

Spring 2010



Review of Large-Scale Retail Design Standards and Development Principles

Accessibility, public space, human scale, safety, and sustainability in the urban landscape

1206 U of Oregon
Eugene, OR 97403

t 541.346.3582
f 541.346.3626

sci@uoregon.edu
sci.uoregon.edu

Monica Witzig, Planning, Public Policy & Management
Scott Turnoy, Community & Regional Planning

Dr Yizhao Yang, Assistant Professor
Planning, Public Policy & Management

Acknowledgements

The authors would like to thank everyone involved with this project for their contributions, without which this report would not have been possible.

We would like to thank the City of Gresham, specifically: Lauren M. McGuire, RLA, ASLA, Senior Planner; Stacy Humphrey, AICP, Special Projects Planner; and Jonathan Harker, Comprehensive Planning Manager, whose guidance enabled the Land Use & Growth Management course to address the specific needs of the City of Gresham.

We would also like to thank Nick Fleury, SCI Program Manager, for his role in administering the Sustainable Cities Initiative and for coordinating University of Oregon coursework with the needs and expectations of the City of Gresham.

Also, we want to thank Assistant Professor Yizhao Yang and Graduate Teaching Fellow Scott Turnoy for providing instruction, materials, and guidance to students in the Land Use & Growth Management course. Their efforts ensured that the energy put into the project by the students was meaningful for both the City of Gresham and the students themselves.

Lastly, we also want to thank the students of the Land Use & Growth Management course for their careful review of design standards documents from 32 communities across the country.

About SCI

Sustainable Cities Initiative (SCI) is a cross-disciplinary organization at the University of Oregon that seeks to promote education, service, public outreach, and research on the development and design of sustainable cities.

Our work addresses sustainability issues across multiple scales, from the region down to the building, and emerges from the conviction that creating the sustainable city cannot happen within any single discipline. SCI is grounded in cross-discipline engagement as the key strategy for solving community sustainability issues. We serve as a catalyst for expanded research and teaching; market this expertise to scholars, policymakers, community leaders, and project partners; and work to create and sponsor academic courses and certificates. Our work connects student passion, faculty experience, and community need to produce innovative, tangible solutions for the creation of a sustainable society.

About SCY

The Sustainable Cities Year Initiative is a 'partnership' with one city in Oregon per year where a number of courses from across the University focus on assisting that city with their sustainability goals and projects. The Sustainable Cities Year faculty and students work with that city through a variety of studio projects and service learning programs to: 1) provide students with a real world project to investigate; 2) apply their training; and 3) provide real service and movement to a local city ready to transition to a more sustainable and accessible future.

About Gresham

With just over 100,000 people, Gresham is the fourth largest city in Oregon. It is bordered to the west by Portland, the largest city in the state. Gresham is home to the Mount Hood Jazz Festival and is known as "The City of Music". It is close in proximity to the Columbia Gorge National Scenic Area and Mount Hood, the highest point in Oregon. Gresham has a wide variety of neighborhoods including the Civic Center, known for its active transportation network, rapid transit connections and residential, commercial and retail mix.

SCI Co-Directors

Nico Larco, Assistant Professor of Architecture
Marc Schlossberg, Associate Professor of Community & Regional Planning
Robert Young, Assistant Professor of Community & Regional Planning

Nick Fleury, SCI Program Manager
Price Armstrong, SCI Research Assistant

Course Participants

Land Use and Growth Management

Dr Yizhao Yang, Assistant Professor, Community & Regional Planning
Scott Turnoy, Graduate Teaching Fellow

Nathan Andrus-Hughes, Environmental Studies Undergraduate
Amy Annino, Landscape Architecture Graduate
Michelle Bolduc, Undergraduate
Lindsay Cagan, Undergraduate
Jacqueline D’Innocenti, Environmental Studies Undergraduate
Rebekah Dohrman, Undergraduate
Greg Eggers, Environmental Studies Undergraduate
Aubrey Fahl, Environmental Studies Undergraduate
Trevor Forbess, Undergraduate
Andrew Galen, International Studies Undergraduate
Dan Higgins, Environmental Studies Undergraduate
Tanja Janssen, Environmental Studies Undergraduate
Tim Keller, Environmental Studies Undergraduate
Kristina Koenig, Landscape Architecture Graduate
Chih Yung Lin, Architecture Undergraduate
Dana Maher, Environmental Studies Graduate
Lynn Merrill, Undergraduate
Colter Millehrer, Environmental Studies Undergraduate
Sarah Murff, Environmental Studies Undergraduate
Dave Myers, Planning, Public Policy & Management Undergraduate
Shigeki Okada, Undergraduate
Lev Parker, Planning, Public Policy & Management Undergraduate
Michelle Parkins, Landscape Architecture Undergraduate
Linsey Payne, Landscape Architecture Graduate
Jamie Quesenberry-Gunson, Undergraduate
Chris Ruderman, Public Policy & Management Graduate
Chelsea Steed, Planning, Public Policy & Management Undergraduate
Allen Stewart, Planning, Public Policy & Management Undergraduate
Adam Watkins, Undergraduate
Hilary Wheeler, Environmental Studies Undergraduate
Monica Witzig, Planning, Public Policy & Management Undergraduate

