



# Landscape Scoring System Workshop

City Council 8-16-16



# Ames Landscape Ordinance Update

## Workshop Outline

- Review of each individual category
  - Point totals
  - Individual point explanations
- Review of existing sites and outcomes from scoring system
  - Scoring of existing sites
  - Developer site examples and adjustments
  - Staff comparison of current L1 and L2 vs. Scoring System Outcomes
- Council direction on Landscape Ordinance Update



# Ames Landscape Ordinance Update

- Mutual interest (Staff, Council, Developers) in updating landscape requirements and prioritized on Work Plan for 2016
  - Options to enhance the quality, aesthetics, and vitality of landscaping
  - Developers seeking flexibility in plantings and arrangement of landscaping
- Confluence hired as a landscape architect consultant on the project
- Staff has held 3 stakeholder workshops in January, March and May
- April 2016 Staff provided an update on feedback from the work group and options for new ordinance
  - Council directed staff to develop a weighted 'score based' system.
- Staff has refined a draft points based landscape system and completed text case examples
- **Now seeking City Council direction on how to proceed.**

# Scoring System

- Basic requirements are part of pre-requisites
- Scoring System includes six (6) separate categories
  - 5 Mandatory Categories
  - 1 Optional/Bonus Category
- Developers would need to achieve a minimum score per mandatory category and an overall point total
  - Total points would exceed the combined minimum points of the five (5) categories.
  - Differentiates point totals between large and small sites (< 0.5 acres)
- Large Site approval requires a total of 50 points
- Small Site approval requires a total of 33 points

# Soil Management Plan

## (8 points Large or Small sites)

- ▶ **New topic compared to current requirements**
- ▶ Stockpile Topsoil Onsite 1 point
- ▶ Verify removal of all construction debris 1 point
- ▶ Verify removal of excess gravel in planting areas 1 point
- ▶ Protect Drip Line of all existing trees of significance 1 point
- ▶ Rip sub-surface to 8" depth, prior to re-spread of topsoil 2 points
- ▶ Restore topsoil to recorded pre-development depth 4 points
- ▶ Replace the topsoil to a minimum 6" depth (submittal of test required) 2 points
- ▶ Soil must have a minimum organic makeup in the top 8"
  - ▶ 3% Organic makeup in top 8" 1 point
  - ▶ 5% Organic makeup in top 8" 3 points



# Environmental Design

## (Large sites 8 points)(Small sites 6 points)

- ▶ Addresses impacts of parking lots and promotes landscaped based stormwater treatment
- ▶ Provide no more than 10% additional parking than necessary beyond base requirements (*Shopping Centers not to exceed 5 per 1000*) 1 point
- ▶ Minimize hard surface parking lot area (In addition to the required Storm Water Management Plan)
  - ▶ Maximize green space (over 25% of the site) Outside of Floodway 2 points
  - ▶ Parking Islands at the end of all parking rows 1 point
  - ▶ No more than 10 continuous parking stalls in any row (7 X16 islands.) 1 point



# Environmental Design

(Large sites 8 points)(Small sites 6 points)

- ▶ Install Bio-retention to manage water quality and quantity 3 points  
*(In areas where Bio-retention are proposed, landscape requirements will be waived.)*
- ▶ Elimination of piping 2 points
- ▶ Design and construct a Green Roof 1 point



# Environmental Design

## (Large sites 8 points)(Small sites 6 points)

Reduce and/or eliminate the use of storm water intakes and piping.  
*(Encourage designers to use overland flow) (Narrative required)*

### Heat Island Effect

- ▶ Islands not designated as bio-swales: plant a minimum of 1 Overstory tree in each. 3 points
- ▶ Parking Lot Shading
- ▶ 35% within 15 years 2 points
- ▶ 50% within 15 years 4 points





# Front Yard Landscaping & Parking Lot Screening (Large sites 10 points)(Small sites 8 points)

- ▶ New requirement for both building front yards and parking lots along streets
- ▶ Diversity of genus (No more than 25% of any genus of plant) 2 points
- ▶ Leave a 3'-0" zone of planter area with no plantings directly in front of all parking stalls 1 point
- ▶ Provide 1 Overstory tree for every 50LF of street frontage in front setback 1 point
- ▶ Provide 2 Understory trees for every 50LF of street frontage in front setback 1 point
- ▶ 9 shrubs or grasses per 50 LF of drive isle outside of parking lot areas 2 points



