Zoning Regulations shall be filed with the Planning Director. Such request shall set forth the specific modification requested and all supporting reasons and documentation as to why the modification should be granted, how the public welfare will be preserved, and why the modification will not detract from the intent and spirit of these design standards. The Director shall distribute a copy of the requested modification and the applicant's statement and accompanying data to the director of the department designated as primarily responsible for the design standards from which the modification is sought. Such director shall, within fifteen days from receipt of a copy of the requested modification, file with the Planning Director notice of his approval of the requested modification or a report stating why the modification should not be granted. Within thirty days from the filing of the request for modification, the Planning Director shall notify the applicant in writing of the recommended approval or disapproval of the request. The request for modification will then be scheduled on the Planning Commission agenda for public hearing and action as provided below.~~

~~(1) (a) If the requested modification is recommended for approval by the director of the department designated as primarily responsible for the design standards from which the modification is sought, the Planning Commission, after holding at least one public hearing on the requested modification, may modify such design standards so that the applicant may develop the land in a reasonable manner, but so that at the same time, the public welfare and interests of the City and surrounding area are protected and the general intent and spirit of these regulations are preserved.~~

~~(b) Any aggrieved person may appeal any action of the Planning Commission to the City Council by filing a notice of appeal with the City Clerk within fourteen days following the action of the Planning Commission. Upon receipt of the appeal by the City Council, the Council shall hold a public hearing thereon within thirty days from the date of appeal. Notice of the public hearing shall be given as provided in Section 27.81.050. The City Council may, after public hearing in conformity with the provisions of this title, reverse or affirm, wholly or partially, or may modify the action of the Planning Commission appealed from.~~

~~(2) If the director of the department designated as primarily responsible for the design standards for which the modification is sought recommends denial of the requested modification, the Planning Commission shall hold a public hearing on such request and make a report and recommendation to the City Council regarding whether the modification should be granted or denied and, if approved, how the public welfare will be preserved and why the modification, if granted, will not detract from the intent and spirit of these design standards.~~

~~The findings of the Commission after public hearing shall be submitted to the City Clerk within seven days from the action by the Planning Commission. After submittal of the findings of the Planning Commission to the City Clerk, the City Clerk shall cause the requested modification to be placed on the agenda of the City Council for approval by the City Council by resolution. The City Council, after holding at least one public hearing on the requested modification, may modify such design standards so that the applicant may develop the land in a reasonable manner, but so that at the same time, the public welfare and interests of the City and surrounding area are protected and the general intent and spirit of these design standards are preserved.~~

~~Notice of public hearings required under this section shall be provided pursuant to Section 27.81.050 of the Lincoln Municipal Code~~

Notwithstanding the above, any request for a deviation of the Capitol Environs Design Standards may be approved by the Nebraska Capitol Environs Commission as provided in said design standards and any request for deviation of the Neighborhood Design Standards may be approved by the Planning Director or the Urban Design Committee as provided in said design standards.

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Chapter 3.45

DESIGN STANDARDS FOR PARKING LOTS

The Department of Public Works and Utilities is assigned responsibility for administration of these design standards.

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3.6 <u>Landscaping</u>

(See Chapter 3.50, Section 7.1)

~~For all parking lots which exceed 10,000 square feet (929 square meters) in paved area, there shall be planted within that paved area one shade tree for each 10,000 square feet (929 square meters) of parking lot paving or portion in excess thereof. The unpaved planting area around each tree shall be not less than 36 square feet (3.3 square meters) and shall be constructed in such a manner as to prevent intrusion of vehicles into said planting area. Such landscaping shall be in conformance with *Section 14.44.010, Lincoln Municipal Code* and the *Design Standards for Screening and Landscaping*.~~

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Chapter 3.50

DESIGN STANDARDS FOR SCREENING AND LANDSCAPING

The Planning Department is assigned responsibility for administration of these design standards.

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Section 3. GENERAL REQUIREMENTS

1. The requirements of this chapter shall apply to all new construction of structures and/or parking lots and to construction of new additions to existing buildings and/or parking lots provided that the screening and landscaping requirements shall only apply to the area of expansion for building additions and parking lot additions. Notwithstanding the above, when lot area or setbacks are reduced as the result of any conveyance to the federal government, state of Nebraska, any natural resources district, any county, the city, or any village within the zoning jurisdiction of the city under the threat of eminent domain any screening or landscaping required to bring the existing structure and/or parking lot located on the remaining portion of the lot into compliance with these design standards shall automatically be waived and the lot shall be deemed to be in compliance with these design standards.

~~1~~ 2. Where required by conditions of approval of a plat, special permit, Planned Unit Development, or use permit the developer shall submit to the City for review and approval, a detailed and accurately scaled plan clearly showing the location, height and design of the fence screen, earth berm or excavation and clearly showing the location and identifying the plant material in the plant material screen. A plant material list including the common name, botanical name, quantity, mature height and spread, planting size and method of handling shall be shown on the plan.

~~2~~ 3. Where screening is required by Title 27 between incompatible land uses, or around parking lots, the owner or builder of a structure or parking lot shall submit a landscape plan showing the location, height, and design of the fence screen, earth berm, or excavation and clearly showing the location and identifying the plant material in the plant material screen. A plant material list including the common name, botanical name, quantity, mature height and spread planting size, and method of handling shall be shown on the landscape plan. Such plan shall be submitted and approved prior to the issuance of a final building permit with a structure or parking lot; provided, however, limited construction as permitted by Section 106.4.1 of the Building Code, may proceed without submittal or approval of the landscape plan.

~~3. The opacity of the screen should be inversely proportional to the horizontal distance between the land uses and the property line to accomplish the above "objective."~~

4. Fences shall be installed during construction of the project or as soon as weather permits and shall be inspected and approved prior to permitting initial occupancy of the property. Plant material shall be installed within one year following completion of the development and initial occupancy of the property unless phase development is permitted or otherwise specified by the Planning Director.

5. Screens over thirty inches (30") in height shall not be installed in the triangular open space required for sight distance for vehicles entering and exiting the property.

6. Screens shall be maintained in a neat appearance and repaired ~~of~~ <u>or</u> replaced to the original state if damaged, destroyed, or in need of repair; masonry and wood fences shall be replaced within a period of thirty (30) days, or as soon as weather permits; plant material shall be replaced in the next appropriate planting season (spring or fall, depending on the particular plan material), in accordance with the approved landscape plan. If the screen is totally destroyed by an "Act of God", the replacement period may be extended with a written request approved by the Planning Director.

7. The landscape design and the selection of plant material ~~shall~~ <u>should</u>:

   (a) Allow the sun to shine on habitable buildings and recreation areas, streets, roadways, parking lots, sidewalks and other traveled ways in winter for solar heat radiation to aid in melting of the snow and ice.

   (b) Provide shade on habitable buildings, recreation areas, streets, roadways, parking lots, sidewalks, and other traveled ways in summertime to reduce solar heat radiation to aid in the reduction of heat and glare.

   (c) Not increase the drifting of snow onto streets, roadways, parking lots, sidewalks and other traveled ways.

~~8. No screening is required if the distance between the lot line and the building is less than five (5) feet.~~

<u>8. Trees shall not count toward required screening of the surface from the ground to a height of ten feet (10').</u>

9. Concrete and metal fences may be used in the screening of salvage and scrap processing operations. Chain link fencing may be used for security or other purposes but is not acceptable screen material with or without slats.

Section 4. PLANT MATERIAL FOR SCREENING AND LANDSCAPING

1. (a) At least one-half (1/2), except three-quarters (3/4) for salvage yards and scrap processing operations of the screen shall be coniferous or a variety of plant material that will retain its leaves through the winter months, except as otherwise provided in this chapter. An exception would be allowed if in conflict with paragraph 7 of the general requirements. Where the number of deciduous plants is increased to provide a year around screen the Planning Director may approve a reduction in the amount of coniferous plants or plants that retain their leaves in the winter. The branching characteristics of the plant will be considered when considering the reduction. This reduction cannot be approved for salvage yards and scrap processing operations.

   (b) The sole use of plants to screen salvage yards and scrap processing operations is not acceptable.

2. A list of acceptable plant material shall be available upon request in the Office of the Planning Department. This list will specifically list the size, method of handling, and design spread diameter for each variety of plant material. However, other plant material may be used and added to the list upon meeting the requirements in subparagraph 3 below and with the approval of the Planning Director. If anyone chooses to add a plant to the list, they should submit information such as its mature spread and height, rate of growth and other information as requested by the Planning Director for consideration.

3. The variety of plant material used shall be reasonably:

   (a) Free from litter and offensive odors;
   (b) Resistant to breakage by wind and winter storms;
   (c) Resistant to disease, insect attack and weather stresses;
   (d) Long lived;
   (e) Adaptable to City conditions;
   (f) Easily transplanted and grown.

4. The installation of the plant material shall be by a certified landscape contractor as approved by the Parks and Recreation Department and shall conform to the approved landscape plan and the general requirements of the City of Lincoln Specifications for Street Trees. These specifications shall be on file at the Planning Department, Parks and Recreation Department, Department of Building and Safety, and City Clerk. The installation may be inspected by the City.