Spring 2010

Review of Large-Scale Retail Design Standards and Development Principles

Accessibility, public space, human scale, safety,
and sustainability in the urban landscape

Table of Contents

I.	Executive Summary	7
II.	Introduction	8
III.	Existing Conditions	10
IV.	Methodology	22
V.	Criteria of Design Objectives	28
VI.	Example Community Design Principles	39
	<i>Accessibility</i>	<i>44</i>
	<i>Public Space</i>	<i>54</i>
	<i>Human Scale</i>	<i>61</i>
	<i>Safety</i>	<i>73</i>
	<i>Sustainability</i>	<i>78</i>
VII.	Summary Points	84
VIII.	Conclusion	86
	Bibliography	87

This document is a compiled review of design standards that will provide the City of Gresham with best practices related to large-scale commercial design standards and development regulations. For large-scale commercial or retail projects, it is important that a community's design review program ensures development qualities consistent with the following urban design principles or values identified by the City of Gresham:

- **Accessibility**
- **Public Space**
- **Human Scale**
- **Safety**
- **Sustainability**

In order to identify specific guidelines that are relevant to urban design principles and values, site design, building design, signage and lighting, and an "other" category are applied to these five objectives in this report.

Criteria for assessment are first discussed, which is organized into detailed definitions for each principle and subsequent questions the City may use to evaluate a proposal. Following the definitions is a large matrix that serves as a quick reference guide for each municipality.

Based off of the analyses and evaluations of the communities represented in the matrix, the next section provides the primary focus of the report -- twenty tables make up this section, four tables for each of the five principles (accessibility, public space, human scale, safety and sustainability). A brief summary is provided with each table. The tables, with the corresponding site design, building design, signage and lighting, and "other" categories, present the selected design standards in alphabetical order by city, and the final columns on the far right provide space for any necessary comments.

There are five points that should be noted from the outset:

- 1) Not all design standards and regulations are included due to too much similarity between the documents, since this is a preliminary reference point in order to allow Gresham to decide if staff should examine the standards in more depth.
- 2) The five criteria are inextricably linked to one another meaning they are applicable to more than one section. For example, policies to address accessibility can also help to achieve sustainability goals. In addition, human scale and accessibility may both be considered in the design and size of a parking area.
- 3) While some standards not provided may be useful for other communities, those selected are based off of Gresham's values and current conditions so as to not recommend an unfeasible solution for the area.
- 4) Many cities used the City of Fort Collins design standards in order to guide the development of their own policies; some are almost verbatim. Instead of solely using Fort Collins's standards in this report, other regulations are provided as examples because they include additional specifications or because the variations in wording prove more effective.
- 5) This is a general assessment rather than a comprehensive evaluation of the effectiveness of these standards. The students who participated in this course are not trained design professionals and do not have equal ability with urban design principles or strategies. However, informed comments are provided for some of the examples given throughout the tables.

II. Introduction

Large-scale developments, and in particular, those termed “big-box” retail stores are a common fixture in many cities across the nation with building sizes ranging from 20,000 square feet to over 200,000 square feet. The design and density of such developments may have significant impacts on the visual and spatial character of a community, as well as on local and regional transportation and environmental conditions (Cullingworth and Caves, 2009). They are simple in architectural style—prefabricated, warehouse-looking buildings that have caused many to become dissatisfied with the effects of sprawling development. This obviates the need for development parameters, causing proponents of new urbanism, smart growth, and other sustainable development practices to consequently seek the revival of the traditional role of physical design to create more livable cities and suburbs (Wong, 2006).

The continuing expansion of plans covering large-scale retail development and design testifies the interest of communities in influencing the quality of design, not just the quantity and location of development (Porter, 2008). While the development content in these plans is less quantifiable than land development regarding the amount, rate, and location of growth, the issue remains highly important to people because of how design quality shapes the community’s environment.

Many communities have either prepared for or responded to increasing demand for large-scale commercial projects by instituting design standards as part of a municipal design review program. Such programs use design controls to avoid generic, big-box development, which tends to be physically disconnected from the local community and mostly serves personal automobile transportation. Accordingly, the City of Gresham’s *Retail Design and Development Standards Design Analysis: Existing Conditions and Precedent Study*, aims to ensure that high quality, appropriately located and scaled large format retail is developed in order to meet the needs of its residents.