# Front Yard Landscaping & Parking Lot Screening (Large Sites 10 points)(Small sites 8 points)

- ▶ Provide 9 shrubs, for every 100 LF of front setback street frontage 2 points
- ▶ Provide 20 ornamental grasses for every 50LF of frontage in front setback 1 point
- ▶ Use of clustered thoughtful plantings (*layering of colors and textures with variety of plants*) 4 points
- ▶ Provide grasses or shrubs with Bio-Swale in required landscape areas between parking and ROW 3 points
- ▶ Provide minimum 10 foot screening area adjacent to residential uses. 2 points
- ▶ Parking separation from lot line with minimum 10 ft. wide planting area (*excluding alleys*) 2 points



# Front Yard Landscaping & Parking Lot Screening (Large Sites 10 points)(Small sites 8 points)

- ▶ Provide landscape berming between the parking area and the street 2 points  
*(Must be a minimum of 30" high and cover 75% of parking lot frontage.)*
- ▶ Provide landscape berming between the parking area and the street 3 points  
*(Must be a minimum of 30" high and cover 95% of parking lot frontage.)*



# Planting Design

## (Large sites 8 points)(Small sites 4 points)

- ▶ **New standard to promote diversity and interest in landscaping**
- ▶ Diversity of genus (No more than 25% of any genus of plant in all categories of plantings) 2 points
- ▶ Provide .2 Overstory tree for every 1000SF of Open Space 1 point
- ▶ Provide .4 Understory trees for every 1000SF of Open Space 1 point
- ▶ Provide 6 shrubs for every 1000SF of Open Space 1 point
- ▶ Provide 10 ornamental grasses for every 1000SF of Open Space 1 point



# Planting Design

## (Large sites 8 points)(Small sites 4 points)

- ▶ Provide 10 shrubs or 3 grasses per 50 LF of building foundation 1 point
  - ▶ Undulating large open space 1 point
  - ▶ Provide added visual interest to the open spaces with the creation of berms and hills. *(large sites)* 2 points  
*(Must be a significant impact on the site to be considered.) Additional submittals will be required.*
- Incorporate existing significant vegetation (Trees must be at least 12 inches in diameter)
- ▶ 50% of existing vegetation 2 points
  - ▶ Planning may authorize for high value wetland, riparian and native areas 2 points
  - ▶ Use of clustered thoughtful plantings that include ornamental grasses, shrubs and over story trees 2 points



# Planting Design (Designer Choice)

**Designer Choice:** A Thoughtful planting plan that generally meets the intent of the items listed above, but goes beyond the basic requirements. It would include signature green spaces, outdoor gardens, rain gardens, seating areas, etc. Note- All items listed above need to be incorporated in some capacity to achieve this (See Note D) (Developments with more than Four (4) Acres of open space will want to use this method as it will likely decrease the number of required plantings).

*Some additional standards proposed include the following:*

- ▶ 15% of open area must contain either an outdoor garden or rain garden
- ▶ At least 2 seating areas required in front or side yards
- ▶ Must provide a summary of vegetation and its significance to the planting plan
- ▶ Must contain at least 2 signature green spaces
- ▶ Must be designed and certified by a professional landscape architect

*8 points*



# Groundcover

## (Large Site 10 points)(Small site 7 points)

- Eco-lawn mixture 1 point
- Use of hardwood Mulch beneath all trees, shrubs and decorative grasses 2 points
- Clustering of shrubs and grasses so that maintenance can operate around them easily 2 points
- 6' diameter mulch bed around all Overstory Trees, 4' on Understory 1 point
- No turf/lawn in areas less than 5-0' in width. 1 point



# Groundcover

( Large site 10 points)(Small site 7 points)

- ▶ Turf Grass / Lawn to cover less than 50% of the Open Space provided 2 points
- OR
- ▶ Turf Grass / Lawn to cover less than 25% of the Open Space provided 3 points
- ▶ Combination of Shortgrass Prairie grasses and ornamental grasses to cover 60% or more of the open space provided 4 points
- OR
- ▶ Use of Shortgrass Prairie grasses to cover 25% of the open space provided 1 point
- ▶ Addition of plantings to attract pollinator species in select areas 3 points
- ▶ Provide no more than 10% additional parking than necessary beyond base requirements 1 point





# Site Amenities “Bonus Category”

## 8 bonus points- Small or large sites

- **Site enhancements that are not necessarily landscaping, viewed as an overall site improvement**
- Provide a public hardscape plaza (minimum of 200SF) 2 points
- Provide public seating opportunities (Bench or Cut Stone) (1 point for every 3 benches) (2 pt Max) 2 points
- Irrigation installed in required landscape areas 1 point
- Use of an alternate paving material for 80% of the designated plaza space (DG pavers, stamped concrete, etc.) 2 points
- Incorporation of publically visible Art Piece (must be approved by City Staff) 2 points
- Addition of Publicly accessible bike parking 2 points