5. The land owner agrees to promote vigorous growth of the required plants by performing continuous and properly timed maintenance. The maintenance responsibility consists of watering, weeding, fertilizing, controlling diseases and insects, pruning, removing the stakes and wires used to secure the plant when planting and removing and replacing unhealthy, damaged and/or dead plants. The replacement plant must be the same species, size and in the same location as shown on the approved landscape plan and planted

during the next appropriate planting season. Substitute plants may be permitted by submitting a request to the Director of Planning.

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7.1 Parking Lots, ~~and~~ Parking Areas, and Driving Aisles

It is the intention of the screening standards for parking lots and parking areas to provide an adequate, aesthetic visual screen of the facility while not seriously impairing observation of the lot from public ways for the sake of security.

(a) General: The screen shall be located adjacent to the barrier surrounding the parking lot or parking area but far enough from the barrier so as to be protected from the bumpers of other vehicles.

~~(b) For parking lots which are set back from the lot line, the screening requirements may be reduced in increments of ten percent (10%) of total screen for each ten feet (10') of turf between the property line and the parking lot line.~~

~~(c)~~(b) ~~Entrance driveways~~ Driveway throats/driveway curb cuts shall be excluded from the required screen.

~~(d)~~(c) The screen shall be evenly distributed horizontally and may vary in height.

~~(e) The design spread of deciduous trees may be used for one half (1/2) of the deciduous plant portion of the required screen.~~

~~(f)~~(d) The side of the parking lot adjacent to a public street shall be screened at least ~~sixty percent (60%)~~ ninety percent (90%) from ~~two feet (2') to four feet (4')~~ ground elevation to three feet (3') above the surface of the lot. Fences may not be used to meet this screening requirement. ~~When there is less than five feet (5') between the parking lot and the street, one (1) deciduous tree shall be required for parking lots less than five thousand (5,000) square feet and one (1) additional tree for each additional five thousand (5,000) square feet of parking or fraction of five thousand (5,000) square feet.~~

~~(g)~~(e) All other sides of the parking lot shall be screened at least ninety percent (90%) from two feet (2') to four feet (4') above the surface of the lot.

~~(h)~~(f) If plant material is used, the density percentage is calculated at plant maturity.

(g) For all parking lots which exceed 6,000 square feet in paved area, there shall be planted within that paved area one shade tree for each 6,000 square feet of parking lot paving or portion in excess thereof. The unpaved planting area around each tree shall be not less than 50 square feet and shall be constructed in such a

manner as to prevent intrusion of vehicles into said planting area. Shade trees may be planted along the perimeter of the parking lot within eight feet (8') of the paved area. Each tree planted along the perimeter of the parking lot may be used for one-half (1/2) of the required one shade tree for each 6,000 square feet of parking lot paving or portion in excess thereof. Such landscaping shall be in conformance with *Lincoln Municipal Code Section 14.44.010* and the *Design Standards for Screening and Landscaping.*

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7.3 ~~Community Unit Plans and Other~~ Multiple Family Dwellings Approved by Special Permit, ~~and~~ Planned Unit Development, and Use Permit

The screen shall be evenly distributed horizontally: It may vary in height so as to screen at least fifty percent (50%) of the surface area of a vertical plane extending along the property line from six feet to fifteen feet (6' to 15') above the adjacent ground elevation of multiple dwelling structures, garages, maintenance buildings, etc. This screen shall be located between the structures and the adjacent property line.

7.4 Residential Lots Backing Onto ~~Public~~ Major Streets and Railroads

The screen shall be evenly distributed horizontally; however, it may vary in height so as to screen at least ~~fifty percent (50%)~~ sixty percent (60%) of the surface area of a vertical plane extending along the entire length of the street or railroads abutting the lots and from the ground elevation at the lot line to ~~six feet (6')~~ ten feet (10') above the surface elevation of the street or railroad. This screen ~~shall usually~~ may be located ~~on private property rather than~~ in the street right of way ~~and along the lot line~~ when the right-of-way is 120 feet or greater. If the street right-of-way is less than 120 feet, the screen shall be located on private property and along the lot line. Open space for sight distance associated with street intersections shall be excluded from the required screen.

If fences are used for the screen, they must be used in conjunction with plants. The plants shall be evenly distributed horizontally and may vary in height so as to screen at least twenty percent (20%) of the surface area of a vertical plane extending along the entire length of the fence. The plants shall be located on the street side of the fence. An opening in the fence (one per lot or joint access for two lots) is required for access to maintain the major street right-of-way, unless a property owners association is made responsible for the maintenance.

7.5 Adjacent Land Uses and Zoning Districts of Substantially Different Character; B-1, B-2, B-3, H-1, H-2, H-3, H-4, B-5, O-2, I-1, I-2, I-3, Abutting Residential Districts

The screen shall be evenly distributed horizontally, however, it may vary in height so as to screen at least sixty percent (60%) of the surface area of a vertical plane extending along the entire length of the property line and from the ground elevation to a height of ten feet (10') above the adjacent ground elevation. This screen shall generally be located adjacent to the property line abutting the different uses.

7.6 Required Yards, Open Space Areas, Malls and Around Proposed Buildings in the O-3, B-2, B-5, I-2 and I-3 Districts and Churches in R-1 through R-4 Residential Districts

There shall be provided for each 10,000 square feet or fraction thereof of building coverage, ~~four (4)~~ three (3) trees with a design spread diameter of thirty (30') feet each or more ~~combination of trees to equal the same~~, and four hundred (400) square feet of shrub coverage.

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7.11 Refuse Areas, Recycling Bins, Open Storage, Loading Areas, and Ground Level Mechanical Equipment.

The above items are required to be screened if they are located within 150 feet of street right-of-way and within the public view or abutting a residential district. The screen shall be evenly distributed horizontally; however, it may vary in height so as to screen at least sixty percent (60%) of the surface area of a vertical plane from the ground elevation to a height of ten feet (10'). Fences shall be softened by landscaping to screen at least thirty percent (30%) of the surface area of a vertical plane from the ground elevation to a height of ten feet (10').

Section 8. PROCEDURES

All plans and documents required to be submitted by the developer hereunder shall be filed with the Building Official. Three (3) copies of each of a detailed and accurately scaled layout showing the resolutions shall be submitted for review and approval by the Planning Director. The Building Official shall serve as the coordinating agency for the reviews and approvals required by the various departments hereunder.

Before the City issues a Certificate of Occupancy, a financial guarantee or signed landscape contract to guarantee installation of the landscaping shall be submitted to the City if landscaping is not installed by the time of final building inspection.

~~Adjustments to these standards may be made by the Director of Planning on an individual basis with written agreement from adjacent property owners accompanying the proposed screen.~~

Before the City issues the Certificate of Occupancy, the owner(s) shall sign an agreement to continuously maintain the required landscape screen and landscaping by performing the maintenance responsibilities described in Section 4, subparagraph (5) of these standards.

Chapter 3.105

DESIGN STANDARDS FOR PEDESTRIAN CIRCULATION IN COMMERCIAL AND INDUSTRIAL AREAS

The Department of Public Works and Utilities is assigned responsibility for administration of these design standards.

Section 1. GENERAL REQUIREMENTS

The design and installation of sidewalks within existing and new areas in the City of Lincoln affect such matters as pedestrian and vehicular safety, pedestrian convenience, healthy living factors, and the general appearance and livability of the city. The design and installation of sidewalks within all commercial and industrial use areas to provide for a minimum amount of safety and connection is a matter of city-wide concern and shall be provided as set forth in the following standards.

Section 2. REQUIRED DESIGN STANDARDS

1. An on-site sidewalk system shall be constructed along streets and drives (both public and private) and shall connect to the sidewalk system on abutting streets. For these purposes, parking lot drive aisles are not to be considered drives or streets. Sidewalks shall also be constructed to lead to pedestrian crossings at off-site full access median openings, trail crossings, and pedestrian signal crossings on abutting streets. Sidewalks may be constructed along one side of private drives if the sidewalk system is continuous and the number of driveway crossings is greatly minimized.

2. Each building and pad-site shall connect to the on-site sidewalk system by way of a sidewalk that serves the main entrance of each building and pad-site.

3. The sidewalk along the front of each building that includes the main entrance(s) to the building shall be required, with a minimum five (5) foot clear walking space. Where angle or 90 degree parking abuts the sidewalk, a minimum of 2.5 feet of a parked car overhang obstructing the sidewalk shall be taken into account when providing this five foot clear walking space, thus necessitating a minimum of a 7.5 foot wide sidewalk.

   An eight (8) foot clear walking space is required along the front of a building when the building size is 50,000 square feet in gross floor area or greater and is in retail use. This wider pedestrian space is needed due to greater pedestrian activity in front of larger retail sites as well as due to the propensity for such uses to use portions of the fronts of such

buildings for storage and display of various items such as shopping carts and display items. When providing for this 8 foot clear walking space, 2.5 feet of parking overhang shall be provided for in addition to the 8 feet of clear space when angle or 90 degree parking abuts the sidewalk. This requirement is not applicable to office or industrial uses where there may be building sizes of 50,000 square feet or greater.

4. Sidewalks shall be constructed to serve pedestrian movement on site in as direct a manner as possible with a maximum 300 foot diversion for pedestrians to be used as a standard for identifying directness. Also, sidewalk/driveway crossings shall be minimized as much as possible in the design of the on-site sidewalk system.

5. With the exception of where sidewalks cross driveways, sidewalks shall be separated from vehicle parking and vehicle maneuvering areas by grade differences, paving material, and/or landscaping.