Community character and appearance can be improved through the adoption of detailed plans and special zoning districts that establish design contexts and policies for said areas (Porter, 2008). These detailed planning processes allow close attention to the qualities that make up the special character of the community’s components. Especially important are the plans that foster its integrity through context-reflective design.

Characteristics of Desired Standards & Guidelines

Commonly referred to as design standards, these standards establish regulations for individual zoning districts. Among many design specifications regarding the desired structure on the property and its relationship to the surrounding environment, the code is concerned with physical design, scale, and form as they are related to the visual impacts of development (Cullingworth and Caves, 2009). Relating these to large-scale retail, the design standards are concerned with accessibility, public space, human scale, safety, and sustainability. Plans should also identify compatibility impacts to their surroundings such as with nearby residences or important natural features and habitats.

Aside from the design criteria, there are additional qualities the standards must have. They should be primarily prescriptive rather than proscriptive, which allows the achievement of a predictable result; this is essential for how to encourage permitted actions. Clarity, while covering all legal bases, is an aspect that cannot go ignored because of the intended audiences (e.g. developers). Equally important is consistency. These standards must be internally as well as externally consistent. Internal consistency is achieved when the many development criteria and objectives aim to achieve the same vision. When consistency with a comprehensive or general area plan and related goals is met, this satisfies external consistency (Land Use and Growth Management, 2010).

In a tangible form, these standards appear as definitions and requirements that should be supported by both text and images. An appropriate balance of the two is needed because with too much text and no visual representation or too many images without enough explanation of the intent or guidance through specific standards, this will result in undesired outcomes. Short, discretionary ordinances can be vague causing both staff and the community confusion due to unanswered questions and unanticipated results. However, these detailed regulations should also avoid being too excessive (Freilich, White, and Murray; 2008).

What must also be made clear is the important distinction between design standards and design guidelines. In the design manual, there are design guidelines, which are discretionary in nature: “Public spaces should incorporate features that advance sustainable principles...” whereas design standards are more clear and objective: “Public spaces shall incorporate the following... one element with sustainability attributes such as a rain garden, solar powered lights or equipment, pervious paving, etc.”

Furthermore, guidelines as opposed to standards are difficult to apply consistently because they offer too much room for subjective interpretation and can be difficult to enforce. Legally enforceable standards require less oversight by discretionary review bodies, therefore “fostering a less politicized planning process that could deliver huge savings in time and capital and reduce the risk of takings challenges,” (Cullingworth and Caves, 2009).

Some might argue that a benefit to employing guidelines rather than definitive requirements offers greater opportunity for creative approaches to design standards. General language in the form of broad statements with words like “compatible” and “desirable” interspersed throughout the text, rather than being exclusionary in nature in an attempt to control product, guide performance so that different solutions to general criteria may be met. This would also allow developers and builders to tailor responses to specific site and market conditions (Porter, 2008). What will be most effective is the use of both in order to be able to communicate inspiring objectives and visions so that they are understandable, but again, must also be clear and enforceable in the form of standards.



Gresham Station, a large-scale development in the city center

III. Existing Conditions

Summary

Documents used for the contents of this section are the *City of Gresham's Approaches to Large Retail Format Size Limitations* and its *Retail Design and Development Standards Design Analysis: Existing Conditions and Precedent Study*, which were both submitted to Council in March 2010.

Substantial community opposition to a proposed Wal-Mart that was to be located on Boulevard and 181st Avenue alerted Gresham City staff and many of its citizens of the “disconnect between what is desired by residents, business owners, and stakeholders,” and what is permitted by the Development Code regarding the City’s existing commercial district development standards. While the proposal was denied due to traffic impacts, this encouraged staff to evaluate and enhance said standards (City of Gresham, 2010).

As part of the 2009 Council Work Plan, a report was made to the Council on October 13, 2009, on how other jurisdictions have attempted to mitigate the impacts of big box retail. Seven issues were summarized in the report:

- Defining large format retail
- Limiting building size
- Building and site design
- Stormwater management
- Traffic impact
- Economic impact
- Vacant buildings

Council directed staff to identify potential adverse impacts; this included the need to address design, size, and the need to balance protecting neighborhoods and the City’s economic development objectives. Council’s direction also included having a significant public participation process. The Retail Design and Development Standards project was thus included in the 2010 Council Work Plan.

City staff Dan McAuliffe submitted the Approaches to Large Retail Format Size Limitations project to Council on March 17, 2010 as part of the 2010 Work Plan. This project has three parts to it:

- Define issues and create regulations, including goals and policies specific to large format retail, addressing size, traffic, economic impact, and vacant buildings.
- Establish design principles, discretionary guidelines, and clear and objective standards that will be integrated into the development code.
- Evaluate the potential application of the design standards to non-retail commercial uses, such as office buildings, personal and business services, etc., within the Corridor Districts to ensure a consistent and cohesive design environment.