# Site Amenities “Bonus Category”

## 8 bonus points- Small or large sites

- ▶ Use of Decorative pedestrian scale lighting (Must be in addition to standard parking lot lighting) 2 points
- ▶ Recreational or private amenity 2 points
- ▶ Perennial flower beds 1 point
- ▶ Edible Landscaping (e.g. community gardens) 1 point





# Applied Standards To Existing Sites

- ▶ Basic Landscape Standards include:
  - ▶ Current standards based upon perimeter parking lot screening
    - ▶ (L1,L2, L3 Options)
  - ▶ Requires planter islands for double loaded parking aisles (every 20 spaces)
  - ▶ Large parking lots require a 15-foot median (1 for every 3 double loaded aisles)
- ▶ Require Apartment foundation plantings along streets

# L1 Landscape Standards

- ▶ The City's existing landscape standards are arranged in 3 separate primary categories ranging in design status from L1 through L3.
- ▶ L1 is based upon use of space for separation
  - ▶ Minimum 10 foot planter areas
  - ▶ Require trees every 50 feet
  - ▶ Shrubs based upon formula for area or street frontage
  - ▶ Allows for some grouping of plantings



# L2 Landscape Standards

- ▶ L2 relies upon dense planting of low growth screening and trees
  - ▶ Minimum of 5 foot wide planters
  - ▶ Shrubs every 4 feet on center
  - ▶ Trees planted every 50 feet



# L3 Landscape Standards

- ▶ L3 is a high screen requirement of 6-foot shrubs and trees
- ▶ Required as transition area between residential and parking lots
- ▶ 6-foot high screen with 6 feet on center and trees every 50 lineal feet (may substitute a 6-foot fence)
- ▶ Minimum width is 5 feet for planter





# Applied Standards To Existing Sites

- ▶ Staff reviewed already built L1 and L2 sites across Ames
  - ▶ Current standards focused on parking lot screening and islands
  - ▶ Reviewed small commercial, office/industrial, apartments, large retail sites
  - ▶ No changes to required landscape or open space requirements of base zoning
  - ▶ No changes to parking requirements
  - ▶ Use approved plans or reviewed from aerial photos
- ▶ Existing sites ranged from 16 to 36 points (assuming soil management points)
  - ▶ Focused on meeting parking lot screening requirements
  - ▶ Very few sites had diversity of plantings
  - ▶ Most sites do not have landscape based storm water treatment
  - ▶ Lack of design in layout and integration of planting variety
  - ▶ Principally rely upon grass turf for open space areas



# Applied Standards To Recent Projects

- ▶ With developer assistance, staff reviewed three recently approved projects to see the differences and what changes would enhance scoring:
  - ▶ Bell Warehouse ( could achieve 42 points )
  - ▶ Walnut Ridge Mixed Use (could achieve 52 points)
  - ▶ Mortenson Heights Apartments/Crane Farm (could achieve 52 points)
    - ▶ Findings: adding diversity not difficult; some site constraints will limit use of certain points; easier with initial integration; industrial loading areas difficult to address, substantial increase in planting requirements in large open spaces of apartments & industrial, soil management verification is needed.
- ▶ Staff generated mocked up a large industrial site and small commercial site for comparison of L1 and L2 versus points based approach
  - ▶ System creates flexibility, but requires integration at the beginning of a project
  - ▶ Less parking lot plantings will be required vs. L2, but more variety required
  - ▶ L1 similar for parking lot requirements, but does not require overall site design





## Site Application in the region

- ▶ The City's consultant Confluence scored two of their recent projects they have worked on in nearby cities using the proposed scoring system.
- ▶ Confluence scored the new Holmes Murphy location Waukee.
  - ▶ 8.2 acre site with a new 90,000 square foot office building on Grand Prairie Parkway in Waukee in the Kettlestone Development.
  - ▶ Approved design scored 46 points (without redesigning any elements)
- ▶ Jackson Crossing Apartments
  - ▶ 5.8 acre 244 unit multi-family south of downtown Des Moines
  - ▶ The site scored a total of 57 points under locally approved plans
  - ▶ Received many site amenity bonus points due to urban location

# Illustrated Large Site Example

- ▶ This example illustrates current L1 standards applied to an 8-acre site with a 60,000 sq. ft. office building with a loading dock in the rear.
  - ▶ Planted with 51 trees and 372 shrubs
  - ▶ Site allowed for wide planter areas to meet L1 along the street and cluster shrub plantings.