6. The on-site sidewalk system shall connect with existing or planned bicycle trails which abut the site but are not necessarily adjacent to the streets abutting the site.

7. Installation of on-site sidewalks shall coincide with and complement required street trees and on-site landscaping requirements.

8. All on-site sidewalks (except for those that abut the fronts of buildings as discussed above in Standard #3) shall provide a minimum of four (4) feet of clear walking space in width and shall be constructed in accordance with sidewalk standards adopted by the City Engineer including all applicable ADA standards.

Section 3. FLOOR AREA INCENTIVE PEDESTRIAN STANDARDS (OPTIONAL)

In order to determine which developments are deserving of the optional Floor Area Incentive bonus offered in the Lincoln-Lancaster Comprehensive Plan the following design features are needed in site designs to determine which developments are truly pedestrian oriented.

1. Sidewalks installed on both sides of private drives to best serve the needs of the pedestrian within commercial and industrial developments.

2. Additional clear walking space, in addition to the required 8 feet, provided along the front of large retail buildings containing 50,000 square feet or more in gross floor area if outside storage and display is likely along the front of such buildings.

3. Internal parking lot design that provides for the comfort and safety of the pedestrian through the provision of sidewalk facilities within the parking area. This type of

pedestrian facility offers the pedestrian a safe, convenient, and comfortable walking environment from the furthest parking stall up to the front of a building.

4. Provide for even greater pedestrian orientation through landscaping that is oriented to the pedestrian through provisions for plazas, sitting areas, fountains, and other amenities, and through the physical arrangement of buildings and parking with an orientation to the pedestrian. Also, provide pedestrian pavement markings at access drives and crosswalks.

5. Bicycle racks provided in convenient and secure areas within a development to serve the needs of those who wish to bike to commercial and industrial areas.

6. Provisions made for transit opportunities in the design of a development.

Section 4. REVIEW PROCEDURES

A pedestrian circulation plan shall be required to include a detailed scaled drawing of the site under review, showing the location, orientation, and dimensions of existing and proposed sidewalks and pedestrian facilities in compliance with these Design Standards for Pedestrian Circulation. This pedestrian circulation plan may be on the same sheet as a site or landscape plan if the pedestrian system is clearly readable.

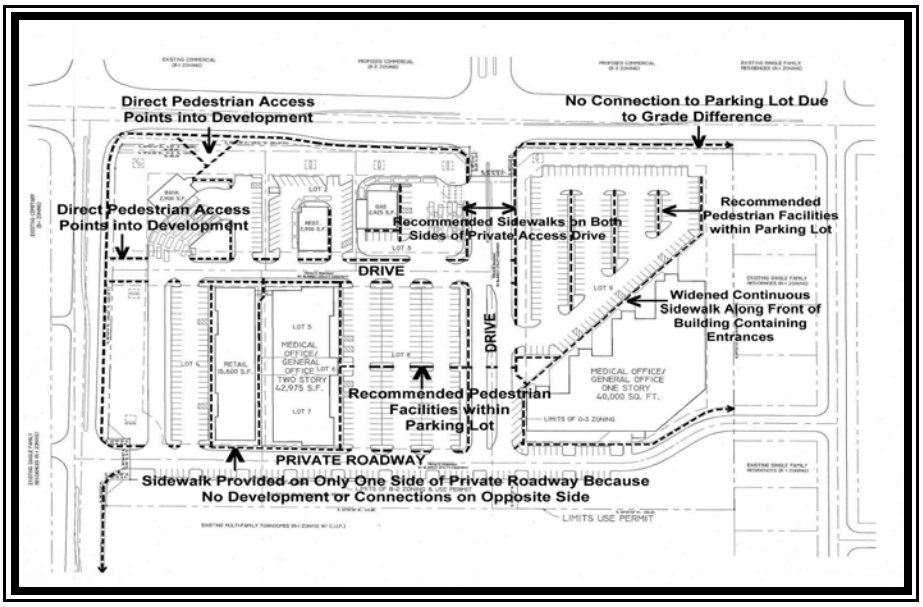
The City-County Planning Department shall serve as the coordinating agency for the review and approval process required for developments involving plats, use permits, special-use permits, and Planned Unit Development procedures.

The City of Lincoln Public Works and Utilities Department shall serve as the coordinating agency for the reviews and approvals required through the building permit process or other such process as approved by the Director of Public Works and Utilities. The Planning Department will assist in the review of the pedestrian circulation plan when submitted during the building permit process. In existing commercial and industrial areas, improvements in the form of building additions or reconstruction of 50% or more of assessed value of the property will trigger the requirement to abide by these pedestrian design standards.

Section 5. EXHIBITS

The following exhibits are visual examples intended to explain the general intent of these pedestrian standards.

Exhibit A: Example of Office and Retail Development Pedestrian Circulation Plan



The site plan above provides a pedestrian circulation plan that generally meets the intent of these Design Standards for Pedestrian Circulation. This site plan includes both office and retail land uses. The pedestrian system shown provides very good pedestrian access to and from each pad site and to and from the surrounding neighborhood. Connections to the larger pedestrian system are provided as are pedestrian facilities within parking areas, continuous sidewalks along drive aisles, sidewalks on both sides of main access points, direct pedestrian connections into the site, and widened sidewalks along the fronts of pad sites containing main entrances.

Exhibit B: Expanded Clear Walking Space Along Front of a Large Retail Pad Site

This site plan highlights the design standard to provide widened clear walking space (minimum of 8' clear) along the front of a large retail building (50,000 square feet or larger) where the main entrances are located. Such a widened clear walking space provides a safe and comfortable space where there is high pedestrian activity. Additional area outside of the 8 feet of required clear space is recommended if outside displays for merchandise or cart storage are desired.

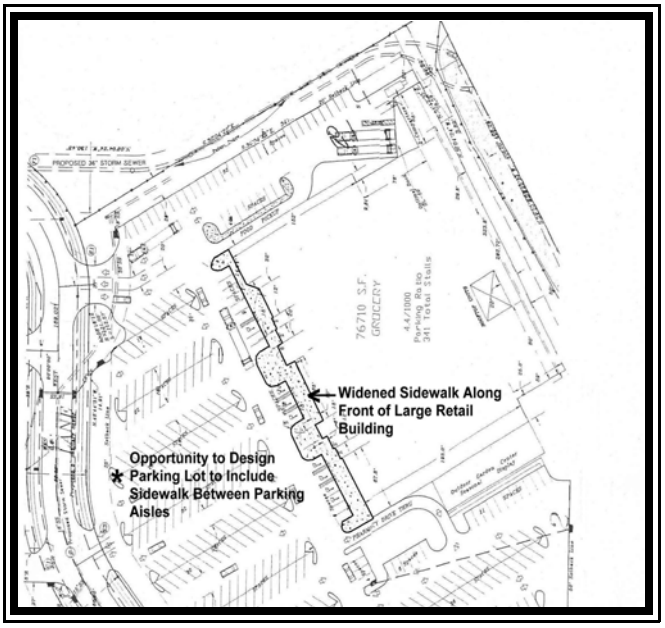


Exhibit C: Example of Desirable Widened Clear Walking Space in Front of Large Retail Site

This example shows how a widened sidewalk along the front of a large pad site provides adequate space for pedestrians to enter, exit, and maneuver shopping carts separate from drive aisles and moving traffic. This photo also shows the use of a barrier curb which further enhances the safety of the pedestrian space.

Exhibit D: Example of an Undesirable Lack of Clear Walking Space In Front of Large Retail Site

In this example little or no clear space is provided to the pedestrian resulting in many conflicts with moving traffic along the main drive aisle of this building. The lack of a curb also limits the delineation between pedestrian space and vehicular space.

Exhibit E: Recommended Additional Space Beyond Required 8 Feet for Large Retail Sites

Often large retail sites use outside areas for display and storage purposes. These areas often obstruct pedestrian movement when there is not adequate space provided for both storage and pedestrians. Here additional space is provided for cart storage in addition to the required 8 feet of clear walking space.

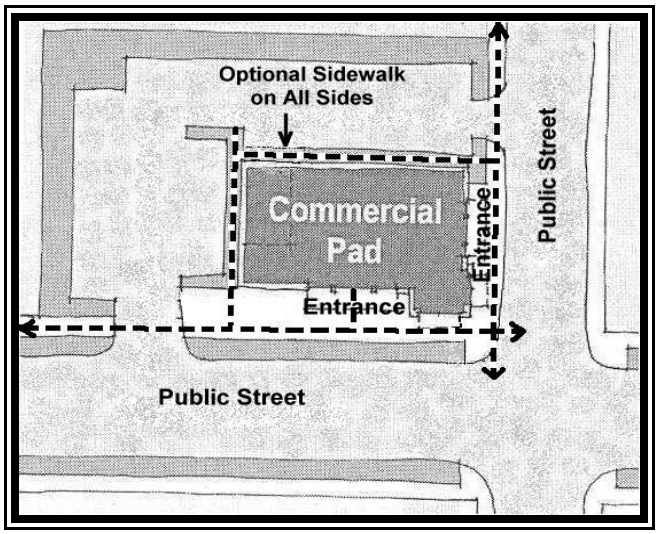


Exhibit F: Single Commercial Pad Site Pedestrian Facilities

This graphic shows both the on-site and off-site sidewalk system that serves the pedestrian. A sidewalk is provided in this case on each side of the building with widened sidewalk areas along the sides that contain entrances to the building. It is important to provide connections to the larger pedestrian system along the abutting streets to make connections into the site. Also, the building is oriented toward the street in a pedestrian friendly manner.