Due to the concern expressed by many of Gresham’s stakeholders, Gresham is currently looking at its Community Commercial (CC) district. Large retail is generally directed toward this district, which was created to serve as larger retail nodes with a variety of commercial uses. Coupled with general concerns, the district has few development restrictions and has no size limit or minimum Floor Area Ratio (FAR), which exacerbates the situation. However, the project will eventually evaluate the need for large format retail regulations in other districts such as within its Corridor Districts (see above).

While it was agreed that a minimum applicable size or other criteria must be established before these standards come into effect, four policy alternatives modeled after several communities' existing ordinances and best practices were presented for review and debate. During a phone conference in early July, 2010, Senior Planner, Lauren McGuire- RLA, ASLA and Associate Planner, Dan McAuliffe- LEED AP, made clear that they were leaning toward, but had not ultimately decided that a combination of the first and fourth alternatives will be most appropriate. A brief description of the four alternatives is as follows:

The first alternative, which was the most straightforward, was to simply put a limit on the total square footage of the development. Sample size limits of 60,000, 80,000, and 120,000 square feet were presented. The second alternative also looked at size limits, but only regarding the limitation of the building footprint on the site. Alternative three investigated the consequences of applying a size limit only to those retailers selling groceries. Lastly, the fourth alternative presented a tiered concept that while various square footages were allowed, additional building and site design regulations would be imposed as the scale of the development increased. This held the rationale that with increase in size comes greater visual, economic, and environmental impacts.

As the first step of the project, Gresham presented its *Retail Design and Development Standards Design Analysis: Existing Conditions and Precedent Study*, on March 31, 2010. Retail evaluated for this document typically exists in a strip center or neighborhood center development type. In most instances, the major retailers are located at the back of the site, often with adjacent inline stores and smaller outbuildings located closer to the street. Below are the site development strategies the City identified in its study. These development strategies were used as criteria to evaluate the major retail centers in the area: Kmart, Gresham Station, Gresham Town Fair, Hood Center, Oregon Trail Center, WinCo, and Fred Meyer; neighboring Gresham is the Troutdale Commons development.

The evaluation portion of this document is presented below.

Development Strategies

Site Development Strategies

- **Street Edge Definition:** The edges of retail sites in Gresham are generally poorly defined. Outbuildings typically alternate with parking at the street edge or are placed behind additional parking areas or driveways. These result in an inconsistent visual character at or along the public edge of the site, and neither condition fosters a pedestrian character or environment. When parking is located adjacent to the street, some developments successfully screen the parking areas with trees, shrubs, and fences. Others are less successful, utilizing ground cover or other landscaping that is not sufficient to screen the parking from view and define the public space.
- **Street Edge Activation:** The outbuildings, where present, generally face inward toward the parking area, leaving a blank or minimally detailed wall adjacent to the active public space. While this configuration is typical of development nationwide, the lack of glazing of other features on the street detracts from the visual character of the developments.

- **Street Grid and Circulation:** Connections to neighboring areas are generally minimal, which isolates the development from adjacent neighborhoods, other retail centers, and creates barriers between surrounding districts. Parking areas are often broken down into smaller areas, but they are often poorly defined.
- **Pedestrian Circulation:** Pedestrian circulation through the site and parking areas is aided by well-defined pedestrian walkways, which often incorporates landscaping. These greatly improve the accessibility and the aesthetics of the parking area when present.
- **Parking:** Parking is generally placed behind outbuildings but is often at the street edge with little screening. Parking areas also seem oversized, but parking utilization may be related to the time of the visit.
- **Service Areas:** Service areas are typically located appropriately at the back of the site. Landscape buffers reduce negative impacts on surrounding residential areas, though some edges should receive additional plantings.
- **Landscaping:** Landscaping is highly variable between projects, from those with dense and mature plantings to sparsely planted parking areas. When present, landscaping in parking areas effectively breaks down the visual scale of these spaces into smaller areas.
- **Open Spaces:** Few public spaces exist in these site plans. Given the quantity of supermarkets and other food vendors, this is a missed opportunity. The few existing spaces function as outdoor seating areas for restaurants or coffee shops and create activity on the street when in use.

Building Design Features

- **Massing and Façade Depth:** Building façades are often flat with the exception of the entry features and the occasional tower feature. These features provide depth and added height to the façade, but typically look tacked on rather than integrated into the building. Few buildings exhibit other substantial changes in mass or form.
- **Glazing:** The major retailers generally lack significant window and door glazing. Storefront windows occur only on inline or outbuilding retailers.
- **Entries:** Entries are well defined but often not designed well. The typical strategy is a large projecting canopy over the doors that extend above the parapet.
- **Materials:** Materials vary greatly but generally fall below high quality finish grade materials. Concrete block is the most common primary material, often accompanied by EFIS above the pedestrian level. Projects that utilize high quality materials, including brick and stone were noticeably more attractive than the majority of the other buildings.
- **Façade Details:** Most buildings display limited wall articulation, which typically occurs by adding horizontal elements including base courses, banding, cornices, or changes in materials or colors. Vertical features that add rhythm to the façade including columns, pilasters, or more substantial articulation occur to a lesser degree. False windows or window openings are present on some buildings, adding some detail but looking noticeably fake.