# Illustrated Large Site Example

- ▶ This examples illustrates the same 8-acre site and 60,000 sq. ft. office building
  - ▶ Used berms and cluster plantings, landscaped based stormwater, prairie areas
  - ▶ Approximately 65 understory trees, 30 overstory, flowers, ornamental grasses, shrubs



# Illustrated Large Site Example

Scoring System to the left



L1 Site Plan to the right



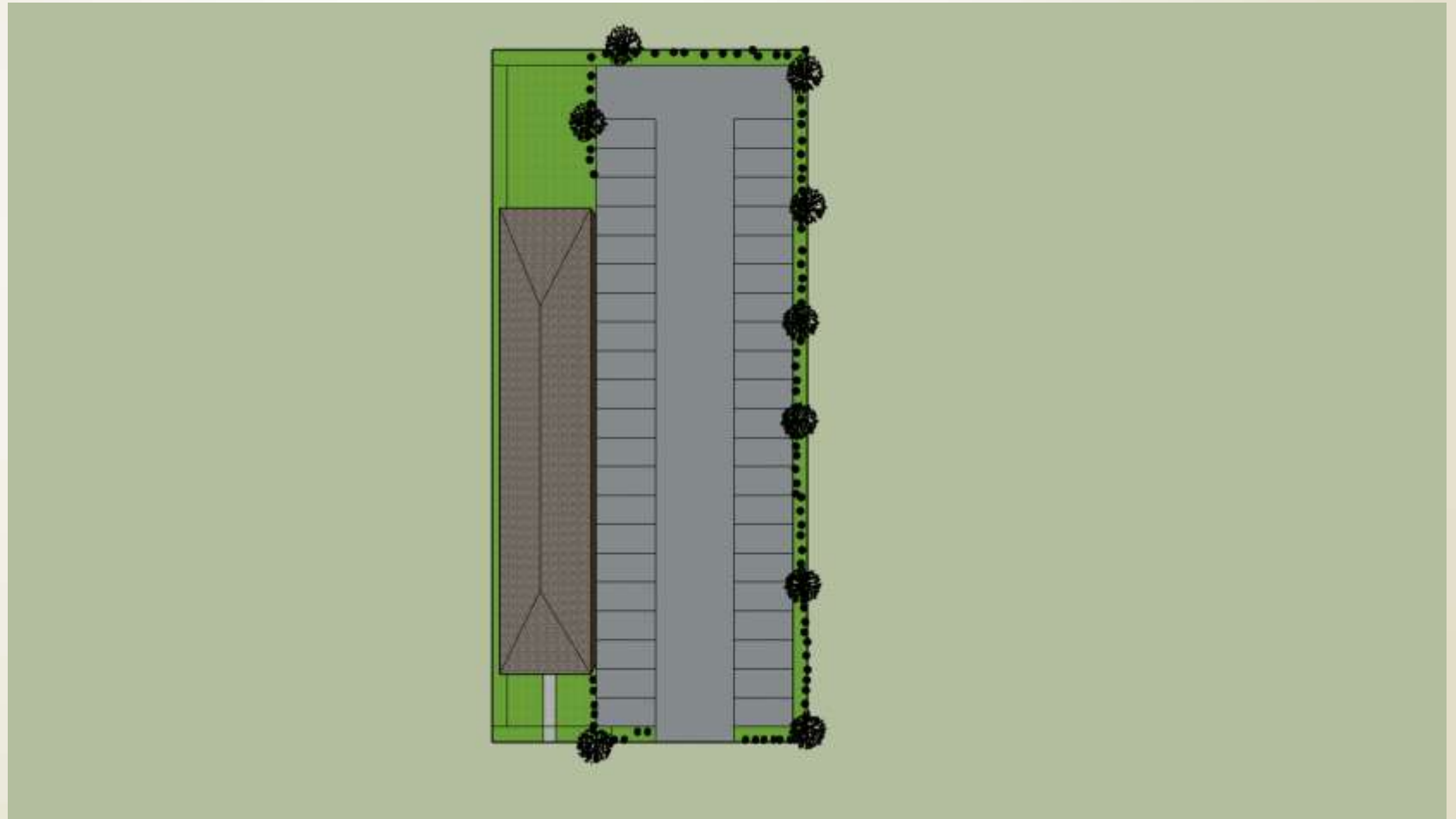
# Illustrated Small Site Example

- This is a .5 acre site designed with 4,000 square feet of restaurant space
- Uses L2 landscaping (perimeter shrubs and trees)
- 9 Trees and approximately 90 shrubs



## Illustrated Small Site Example

Top down site overview of the L2 standard.