Exhibit G: Fast-Food Pad Site with Widened Sidewalk

Here a fast-food site provides a widened sidewalk along the face of the building that contains the main entrance. This sidewalk also allows for a connection to the larger pedestrian system within a mixed-use development.

Exhibit H: Example of Widened Sidewalk Along Front of Building

This example shows how a widened sidewalk along the front of an office building allows for comfortable and direct pedestrian access to the building. In this case, 90° parking abuts the sidewalk which under these standards invokes the minimum 7.5 foot sidewalk width.

Exhibit I: Negative Impact of Car Overhang on Clear Walking Space

Nearly half of this 5 foot sidewalk is obstructed by the overhang of this car. It is common to have 2.5 feet of sidewalk width obstructed by car overhangs. Thus it is important to account for this impact when providing for clear walking space along the fronts of buildings where parking abuts the sidewalk.

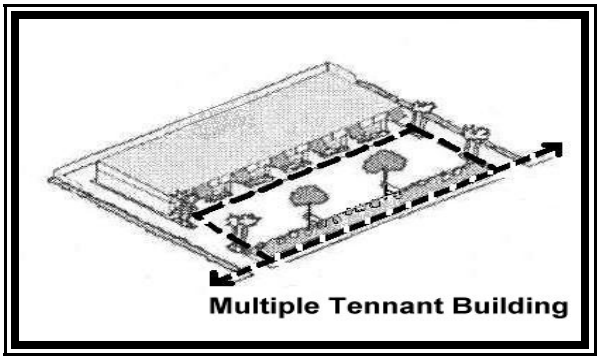
Exhibit J: Example of a Direct Sidewalk into a Development

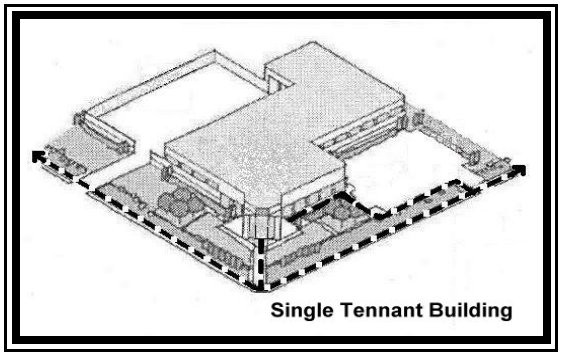
The functionality of this bank-site is enhanced by providing a direct sidewalk connection from the arterial street sidewalk system. It is important to provide such direct access points so that pedestrians are not diverted more than 300 feet out of the way of their destination.

Exhibit K: Example of a Recommended Pedestrian Facility within a Parking Lot

As a recommended practice, it is often desirable in parking lots to provide separated sidewalk facilities such as this to allow for direct and safe pedestrian circulation.

Exhibit L: Industrial Development Sidewalk Connections





Industrial developments and buildings also need pedestrian facilities, especially for employees. Like retail and office areas, sidewalks are needed to connect the larger sidewalk system along streets and drives within the larger development into and within each building site.

Exhibit M: Example of a Sidewalk Along a Main Entrance Drive

Sidewalks should be provided on both sides of main entrances to a site, whether they are private or public streets or drives. Often these connections and facilities lead to major intersections on arterial streets where pedestrian crossings are provided, further enhancing pedestrian convenience and circulation.

Exhibit N: Example of an Undesirable Lack of Sidewalk on Main Entrance Drive

When no sidewalks are provided along main entrances to developments, pedestrians are either forced to walk in the drive aisles along with moving traffic (an unsafe situation), or the conditions become such that pedestrians simply do not walk to or from the development, forcing a dependance on automobile usage. Here a sidewalk system along the arterial street is not connected to a sidewalk system into the development.

Exhibit O: Orientation of Buildings to Pedestrians

To improve the pedestrian environment it is recommended that buildings within a development be oriented to pedestrians. An example of this is to orient buildings up to and along the street and provide large parking areas to the rear of buildings.

Exhibit P: Incorporating Plazas, Sitting Areas, and Fountains as Pedestrian Amenities

Provision for plazas, sitting areas, and fountains is recommended to provide an even greater pedestrian environment within a development.

Exhibit Q: Provision for On-Site Bike-Racks

Bike-racks are recommended to be provided within a development's design. It is important to place bike racks at convenient and secure locations when a site is being designed and to use quality bike-rack design.

Exhibit R: Sidewalk System Complementing Required On-Site Street Trees and Landscaping

The on-site sidewalk system should coincide and complement required street trees and landscaping. In this case a sidewalk provided next to a parking lot incorporates tree and shrub plantings with the sidewalk making the pedestrian experience more enjoyable.

Exhibit S: Bicycle Trail Connection into Development

A connection into a commercial or industrial site from a planned or existing multi-use bicycle trail provides a convenient and safe connection from various neighborhoods and developments to a particular site. Here a short sidewalk provides the connection from the trail to the parking lot of a development.

Exhibit T: Designing Development for Future Transit Stops

As a recommendation, designing a site for a future bus stop within a development's parking and access system is desirable. Here a bus shelter is located along a main access drive and next to a parking area within a commercial development.

Chapter 4.20

DESIGN STANDARDS FOR LANDSCAPING STREETSCAPES, MEDIANS, BOULEVARDS, ROUNDABOUTS AND MAJOR STREETS

The Departments of Public Works and Parks and Recreation are assigned the responsibility of administration of these design standards.

Section 1. GENERAL

1.1 Intent

The Design Standards for Landscaping Streetscapes, Medians, Boulevards, Roundabouts and Major streets are intended to promote suitable site preparation and plant material selection, to improve public safety by minimizing sight obstructions, to indicate where design elements may or may not warrant additional plant material installation or maintenance costs, and to create a contiguous aesthetic image throughout the community.

1.2 Scope

These Design Standards apply to streetscapes where specified and include the design, selection, site preparation, planting and maintenance of suitable landscaping plant materials within or upon designated medians, cul-de-sac circles, boulevards, roundabouts or major streets in the public right-of-way. The requirements of this chapter are in addition to and compliment those set forth in the "Design Standards for Street Trees" and the "Design Standards for Screening and Landscaping" in Titles 2 and 3 of the City of Lincoln Design Standards.

1.3 Concept

The **"basic"** landscape design concept is a corridor framed by medium or large street trees with low-growing, drought-tolerant turf interspersed with groupings of small, medium and/or large trees in the center median. Site and soil conditions, the desired character of the landscaping and installation and maintenance costs should guide the selection of turf and tree species for this prototypical design. A concrete apron (i.e. "mow strip") 2' in width/5" thick with a minimum slope of 0.6" per foot draining to the curb, is required around all medians, cul-de-sac circles, boulevards, and roundabouts, for both the **"basic"** and **"enhanced"** design concepts.

The **"enhanced"** landscape design concept includes more intensive landscaping of corridors or portions there of, beyond the "basic" prototypical design of trees and drought-tolerant, low growing turf that requires minimal mowing. Additional groupings of ornamental grasses, shrubs, trees and/or perennial flowers in the center median would be components of an "enhanced" landscape design. The design, installation and maintenance of "enhanced" landscaped corridors would be implemented through a cooperative effort between a developer, neighborhood association and/or business organization and the City. Those desiring an "enhanced" landscape would be required to contribute financially by funding both installation and maintenance costs for installation and maintenance beyond those associated with the prototypical "basic" landscape design.

The process to apply for and receive approval for "Enhanced Landscaping" and or "Enhanced Streetscaping" within and along Public Right-of-Way Areas, including the purpose and intent, process, and design principals for implementation, is set forth in Resolution No. A-82058 adopted by the City Council on April 21, 2003.

1.4 Reference Standards and Ordinances

Where not specified in these Standards, the Director of Public Works and the Director of Parks and Recreation will specify City of Lincoln Design Standards, Lincoln Municipal Code, City of Lincoln Sight Distance Standards for Traffic Safety and City of Lincoln Standard Specifications for Municipal Construction to be applied to the requirements, design, construction and landscaping of streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and major streets within the City of Lincoln public right-of-way.

1.5 City Approval Required

All work associated with the design, construction, and landscaping of streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and major streets within or upon any City of Lincoln public right-of-way is subject to City of Lincoln approval as set forth in the City of Lincoln Municipal Code, City of Lincoln Design Standards, and City of Lincoln Standard Specifications for Municipal Construction. See Chapter 2.15, Design Standards for Urban and Public Streets; Chapter 2.35, Design Standards for Street Trees; and Chapter 3.50, Design Standards for Screening and Landscaping.

Section 2. LANDSCAPING PLAN

2.1 Landscaping Plan Required

An applicant for development, redevelopment, zoning, rezoning, special use permit or construction approval involving a project or development where the landscaping of streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and/or major streets are required or where prescribed by a City-adopted Community Unit Plan, Planned Unit Development, or special use permit, shall submit a Landscaping Plan for review and approval in compliance with these Standards and other applicable City of Lincoln Design Standards for Land Subdivision Regulations, Zoning Regulations and Titles 12, 14, 26 and 27 of the Lincoln Municipal Code. Any construction activities or enhancements done by the City of Lincoln involving the landscaping of streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and/or major streets shall also be required to have a Landscaping Plan which shall be reviewed and approved by appropriate City departments in compliance with these Standards and other applicable City of Lincoln Design Standards, Lincoln Municipal Code and Standard Specifications for Municipal Construction.