- **Roofs:** One consistent element between Gresham’s retail seems to be arcades with sloped roofs in front of the buildings. While these add depth, they create a monotonous horizontal façade and dark spaces beneath it; one can see the sign and the arcade more than the storefront. This feature creates difficulty in plane changes and results in flat buildings.

Gresham Site Evaluation Examples

The City of Gresham conducted an evaluation through 2009 of several key site developments in the core area of the community. The evaluation looked at several building characteristics, including street activation, street and pedestrian circulation, open space, landscaping, façade details, materials, and sustainability features.

Table 1 and Figure 1 provide an overview of five of the examined sites, immediately followed by findings from each site evaluation from the 2009 City of Gresham study.

Table 1 - Evaluated Site Characteristics

Site Name	Bldg Size (sq ft) (# of bldgs)	Land Use Designation	Site Size
Fred Meyer	190,000 (1)	Community Commercial (CC)	19 acres
Gresham Station	300,000 (1)	TDD - Medium Density Civic (TDM-C)	16 acres
Gresham Town Fair	250,000 (11)	Downtown Mixed-Use (DMU)	25 acres
Hood Center	105,000 (3)	Downtown Comm Low-Rise (DCL)	8 acres
Winco	85,000 (1)	Corridor Mixed-Use (CMU)	8 acres

Figure 1 - Location of Evaluated Sites



Source: Google Maps, <http://www.google.com>

Fred Meyer

Site Size: 19 Acres Building Size: 190,000 square feet in one building

Land Use Designation: Community Commercial (CC)

Description: Single large retail building with liner spaces and no outbuildings.

Strengths: Multiple full height glazed entries; liner uses on façade; major changes in building mass.

Weaknesses: No buildings at the street edge; minimal parking landscaping; minimal glazing outside liner uses and entries; little building detail; horizontal building emphasis.

Site Development Strategies

- **Street Edge Definition:** The street edge is not defined by buildings or consistent landscaping. No outbuildings are used in front of the Fred Meyer, but a gas station has recently been developed there. Street edge landscaping comprised of ground cover and a few street trees is sparse and inconsistent. The single long building is placed at the rear of the site.
- **Street Edge Activation:** There are no street-activating features on this site. The building has many entries, which are facing the street but they are set back a great distance.
- **Street Grid and Circulation:** No connections are made through the site. While the parking area is divided into blocks, they are much less defined than other examples.
- **Pedestrian Circulation:** Two landscaped pedestrian sidewalks follow the primary entrance on Burnside to a building entrance. A second pedestrian path is located off the side street. Trees and the occasional shrub are present along the length of these paths.
- **Parking:** Parking is placed at the street edge and visible from the street.
- **Service Areas:** Service areas are placed at the rear of the site. Additional landscaping to screen neighboring residential would be beneficial in certain areas.
- **Open Spaces:** The site has no open spaces.
- **Landscaping:** The parking area is sparsely landscaped with few islands and landscaped rows only following the main site entries. Street edge landscaping is also minimal. Landscaping is used to screen the rear of the site from the nearby residences. Small landscaped spaces also exist on the perimeter of the site.
- **Sustainability:** No sustainable features were visible during the site visit.



Building Design Features

- **Massing and Façade Depth:** Several changes in mass occur over the length of the building. Entry towers project in both plane and height from the surrounding building. Liner uses along the front façade also extend toward the street. Diagonal geometry is introduced at one end of the building, which adds variation.
- **Glazing:** Fred Meyer's glazing is concentrated around full height glazed entry towers. The liner uses have pedestrian level glazing but are not as extensive as most storefronts.
- **Entries:** The building has three primary entries, each enclosed in a projection with extensive glazing. The projections extend vertically and horizontally from the building, adding hierarchy and depth to the façade. Liner uses have individual entries integrated into their façades.
- **Materials:** Two colors of painted concrete blocks are used as the primary material with green corrugated metal panels as the secondary material. These are not typically considered finish grade materials.

- Façade Details: Other than the entry towers, the façades have very little detail with green corrugated metal projecting slightly over the pedestrian level of the façade. Painted materials create bands in the façade, reinforcing the horizontality of the building. Green screens have recently been added which may improve the façade appearance once the plants are established.
- Roof: The building uses a parapet roof with projecting flat roofs over the entry towers.



Gresham Station

Large format retailers: Best Buy, Borders, Old Navy, Bed Bath and Beyond, World Market

Site Size: 16 acres (plus ROW) Building Size: 300,000 square feet

Land Use Designation: Transit Development District – Medium Density Civic (TDM-C)

Description: Neighborhood shopping center with multiple large retailers and outbuildings arranged on street grid.