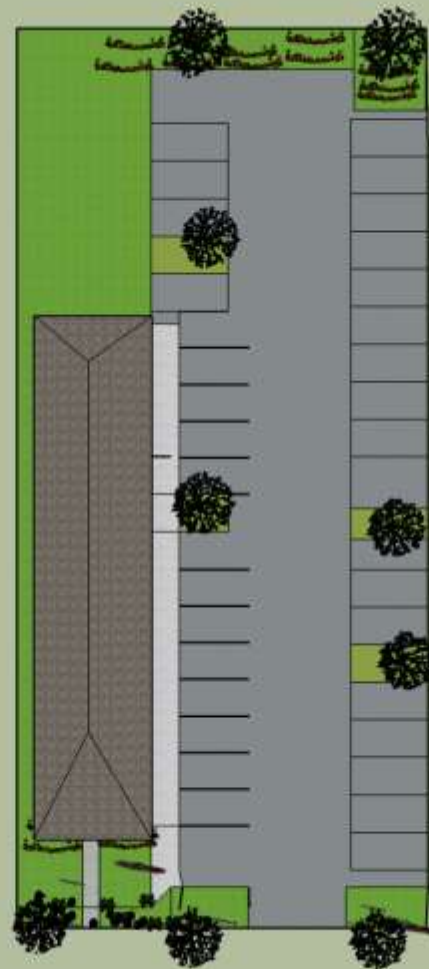


## Illustrated Small Site Example

- ▶ Same .5 acre site with Scoring System Landscaping
  - ▶ No side or rear perimeter landscaping
  - ▶ Includes islands within parking areas
  - ▶ Adds front yard landscaping with layered vegetation of flowers, grasses, shrubs, trees
  - ▶ 9 Overstory Trees, 2 understory trees, approximately 27 shrubs, 44 grasses, flowers



A top down view of the site with scoring system standards applied.

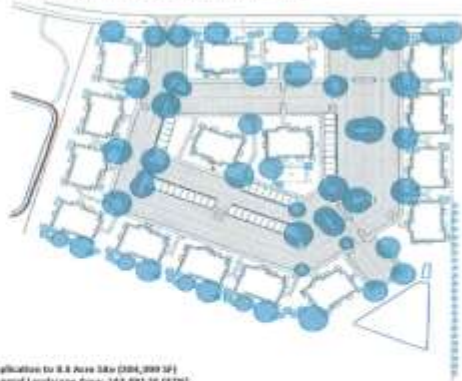




# Mortensen Heights Apartments

- ▶ Recently, the City Council gave approval to a new apartment complex at 5310 Mortensen Road known as Mortensen Heights apartments. The engineer for the developer agreed to take the proposed scoring language and apply it to the site with the building layout staying as proposed. The shrub, grass and tree totals between both the current approved site and proposed scoring system are listed.
- ▶ City Council approved major site plan:
  - ▶ 19 Overstory trees
  - ▶ 26 Understory trees
  - ▶ 210 shrubs
  - ▶ 0 grasses
- ▶ Draft ordinance proposal totals:
  - ▶ 27 Overstory trees
  - ▶ 54 Understory trees
  - ▶ 819 Shrubs
  - ▶ 1,365 grasses

CURRENT CODE | MAJOR SITE PLAN APPROVED BY CODES



DRAFT CODE



Application to R.S. Zone 50a (204,000 SF)  
General Landscape Area: 143,481 SF (67%)

Draft Code requires a minimum of 27 overstory trees, 54 understory trees, 829 shrubs, and 1,365 grasses for a site of this scale.

CODE OVERLAY





# Findings

- Adding diversity is not difficult;
  - Some site constraints will limit the use of certain points;
  - The process is easier with initial integration;
  - Industrial loading areas are difficult to address;
  - There is a substantial increase in planting requirements in large open spaces of apartments & industrial areas;
  - Soil management verification is needed;
  - Campustown and Downtown need special consideration;
  - Regional stormwater detention facilities(off-site) do not lend themselves to points.
- 
- Will have to exercise discretion over existing non-conforming sites.



# Next Steps

- ▶ Is Council comfortable with the types of points and range of points in the proposed system?
  - ▶ Is the system mandatory for all sites?
- ▶ If moving forward, staff will draft an ordinance and return to work group to review specific language of an ordinance.
- ▶ Public Hearing with the Planning and Zoning Commission
- ▶ Public Hearing with the City Council