2.2 Landscaping Plan Requirements

The Landscaping Plan shall include the following elements:

1. Location, type and size of all existing trees and landscaping materials proposed to remain and the construction activity controls, measures, provisions and restrictions recommended to ensure their proper protection.

2. Design location, type, number and size of all plant materials proposed to be planted, relocated or removed.

3. Botanical and common name/including cultivar of all plant materials listed on plan.

4. Location of existing and proposed utilities, streets, medians, cul-de-sac circles, boulevards, roundabouts and public right-of-way boundaries and easements.

5. Design specifications and notes for proposed landscaping plant materials, including without limitation, approved plant variety types, number and size of plants to be installed, type of planting stock (i.e. container, balled & burlap, sod, seed, plugs, etc.), location, and installation details illustrating proper planting, mulching, staking, establishment and maintenance techniques.

6. Topsoil specifications/qualities for backfill materials and backfill/finish grading specifications in areas to be landscaped.

Section 3. SITE PREPARATION

3.1 Description

Site preparation includes, without limitation, layout, existing tree and plant materials protection, demolition, clearing, excavation, fill and backfill, top soiling, and finished grading of areas to be landscaped.

3.2 Materials

Imported fill for areas of constructed streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and major streets to be landscaped shall be clean, fertile, friable, silty clay loam topsoil that is free from turf, lime, ashes, debris, noxious weeds, plants or roots, stones over 1" in their largest dimension, lumps, clods, salts, soil sterilants or other materials that are detrimental to plant growth. Topsoil shall not be delivered or used while wet, frozen or in a muddy condition. Topsoil shall have an acidity range of pH 6.0 to 7.5 and contain not less than 3 to 5 percent organic matter. Topsoil shall be of a quality to support the growth of landscape plant materials.

3.3 Excavation

Excavation of existing topsoil shall only be done if specifically required on the approved construction plans to a depth specified in the plans and stockpiled onsite or removed as indicated by the Project Inspector for the City. Excavated topsoil from onsite or that which is required to be hauled in must meet the materials specifications of this Standard for backfill used for constructed streetscapes, medians, cul-de-sac circles, boulevards, roundabouts and major streets that are to be landscaped.

3.4 Fill and Backfill Operations

The contractor shall be responsible for obtaining the Project Inspector's approval of the subgrade and finish grade before commencing soil preparation, top soiling, and finish grading or other subsequent operations. The following grading tolerances shall be applied:

1. Tolerances shall not exceed 0.1 feet above or below desired subgrade deviation in areas to be landscaped and no tolerance will be allowed on subgrades prepared for paving or site improvements, or subgrades immediately adjacent to curbs, medians, boulevards and/or roundabout pavements.

2. Settling of finish grade shall not exceed 0.1 feet.

The contractor shall complete all designated clearing operations before beginning any filling or backfilling.

If sufficient suitable fill or backfill material is not available on the project site, additional topsoil materials shall be furnished and installed in the quantities required and specified in these Standards for backfill used in landscaping constructed streetscape, medians, cul-de-sac circles, boulevards, roundabouts and major streets.

Placing fill and backfill in layers not to exceed 6 inches in compacted depth with the following compaction standards:

1. Each layer shall be compacted to the specified density. Landscaping fill and backfill shall be compacted to no less than 80 percent and no more than 85 percent density in areas to be planted.

2. Compaction shall not occur when soil is wet.

Contractor shall ensure that filling and backfilling shall provide adequate site drainage at all times. Fill or backfill shall not be placed on wet sub soil.

3.5 Finish Grading

Finish grading shall consist of cutting, filling, shaping and fine grading work to be done according to the exact lines and elevations indicated on the approved landscaping plans and/or as directed by the Project Engineer/Inspection for the City.

The contractor is responsible for the following:

1. Completing all finish grading onsite. The top of the subgrade shall be the depth below the finished grade as required for pavements, walks, seeding, plugging, sodding, landscaping, mulches and other site improvements.

2. Protecting the finish grade areas and regrading to correct any irregularities caused by hauling materials or by other operations over the finished grade.

3. Repairing any soil erosion or other damage resulting from weathering action before final acceptance.

4. Finish and fine grade the project area to establish an even and well matched grade over the entire surface. Positive surface drainage shall be assured and there shall be no depressions, subsequent settling or irregularities in the finished grade.

Excavated and filled sections and adjacent transition areas shall be smooth, properly compacted and free from irregular surface changes, all lumps of soil shall be pulverized, raked out or removed. The degree of finish grading shall be that ordinarily obtained from either blade, grader, or scraper operations. Where finishing cannot be satisfactorily completed with power equipment, hand raked methods shall be used.

Unless otherwise indicated, the subgrade shall be evenly sloped to provide drainage away from site improvements or the centerline of medians. Swales shall be cut as shown on the plans, but shall not reduce the thickness of the topsoil specified.

Finish grading shall conform to the grade elevations shown on an approved landscaping plan and the area shall be in a smooth, even condition, free from debris and other materials that would be detrimental to the finished grade. Settling of any finish grade shall not be more than 0.1 feet, and if settling is greater, the contractor shall bring the grade to specified elevations.

Section 4. PLANT SELECTION AND PLACEMENT

4.1 Plant Materials

1. Specific plant materials designated on the landscape plan to be planted in the public right-of-way shall be selected from the **Approved Lists** contained within these standards, unless an alternate plant selection has been approved by the Parks and Recreation Department.

2. Plant selection and placement shall be designed and based upon the expected mature height and spread of the selected species, to prevent unnecessary competition or overcrowding of plants and to ensure that the selected plants remain within the median strip, cul-de-sac circles, planting strip, public easement, and/or roundabout width when mature without requiring excessive or frequent pruning.

3. Plant selection and placement shall be designed to avoid or minimize traffic sight obstructions and be in conformance with the City of Lincoln's Traffic Safety Sight Distance Standards where applicable and practical. Plantings for medians, cul-de-sac circles, major streets, and roundabouts must be designed to allow for visual access between vehicles and pedestrians in the vicinity of intersections and street access drives. Refer to Lincoln Municipal Code Chapter 12.20, Trees and Shrubbery, Section 12.20.070, Height and Spread Limitations for Landscape Plantings Within the Sidewalk Space; Special Assessment for Failure to Maintain. In addition, it is recommended that sufficient space be left between individual trees and/or clumps of trees as "windows" for motorists to monitor the locations of vehicles in other traffic lanes. Spacing of street trees planted between the curb and sidewalk/trail along major streets should be done according to the posted speed limit as noted in the city of Lincoln Sight Distance Standards for Traffic Safety.

4. Plant selection and placement shall be designed to avoid conflict with street lights, traffic lights, traffic signs, fire hydrants, crosswalks, intersections, sidewalks, bicycle/pedestrian trails, overhead utility wires, utility easements, and take into consideration the depth and location of underground utilities.

5. Street trees and/or center median trees shall not be planted any closer than 6 feet from back of curbs and no closer than 4 feet from sidewalks/trails; no closer than 15 feet from street lights, utility poles or traffic signal poles; no closer than 10 feet from fire hydrants; no closer than 15 feet from street access drives/alleys; no closer than 25 feet from the property corner adjacent to the street right-of-way intersection; no medium and/or large maturing tree types beneath overhead electrical wires.

6. Plant selection and placement of landscape screens for **commercial areas/parking** lots along major streets would be for spaces five feet or wider between the parking lot and the private property lot line within the front yard setback. The expected mature height and spread of plant materials used for such landscape screens should

remain within the width of the existing space between the parking lot and the private property line within the front yard setback without requiring excessive or frequent pruning. Such plantings **shall not encroach** onto any public sidewalk or bicycle/ pedestrian trail and shall conform to the City of Lincoln's Sight Distance Standards for Traffic Safety for driveways or alleys adjacent to such areas.

7. Plant selection and placement of landscaping in the six (6) feet of green space located between the sidewalk and/or bicycle/pedestrian trail and the **right-of-way** line along major streets will be extremely restrictive due to space limitations and the location of the adjacent sidewalk and trail. Plant materials should not encroach upon sidewalks and/or trails when fully mature and should not be planted any closer than four (4) feet from the sidewalk and/or trail.

Section 5. PLANTING

5.1 Description

Planting includes, without limitation, the placement of specified plant materials, seed, sod and/or plugs, as shown on the approved landscape plan, the placement of materials to protect and enhance plant growth, and the methods applied in planting and maintaining landscape plants.

5.2 Specifications

Specified sizes and types (i.e. container, balled & burlapped, etc.) of plant materials (i.e. nursery grown trees, shrubs, ornamental grasses, perennials, wildflower seed mixtures, turf-type seed, sod or plugs, etc.) shall be determined by the City prior to the design of landscaping plans. City of Lincoln Standard Specifications for **Landscape Work** and **Seeding and sodding** shall be used where applicable in the installation and maintenance of landscaping done on the City right-of-way.