Strengths: Internal grid and street connections; strong definition of principle streets; double frontage buildings; successful building designs.

Weaknesses: Extensive use of EFIS; immature landscaping

Site Development Strategies

- **Street Edge Definition:** All buildings are placed on a street edge and the principle frontages, Division and Civic Drive, are lined with buildings. Some of the buildings fronting Division are two stories with office uses over the ground floor retail. Where parking is adjacent to the street edge, shrubs help screen the parking although their size limits its success. Major retail spaces are located on 12th St and Norman Ave, forming an “L” at the rear of the site.
- **Street Edge Activation:** All stores front a street edge, with windows and doors along the street. Many retail spaces are double-sided and are accessible from the parking area as well. Streetscaping, including street trees, pedestrian level lighting, and decorative paving encourages activity at the street.
- **Street Grid and Circulation:** A street grid was created within the site and multiple connections were established to surrounding areas.
- **Pedestrian Circulation:** All blocks created by the street grid are lined with sidewalks on all sides. Additionally, dedicated pedestrian connections exist through most of the parking areas within blocks.
- **Parking:** On-street parking is provided on all internal streets, giving retailers spaces directly in front of the entries. Most parking is in off-street lots located behind outbuildings on the site’s primary frontages. One block is exclusively parking.
- **Service Areas:** Service areas are placed at the rear of the site but are visible from a minor street running behind the stores. These areas are configured as a shared court recessed into the building. Walls are utilized to minimize views into these areas.
- **Open Spaces:** There are multiple small open spaces on the site. Two are located on corners, allowing ends of outlot buildings to front the spaces. This also allows access between the street and the parking area without walking around the building. The spaces are appropriately placed next to uses which create activity in them, including restaurants and cafes.

- Landscaping: The site is well landscaped with trees and shrubs planted on many islands in the parking areas. Landscaping is also present around the block edges. The immature trees and shrubs will become more effective dividing and defining space as they age.
- Sustainability: A densely planted and attractive stormwater pond is at the rear of the site along a pedestrian path. The site is accessible by transit.



Building Design Features

- Massing and Façade Depth: Major retail spaces utilize an entry projection to establish depth in the façade. Outbuildings, which simulate several adjacent buildings, utilize several small projections and recessions to add depth and reduce the building's scale.
- Glazing: Major retail spaces utilize glazing that is focused at the entry with few other windows. Outbuildings and inline retailers typically use extensive storefront glazing, often on multiple sides of the façade though some street façades are blank.
- Entries: The entry features of the major retailer spaces vary; most utilize projecting elements, including wall projections, arcades and canopies, increases in parapet height, changes in material, and increased glazing.
- Materials: Primary materials include concrete block, brick and multiple colors of EFIS. Several façades have damaged areas of EFIS and have been only marginally repaired. Accent materials are higher quality and include stone and tiles
- Façade Details: Most buildings are designed in a base middle top fashion, with a change of material at the base and a cornice feature at the top. Horizontal planes of the building are broken down through the use of pilasters, small changes in plane accompanied with a changes in material. Individual awning or canopies typically accompany window and door openings, creating additional depth at the pedestrian level. False second story windows are placed on certain buildings, which adds detail above the ground level but looks fake.
- Roof: Roofs typically use parapet walls, which change in height corresponding to different retailers and wall projections, adding individuality to the buildings. Pitched roofs are commonly used on tower elements, drawing attention to critical locations in the plan.



Gresham Town Fair

Large format retailers: Dick’s Sporting Goods, PetSmart

Site Size: 25 Acres Building Size: 250,000 square feet in 11 buildings

Land Use Designation: Downtown Mixed-Use (DMU)

Description: Neighborhood shopping center with multiple large retailers; inline spaces and outbuildings.

Strengths: Strong landscaping on edges and in parking area; majority of parking behind outbuildings; public art feature.

Weaknesses: Barrier to between neighborhoods; few buildings face the street; arcade creates horizontal and dark storefronts; service areas front street edge.

Site Development Strategies

- Street Edge Definition: Several buildings are located at or near the street edge on the site’s two major frontages. A building is also at site’s prominent corner. Most buildings are separated from the street edge by parking or drive lanes, but a few are located at the street. Mature trees and shrubs line Eastman Parkway and improve the street edge. The back of one of the buildings face the third frontage with trees lining the street. Large retail and inline spaces are placed at the back of the site in an “L” configuration.
- Street Edge Activation: While many buildings are near the street edge, only the Burger King on the corner has an entrance and glazing off the street, although it also has a drive-through window there as well. Some buildings have glazing facing the streets but offer no entries. In this case, sidewalk connections lead to side entries. The remainder of buildings at the street edge are separated by parking and screening and generate little activity.
- Street Grid and Circulation: The long site has no street connections through it, acting as a barrier between the Civic Neighborhood and Downtown. The parking area is divided by major access routes into a block structure, though its edges are not well defined. The primary circulation routes generally lead to entries of the major retailer on the site.
- Pedestrian Circulation: Defined pedestrian walkways are present only along the primary entry boulevard. Smaller walkways leading to outbuildings from the sidewalk are also present.
- Parking: Most parking is placed behind the outbuildings, but smaller parking areas serving these spaces are present at the street edge. This parking has generally been screened with trees and shrubs at the street edge.
- Service Areas: Service areas are placed at the rear of the site. One of the service areas fronts the site’s 3rd St and screening should be improved.
- Open Spaces: There are no open spaces on the site, but other features including public art in a planted boulevard are present.
- Landscaping: The site is extensively landscaped with mature plant material. Many landscaped islands and rows exist within the parking area, featuring trees and shrubs. This visually reduces the scale of the parking area and creates smaller zones. The site edge is also well landscaped and planting beds are present at most major entries to the site.
- Sustainability: The planted boulevard on the primary entry also functions as a stormwater area. The site is accessible by transit.



Building Design Features

- **Massing and Façade Depth:** Mass and depth are primarily established through an arcade, interrupted with towers placed at regular intervals, and the entries of major retail spaces.
- **Glazing:** Little glazing is generally present in the façades of the major retail spaces; storefront glazing is utilized by Joanne Fabrics, inline spaces and outbuildings.
- **Entries:** The entry features of the major retailer spaces vary. Some utilize two projecting tower elements surrounding a taller pitched roof over the arcade. Dick's utilizes a projected and stepped parapet wall with changes of materials. PetSmart's entry is oddly configured, including arched parapets ending over arcade spans. A major drive aisle terminates into a blank wall of this façade.
- **Materials:** Concrete block is the primary material of the building and columns, with EFIS used for parapet walls and standing seam metal on pitched roof sections.
- **Façade Details:** Tower elements are slightly projected from the arcade and the concrete columns add verticality to an otherwise horizontal façade. The towers also utilize a framed window opening, adding detail to the façade and light to the dark spaces below the arcade.
- **Roof:** Roofs are typically pitched. Several entries of major retail spaces utilize pitched roof sections that extend through parapets.



Hood Center

Site Size: 8 Acres Building Size: 105,000 square feet in three buildings

Land Use Designation: Downtown Commercial Low-Rise (DCL)

Description: Grocery store anchored shopping center with several inline retail spaces.

Strengths: One building faces the street; consistent street edge landscaping.

Weaknesses: Street edge not defined; minimal parking area landscaping; buildings lack detail, glazing and depth; horizontal façade.

Site Development Strategies

- **Street Edge Definition:** One outbuilding is located at the street edge and a second is near the street but setback behind parking. Street trees line the site, adding consistency but not substantial definition to the public space. The major retail spaces are in a single, long building located at the rear of the site. The lack of a building on the corner of Division and Burnside weakens the sense of place and the undeveloped corner is a lost opportunity.
- **Street Edge Activation:** The single building at the street edge has large windows that face the street. No other street-activating feature is present on the street.
- **Street Grid and Circulation:** No street connections are made through the site. The parking area is also not significantly divided by internal connections.
- **Pedestrian Circulation:** A raised walkway directly links the sidewalk and Safeway. There is no landscaping along the walkways path and no buffering is provided between pedestrians and automobiles.

- **Parking:** Parking is placed at the street edge and is visible from the street. Little attempt has been made to screen the parking from public view. The addition of shrubs or a garden wall would greatly improve this condition.
- **Service Areas:** Service areas are placed at the rear of the site and are generally well screened from neighboring residences.
- **Open Spaces:** The site has one small, planted area in the parking lot. The configuration reflects it was left over space and not planned as an active space.
- **Landscaping:** The parking area has little landscaping present. Islands planted with shrubs and small trees are located at the end of rows.
- **Sustainability:** No sustainable features were visible during the site visit. The site is accessible by transit.



Building Design Features

- **Massing and Façade Depth:** Safeway has a change in mass near its entry as well as a projecting entry feature to add depth to the façade. A canopy is present on the remainder of Safeway's façade. The remaining spaces rely on an arcade to provide depth, with an extension for RiteAid to add some distinction.
- **Glazing:** No glazing is present on Safeway's façade other than the entry doors. RiteAid has very limited glazing above eye level and inline spaces are typically in a storefront condition.
- **Entries:** The entries face the street although they are set back. Safeway has a projecting entry feature utilizing a pitched roof. The remaining retail spaces do not have entries that are reflected in the façade.
- **Materials:** Concrete block is the primary material with standing seam metal on pitched roof sections. The outbuilding utilizes brick as its primary material.
- **Façade Details:** Very few details are present in the façade. Subtle horizontal banding is created by using concrete blocks of different texture, but this is not visible from any significant distance. The horizontal nature of the façade is compounded by the arcade and no vertical articulation is present in the buildings.
- **Roof:** An unadorned parapet wall is present on Safeway and broken by the pitched roof of the entry feature. The remaining areas utilize a pitched roof over an arcade, which is projected over the RiteAid.