Section 6. APPROVED TREE LIST FOR NON-PAVED PLANTING STRIPS, MEDIANS, CUL-DE-SAC CIRCLES, BOULEVARDS, AND ROUNDABOUTS

Trees listed will do well provided the appropriate species is selected for a particular site and proper care is given (see Section 7, "Tree Characteristics"). The trees on this list offer a wide range of varieties and cultivars. Tree names are followed by acceptable tree varieties that may be used in streetscapes with ***restrictions footnoted.*** *Other available varieties or cultivars of the tree types listed may be used, subject to Parks and Recreation Department City approval. Trees are listed in alphabetical order and are not prioritized according to their suggested use.*

Small Maturing Trees (Under 25' Mature Height) **Required Planting Strip Width** 4' - 5' Minimum **Spacing Between Trees** 20' Minimum, 25' Recommended	**Medium Maturing Trees** (30'-40' Mature Height) **Required Planting Strip Width** 6'-8' Minimum **Spacing Between Trees** 30' Minimum, 35' Recommended	**Large Maturing Trees** (Over 45' Mature Height) **Required Planting Strip Width** 8' Minimum **Spacing Between Trees** 40' Minimum, 45' Recommended
Ash - *Fraxinus pennsylvanica* 'Leprechaun'	**Goldenraintree** - *Koelreuteria paniculata*	**Ash** - *Fraxinus pennsylvanica* ('Cimmaron', 'Marshall's Seedless' 'Patmore')
Crabapple - *Malus spp*. Disease resistant varieties, 'Donald Wyman', 'Centurion', 'Harvest Gold', 'Indian Summer', 'Prairifire', 'Professor Sprenger', Robinson', 'Sugar Tyme'	**Honey locust** - *Gleditsia triacanthos var. inermis* ('Imperial')	**Ash** - *Fraxinus americana* ('Autumn Purple')
Lilac, Japanese Tree - *Syringa reticulata* ('Ivory Silk' - tree form)	**Linden, Little-leaf** -*Tilia cordata* ('Greenspire')	**Bald Cypress*** - *Taxoduim distichum*
Maple, Amur - *Acer ginnala* ('Flame' - tree form)	**Maple, Black** - *(Acer nigrum)* 'Greencolumn'	**Coffeetree, Kentucky** -*Gyminocladus dioicus*
Maple, Tatarian - *Acer tatarium* - tree form	**Pear** - *Pyrus calleryana* ('Aristocrat', 'Chanticleer', 'Capital, 'Redspire')	**Elm, American** - *Ulmus americana* ('Homestead', 'Pioneer')
Redbud - *Cercis canadensis* - tree form		**Ginkgo** - *Ginkgo biloba* ('Autumn Gold', 'Princeton Sentry', 'Saratoga')
Serviceberry - *Amelanchier spp.* ('Autumn Brilliance', 'Cole Select' - tree form)		**Hackberry, Common** - *Celtis occidentalis*
		Honeyloucst - *Gledistia triacanthos var. inermis* ('Skyline')
		Maple, Red - *Acer rubrum* ('Red Sunset')
		Oak, Bur - *Quercus macrocarpa*
		Oak, Swamp White - *Quercus bicolor*

Small Maturing Trees (Under 25' Mature Height) **Required Planting Strip Width** 4' - 5' Minimum **Spacing Between Trees** 20' Minimum, 25' Recommended	**Medium Maturing Trees** (30'-40' Mature Height) **Required Planting Strip Width** 6'-8' Minimum **Spacing Between Trees** 30' Minimum, 35' Recommended	**Large Maturing Trees** (Over 45' Mature Height) **Required Planting Strip Width** 8' Minimum **Spacing Between Trees** 40' Minimum, 45' Recommended
		Pine, Limber * - *Pinus flexilis* ('Vanderwolf's Pyramid')
		Spruce, Black Hills*- *Picea glauca densata*
		Spruce, Colorado* - *Picea pungeus*
		Spruce, Serbian* - *Picea omorika*

***Coniferous trees are not allowed between the curb and sidewalk, curb and bicycle/pedestrian trail, or certain other locations within the City right-of-way of residential or major streets due to traffic sight clearance requirements.**

Section 7. TREE CHARACTERISTICS

The following table describes the typical characteristics of specific deciduous and coniferous trees* ***(see restrictions footnote)*** *on the* ***Approved Tree List*** *for Lincoln when planted in non-paved planting strips, medians, boulevards, roundabouts, and major, streets located within and/or adjacent to the public right-of-way of city streets. Trees growing in paved areas will typically have an overall mature height of approximately 1/3 less then that of trees in non-paved areas.*

Small Maturing Trees
(Under 25' Mature Height)

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Ash *Fraxinus pennsylvenica* ('Leprechaun')	18' ht., 16' spread, round	Genetic dwarf form of Green Ash. Small to medium green leaves turn yellow in fall. Dense canopy matures to a compact, rounded shape.
Crabapple *Malus* ('Centurion')	20'-25' ht., 15' spread, upright oval	Adaptable water requirements once established, red buds open to rose red flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, good to excellent disease resistant
Crabapple *Malus* ('Donald Wyman')	20' ht., 20' spread, broad globe	Adaptable water requirements once established, red to pink buds open to white flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, good disease resistance

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Crabapple *Malus* (‘Harvest Gold’)	20' ht., 15' spread, upright to vase-shaped	Adaptable water requirements once established, red to pink buds open to white flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, good disease resistant.
Crabapple *Malus (*‘Indian Summer’)	18' ht., 20' spread, rounded	Adaptable water requirements once established, red buds open to rose red to deep pink flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, good to excellent disease resistance
Crabapple *Malus* (‘Prairifire’)	20' ht., 15' spread, moderate upright to rounded	Adaptable water requirements once established, red buds open to purplish red flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, excellent disease resistant
Crabapple *Malus* (‘Professor Sprenger’)	20' ht., 20' spread, upright spreading	Adaptable water requirements once established, red to pink buds open to white flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, excellent disease resistant
Crabapple *Malus* (‘Robinson’)	25' ht., 25' spread, upright spreading to rounded	Adaptable water requirements once established, crimson buds open to deep pink flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, good to excellent disease resistant
Crabapple *Malus* (‘Sugar Tyme’)	18' ht., 15' spread, upright oval	Adaptable water requirements once established, pale pink buds open to sugar white flowers, tolerates acid, alkaline, wet & dry soils, requires full sun, fair to good disease resistance
Lilac, Japanese Tree *Syringa reticulata* (‘Ivory Silk’)	20' ht., 15' spread, moderate globe, plant tree form only	Adaptable water requirements once established, attractive white flowers in June, requires full sun, tolerant of road salt spray
Maple, Amur *Acer ginnala* (‘Flame’)	20' ht., 20' spread, moderate, upright, plant tree form only	**Drought tolerant** once established, can become chlorotic in alkaline soils, brilliant red-orange fall color, requires full sun, tolerant of road salt spray
Maple, Tatarian *Acer tataricum*	20'-25' ht., 15'-20' spread, oval to rounded, plant tree form only	**Drought tolerant** once established, seeds are a rosy-red color, yellow to orange fall color, requires full sun, tolerant of road salt spray
Redbud *Cercis canadensis*	20-25'ht., 20-25'spread, moderately globe-shaped, plant tree form only	Moist to adaptable water requirements, needs protected location, pink to lavender blossoms in early spring, yellow fall color, prefers filtered shade to shade
Serviceberry *Amelanchier x grandiflora (*‘Autumn Brilliance’ or ‘Cole Select’)	25' ht., 15' spread, round, plant tree form only	Adaptable water requirements once established, tolerates acid, wet & dry soils, white flowers in spring, red-orange fall color, grows in sun or shade, tolerant of road salt spray

Medium Maturing Trees
(30'-40' Mature Height)

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Goldenraintree *Koelreuteria paniculata*	30' ht., 25' spread, round	**Drought tolerant** once established, tolerates acid, alkaline & dry soil, attractive yellow flowers in mid-summer, yellow fall color, grows in full sun or partial shade
Honey locust *Gleditsia triancanthos var. inermis* (‘Imperial’)	35' ht., 35' spread, round	**Drought tolerant** once established, tolerates acid, alkaline, wet & dry soils, full sun to light shade, yellow fall color, cankers can be a problem, tolerant of road salt spray
Linden, Little-leaf *Tilia cordata (‘Greenspire’)*	40' ht., 30' spread, moderately pyramidal	Tolerates alkaline soil, withstands compaction, adaptable water requirements once established, salt sensitive, suckers, yellow fall color, grows in full sun or partial shade
Maple, Black *Acer nigrum (‘Greencolumn’)*	40' ht., 25' spread, columnar to moderately oval	Adaptable water requirements once established, susceptible to leaf scorch and sun scald thus limited use, yellow fall color, requires full sun
Pear *Pyrus calleryana* (‘Aristocrat’)	40' ht., 35' spread, pyramidal	Adaptable water requirements once established, tolerates salt & alkaline soils, attractive white flowers in spring, purple-red fall color, requires full sun or partial shade
Pear *Pyrus callenyana* (‘Chanticleer’ or ‘Capital’)	35'- 40' ht., 15' spread, narrow pyramidal	Adaptable water requirements once established, tolerates salt & alkaline soils, attractive white flowers in spring, reddish-purple fall color, requires full sun to partial shade
Pear *Pyrus calleryana* (‘Redspire’)	35' ht, 25' spread, pyramidal	Adaptable water requirements once established, tolerates salt & alkaline soils, attractive white flowers in spring, yellow to red fall color, requires full sun or partial shade, slight fireblight susceptibility

Large Maturing Trees
(Over 40' Mature Height)

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Ash *Fraxinus pennsylvanica* (‘Cimmaron’, ‘Marshall’s Seedless’ or ‘Patmore’)	45' - 50' ht., 30' - 40' spread, upright oval to broadly ovate	Adaptable water requirements once established, tolerates salt and alkaline soils, yellow fall color, tolerant of road salt spray, requires full sun
Ash *Fraxinus americana* (‘Autumn Purple’)	45' ht., 40' spread, rounded	Adaptable water requirements once established, requires some supplemental water during prolonged dry periods, tolerant of road salt spray, reddish-purple fall color, requires full sun
Bald Cypress* *Taxoduim distichum*	50' ht., 20' - 30' spread, moderately pyramidal	Deciduous conifer, good on both wet and dry sites once established, golden yellow fall color, tolerant of road salt spray, requires full sun

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Coffeetree, Kentucky *Gyminocladus dioicus*	50' ht., 40' - 50' spread, moderately globe	**Drought tolerant** once established, tolerant of alkaline soils, tolerant of road salt spray, free from insect and disease problems, may have seed pods, requires full sun
Elm, American *Ulmus americana* ('Homestead' or 'Pioneer')	50' ht., 35' - 50' spread, upright oval to rounded	Highly resistant to Dutch Elm Disease, good drought tolerance once established, tolerant of road salt spray, yellow fall color
Ginkgo *Ginkgo biloba* ('Autumn Gold' or 'Princeton Sentry' or 'Saratoga')	50' ht., 25' - 35' spread, narrow to broad pyramidal	Good drought tolerance once established, tolerant of road salt spray, yellow fall color, requires full sun, free from insect and disease problems
Hackberry, Common *Celtis occidentalis*	50' ht., 40' spread, moderately globe	**Drought tolerant** once established, tolerant of salt and wide range of soil conditions, yellow fall color, requires full sun
Honey locust *Gledistia triancanthos var. inermis* ('Skyline' or 'Shademaster')	45' ht., 35' spread, broad pyramidal	**Drought tolerant** once established, tolerant of salt and alkaline soils, tolerant of road salt spray, yellow fall color, susceptible to insect & disease problems, requires full sun
Maple, Red *Acer rubrum (*'Red Sunset')	45' ht., 35' spread, upright oval	Adaptable water requirements once established, may develop chlorosis when grown in highly alkaline soils, salt sensitive, susceptible to sun scald and leaf scorch thus limited use, red-orange fall color, requires full sun
Oak, Bur *Quercus macrocarpa*	55' ht., 45' spread, broad oval	**Drought tolerant** once established, tolerant of a wide range of soil types, yellow to brown fall color, requires full sun
Oak, Swamp White *Quercus bicolor*	50' ht., 50' spread, round	**Drought tolerant** once established, good or poorly drained or compacted soils, can become chlorotic in alkaline soils, yellow fall color, requires full sun
Pine, Limber * *Pinus flexilis* ('Vanderwolf's Pyramid')	40' ht., 25' spread, pyramidal, upright	Does best on well drained soils, adaptable to dry clay soils, blue-green needles, requires full sun.
Spruce, Black Hills* *Picea glauca densata*	45' ht., 25' - 35' spread, pyramidal	Adaptable to environmental extremes once established, good tolerance to road salt spray, best in full sun, but tolerant of some shade
Spruce, Colorado* *Picea pungens*	45' ht., 25' - 35' spread, pyramidal	Does best on moist to average soils, most tolerant spruce for dry sites, tolerant of road salt spray, requires full sun
Spruce Serbian* *Picea omorika*	45' ht., 20' - 30' spread, narrow pyramidal	Tolerates acid, alkaline and dry soils, prefers moist and well-drained soils, requires full sun

***Coniferous trees are not allowed between the curb and sidewalk, curb and bicycle/pedestrian trail, or certain other locations within the City right-of-way of residential or major streets due to traffic sight clearance requirements.**

Section 8. SHRUB CHARACTERISTICS

*The following table describes the typical characteristics of specific shrubs on the **Approved Shrub List** for Lincoln when planted in **enhanced** non-paved medians, roundabouts, boulevards and parking strips located within and/or adjacent to the public right-of-way of city streets.*

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Genista spp. *(Common Woadwaxen or Dyer's Greenwood)*	2'-3' ht., 2'-3' spread	Prefers hot, sunny locations in relatively infertile soils which are dry and loamy. Thrives in limestone soil. No serious diseases. Low growing plants for poor dry soils.
Hypericum supp. (*St. Johnswort)* Recommendations: fronosum *(Golden St. Johnswort)* kalmianum "Kalm St. Johnwort	3'-4' ht., 3'-4' spread	
Juniperus spp. Recommendations: horizontalis *(Creeping Juniper)* sabina *(Savin Juniper)* *(Broadmore)* *(Buffalo)*	Trees and shrubs variable height and spread.	Tolerates limestone soils, full sun, pH adaptable.
Lonicera japonica, *(Honeysuckle, Japanese)* Recommendations: L. x xylosteadies *(Emerald Mound)*	A twining vine growing 15'-30'.	Full sun to part shade. Tolerant of clay soils and dry conditions.
Polygonum japonicum var. compactum	2' ht., spreading	Low growing Fleece Flower has greenish white flowers, small reddish fruit. Full sun or shade, does well in dry soil, vigorous habit.
Ribes, *(Current)* Recommendations: alpinum *(Alpine Currant)* odoratum *(Clove Currant)*	3'-6' ht., 3'-6' spread	Works well in high pH soil.
Rhus spp. *(Sumac)* Recommendations***:*** aromatica, *(Gro-low Sumac)* glabra, *(Smooth Sumac)*	2'-2.5' ht., 6'-40' spread	Adapted to many soil types from clay to sterile soil. Tolerates very dry soil conditions. Performs well along road-sides.
Rosa spp.	Variable	New low maintenance roses tend to be pest and disease free.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Spirea spp. Recommendations: S. x bumalda S. x japonica		
Symphoricarpos, ***(Coralberry***) x. chenultii	3'-6' ht., 6'-8' spread, low arching, spreading	Small, dark blue-green ovate leaves, foliage holds on late in fall. Full sun to partial-shade tolerant. Tolerant of any soil type, native on limestone and clay.

Section 9. ORNAMENTAL GRASS CHARACTERISTICS

The following table describes the typical characteristics of specific ornamental grasses on the ***Approved Ornamental Grass List*** *for Lincoln when planted in* ***enhanced*** *non-paved medians, roundabouts, boulevards and parking strips located within and/or adjacent to the public right-of-way of city streets. This plant list will be updated administratively on a regular basis. This list is not meant to be inclusive, site conditions and design intent need to be taken into consideration while using the following list.*

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Bouteloua curtipendula, *(Grama, sideoats)* Recommendations: *'Trailways'*	2'-3' ht., 1.5' spread, upright clump	Graceful foliage, flowers dangle one-sided on flowering stems like bells. Clumping, warm-season grass. Drought tolerant.
Bouteloua gracilis , *(Blue Grama)*	1'-2' ht., .5'-1' spread, upright clump	Fine textured, curly, narrow leaves. One sided seed spikes with eyelash-like inflorescence. Warm season grass. Tolerant of extreme heat or cold.
Buchloe dactyloides, *(Buffalo grass)*	4"-6" ht., 6"+ spread, spreading	Gray-green fine textured, low sod-forming warm season grass, tolerates poor soils, drought conditions, but not wet soils, needs well drained soil.
Calamagrostis acutiflora, ***(****Feather reed grass*) Recommendations: acutiflora (x) *'Karl Foerster'* acutiflora (x) *'Overdam'*	2'-6' ht., 2'-4' spread, upright clump	Slender, wiry leaves with taller flower stalks, turning golden brown in late summer.
Chasmanthium latifolium, *(Northern Sea Oats)*	2'-3' ht., clumping	Attractive drooping seed heads. Drought resistant, tolerates a variety of soil conditions. Prefers moist loamy soil.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Elymus arenarius Recommendations: glaucous, *'Blue Lyme Grass'*	1'-3' ht., spreads by rhizomes.	Blue-green foliage. Tough plant, salt tolerant. Can become invasive.
Eragrostis trichoides., *(Sand Lovegrass)*	3' ht., upright clumping.	Cool, grass with arching seed heads. Prefers moist, well drained sandy, fertile soils.
Miscanthus sinensis, *(Eulalia grass*)	3'-12' ht., 3'+ spread, upright clump	Leaves grow up then out to cascade, turns various shades of tan or gold in fall, many cultivars.
Panicum virgatum *(Switch Grass)* Recommendations: *'Heavy Metal'*	3'-3.5'ht., upright clumping	Stiff, powder blue leaves. Turns bright yellow in the fall.
Pennisetum alopecurpoides., *(Chinese pennisetum)* Recommendations: *'Hamlin'*	3'-4' ht., 3'-4' spread, upright clump	Fine textured green foliage in summer, light brown in fall, silver-purple flower spikes. Prefers moist well drained soil.
Sporobolus heterolepis, *(Prairie Dropseed Grass)*	2' ht., 1.5'-2' spread, upright arching	Narrow leaved, fragrant native grass, emerald in summer, gold in fall, panicles of small flowers.
Schizachyrium scoparium *(Little bluestem)*	1'-2' ht., 1' spread, upright clump	Green leaves with a hint of blue at the base, red throughout fall and winter, blue cultivars available, native

Section 10. PERENNIAL CHARACTERISTICS

The following table describes the typical characteristics of specific perennials on the **Approved Perennial List** for Lincoln when planted in **enhanced** non-paved medians, roundabouts, boulevards and parking strips located within and/or adjacent to the public right-of-way of city streets.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Achillea spp. *(Yarrow, Milifoil)* Recommendations: *'Coronation Gold'* *'Moonshine'*	2' ht., 2' spread, compact.	Fern-like gray-green foliage. Narrow leaves, white to yellow, red to purple flowers, full sun. Well drained soil. Some invasive varieties will tolerate drought conditions.
Amsonia spp. *(Threadleaf Blue Star)* Recommendations:--- ciliata hubrichtii	2 ½'-3' mounds	Blue flowers, thread-like leaves, nice yellow color in fall.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Artemisia spp. Recommendations: abrotanum *'Southernwood'*	1'-5' ht., 1.5'-3' spread, can be variable	Grey to silver leaves, range from tall erect to low mounding plants. Thrive in ordinary soil. Prefers poor, well drained soil.
Asclepias spp. *(Silkweed)* Recommendations: tuberosa, *'Butterfly Milkweed'*	2'-3' ht.	Wildflower. Native wet-land plant. Tough durable plant once established.
Aster spp. Recommendations: fendleri *[rock aster]* novae-angliae *'Purple Dome'* novi-belgii *'Snowball'*	2'-3' ht., 1.5' spread, can be variable.	Stout hairless stems, many different colors and sizes of flowers available. Prefers full sun, high organic well drained soil. Some varieties are stoloniforous.
Callirhoe spp., *(Wine cups, Purple poppy mallow)* Recommendations: alcaeoides *'Logan Calhoun'* bushii, *'Bush's Poppy Mallow'* involucrata, *'Wine Cup'*	8"-12" ht., 1' spread, spreading.	Low growing with cut leaves, pink, purple or white cup shaped flowers, flowering all summer, native, full sun.
Coreopsis spp. Recommendations: auriculata, *'Nana'* grandiflora, *'Early Sunrise'* palmata, *'Stiff Coreopsis'* verticillata, *'Moon Beam & Zagre'*	9"-2' ht., 1'-3' spread.	Dark green leaves to feathery leaves. Bright yellow flowers, thrives in full sun, well drained soil. Drought tolerant.
Euphorbia spp. Recommendations: myrsinites, polychroma, nicaeensis	1'-3' ht., 1-3' spread.	Tolerates dry, well drained, poor soils. Bushy erect with blue green, glaucous fleshy leaves. Clusters of yellow flowers.
Gaillardia spp. *(Blanket Flower)* Recommendations: grandiflora *'Baby Cole, Goblin & Monarch'*	18"-25" ht., 12" spread.	Seeding wild flower. Daisy-like flower with many shades of yellow, scarlet and bronze. Heat and drought tolerant. Needs well drained soil.
Geranium spp. *(Cranesbill)* Recommendations: endressii ,*'Wargrave Pine'* *'Johnson Blue'* macrorrhizum, sanguineum	1' ht., 1.5' spread. Moundy	Very hardy and durable, full sun, ordinary soil, long blooming, essentially pest and disease free. Require well drained soil. Good fall red color.
Hemerocallis spp. *(Daylily)* Recommendations: many varieties	1'-4' ht., 2'-3' spread, arching leaves.	Wide color range of trumpet flowers blooming from early summer to early autumn. Prefers high organic soil-well drained soil. Fairly heat and drought tolerant.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Knautia macedonica, Recommendations: *'Scabiosa rumelica'*	2'ht., 2'spread.	Many tiny dark purple to dark red scabiosa like flowers. Prefers warm, sunny, dry sites including sloping landscapes.
Lespedeza spp. *(Bush Clover)* Recommendations: bicolor, *'Bush Clover'* capitata, *'Round-headed L.'* virginica, *'Slender Bush Clover'*	2'-3'ht., 2'-3'spread.	Native, warm-season, deep-rooted hardy perennial legume. Clusters of small purple, white or pink flowers in August and September.
Liatris spp. *(Blazing Star or Gayfeather)* Recommendations: aspera, *'Rough Blazing Star'* punctata spicata, *"Floristan Violett)*	2'-4' ht., 1.5' spread, erect.	Glabrous stems with sessile flower heads, purple florets with purple bracts, native, drought resistant, full sun, well drained soils.
Linaria spp. Recommendations: purpurea, *'Purple Toad Flax'*	3' ht.	Attractive grey-green narrow leaves. Snapdragon like flowers of pink and purple
Linum spp. *(Flax)* Recommendations: perenne, *'Lewisii'*	10"-18" ht.	Pretty-blue flowers-native
Nepeta spp. *(Catmint)* Recommendations: x faassenii, *'Faassen's Catnip'* x faassenii,*'Walker's Low'*	8"-3' ht., 2'-3' spread.	Aromatic plants with small gray-green foliage. Thrive in hot, sunny areas in well drained soil. Drought tolerant.
Oenothera spp. *(Evening Primrose or Sundrops)* Recommendations: fruticosa subsp. glauca macrocarpa, *'Silver Blade'* m., *'Comanche Campfire'*	9"-2' ht., 2' spread, sprawling.	Large lemon-yellow flowers, native plant with narrow dark green or silvery leaves, requires full sun and fertile soil with free drainage but tolerates poor, dry soil.
Origanum laevigarum *(Herrenhausen)*	2' ht., and equal spread	Sub-shrub with small aromatic leaves. Small pink flowers and red-purple bracts. Late summer to fall color.
Penstemon spp. *(Beard Tongue)* Recommendations: barbatus, *'Praecox Nanus'* grandiflorus, *'Shell-Leaf P.'*	8"-3' ht., 2'-3' spread, erect stem.	Showy flowers, full sun, well drained, non-fertile soil with little to no organic matter.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Petalostemon spp. *(Prairie Clover)* Recommendations: candidum, *'White Prairie Clover'* purpureum, *'Purple Prairie Clover'*	2'-3' ht., 2'-3' spread.	Erect prairie legume with cylindrical heads of flowers, whites, and purples. Native to U.S.
Persicaria spp. (Formerly Polygonum) Recommendations: affinis, *'Himalayan Border Jewel'* amplexicaulis, *'Rosea'*	4"-30"ht. Spreading.	Creeping ground-cover. Glossy green leaves with light pink flowers. Heat and drought tolerant.
Perovskia atriplicifolia, *(Russian Sage)* Recommendations: dwarf variety	3'-4' ht., 1.5'-2' spread up-right habit.	Silvery Gray stems and fine foliage, erect and stiff. Spikes of lavender blue flowers. Drought tolerant but requires good drainage.
Pycnanthemum muticum ***(Mountain Mint)***	12"-30" ht.	Fragrant purple to lavender flower color in tufts of silver foliage.
Rudbeckia spp . *(Black -eyed Susan)* Recommendations: fulgida, *'Goldstrurm'* nitida, *'Hersestonne'*	18"-30"ht., 3' spread, erect.	Lanceolate leaves on long petioles, smaller stem leaves are sessile, flowers are bright orange yellow rays with brownish purple blunt disks, full sun.
Salvia spp. Recommendations: nemorosa, *'Blauhugel'* n. x *'Mainacht'* verticillata *'Purple Rain'*	18" ht., 24" spread.	Drought tolerant, requires good drainage and regular soil. Violet-blue flowers with oblong green leaves.
Sedum spp. *(Stonecrops)* Recommendations: *'Herbstfreude' [Autumn Joy]*	1"-2' ht., 1' spread, spreading to upright.	Simple stems with fleshy sessile leaves, dense clusters of pink to red to purple flowers, winter interest, full sun. Prefers well drained soil. Drought tolerant.
Senecio doria Recommendations: plattenensis, *"Prairie Ragwort"*	16"-18" ht.	Yellow flowers with orange centers blooming from May to June. Basal leaves have maroon undersides. Native to dry prairies
Solidago spp. *(Golden Rod)* Recommendations: sphacelata, *'Golden Fleece'* *'Wichita Mountains'*	10"-30" ht.	Spike-like racemes of golden flowers in late summer and fall. Drought resistant. Native species can spread rapidly.

COMMON & SCIENTIFIC NAME	SIZE AND FORM	CHARACTERISTICS
Stachys spp. *(Betony, Lambs Ears, Woundwort)* Recommendations: byzantina, *'Helen von Stein'* byzantina, *'Silver Carpet'*	1' ht., 1.5' spread.	Silvery foliage spreads to form a thick mat of white-wooly leaves. Tolerates hot conditions, poor soils but requires good drainage.
Yucca spp. *(Adam's needle or Soap Weed)*	3'-6' ht., 2'-3' spread, clumping.	Gray-green leaves tipped with spines, tall stalks of bell-shaped flowers, spines may be a safety hazard, full sun.