Winco

Site Size: 8 Acres Building Size: 85,000 square feet in one building

Land Use Designation: Corridor Mixed-Use (CMU)

Description: Stand-alone grocery store.

Strengths: Layered street edge landscaping; good pedestrian connections.

Weaknesses: No buildings near the street edge; minimal parking landscaping; windowless blank façade; utilitarian design; visible service area.

Site Development Strategies

- **Street Edge Definition:** The street edge is not defined by buildings. Consistent but immature landscaping at the street consists of trees, shrubs and planting beds in a layered arrangement. This approach creates some definition of the street edge.
- **Street Edge Activation:** There are no street-activating features on this site. The entry faces the street but is setback a large distance.
- **Street Grid and Circulation:** No connections are made through the site. The parking area is divided only by walkways.
- **Pedestrian Circulation:** Two pedestrian paths lead directly to the building from the sidewalk. The stark paths are not landscaped and look strictly utilitarian.
- **Parking:** Parking is placed at the street edge and visible from the street.
- **Service Areas:** Service areas are placed at the rear of the site; however, a service door is also located on the front façade. This condition detracts from the aesthetic value of the façade. Additional landscaping to screen neighboring residential lots would be beneficial in areas.
- **Open Spaces:** The site has no open spaces.
- **Landscaping:** The parking area is sparsely landscaped with few islands, which are located toward the street. Many of the islands only have shrubs and do not include trees, which do little to divide the parking area into smaller sections. As previously mentioned, street edge landscaping is immature but should improve with time.
- **Sustainability:** No sustainable features were visible during the site visit.



Building Design Features

- **Massing and Façade Depth:** The building is a simple box with no changes in mass other than the entry projection.
- **Glazing:** No glazing is found on the building except for the glass entry doors.
- **Entries:** The building's main entry is located below a simple projecting arcade. The projection extends to the parapet with no change in height to give the entry prominence. The only unique feature is the addition of colored bands, which do little to improve the appearance of the façade.
- **Materials:** Split face concrete blocks are used for the majority of the façade with a different colored block used as a base and cornice. EFIS is used in the projection above ground level. These are not typically considered finish grade materials.
- **Façade Details:** The façade has no significant details. A very simple base and cornice are created using a change in materials, however no vertical division exists within the façade. Canopies are placed at pedestrian level on the façade, but they do not correspond with any changes in the façade, reinforcing the notion they are tacked on.
- **Roof:** The building has a parapet roof of a single height.



IV. Methodology

The graduate and undergraduate students of the Land Use and Growth Management class each reviewed a municipality's design standards in order to provide the City of Gresham with the following summary of best practices to guide the design of large-scale commercial and retail development. A list of municipalities was generated from online research conducted by Scott Turnoy, the graduate teaching fellow for the course, who compiled design standard documentation for each municipality.

The documents were obtained from publicly accessible websites, such as city and county websites, as well as from sustainable design organization websites and general keyword searches in online search engines for specific city design standards documents. Most design standards originate from the planning and development departments of each particular city or county. Although some communities have developed formal design guidelines and plans, few provide these documents online. Thus, for many municipalities the appropriate section of the municipal development code was obtained online and compiled for student review in place of a design guideline document.

The design standards and/or guidelines from the following cities and counties were chosen for student review:

Table 2 - List of Examined Communities for Design Standards and Guidelines

Albuquerque, NM	McMinnville, OR	Troutdale, OR
Bellingham, WA	Medford, OR	Tucson, AZ
Bennington, VT	Moscow, ID	Winchester-Clark County, KY
Bentonville, AR	Newberg, OR	
Bozeman, MT	Pasco County, FL	
Cheyenne, WY	Portland, OR	Olympia, WA**
Eugene, OR	Reno, NV	Oregon City, OR**
Fort Collins, CO	Rockville, MD	Santa Fe, NM**
Fort Worth, TX	San Diego, CA	Sequim, WA**
Hood River, OR	Steamboat Springs, CO*	Windsor, CO**
Largo, FL	Talent, OR	
Joliet, IL	Taos, NM	

* Monica Witzig, a student selected from this class and intern for the Sustainable Cities Initiative, later reviewed Steamboat Springs's standards along with her assigned community per the request of Gresham City staff, Lauren McGuire and Dan McAuliffe.

** Documents were assigned to students for review, but five assignments were not returned.

Documents from the cities and counties listed above were selected for student review because they represent a range of specificity regarding design standards and guidelines for large commercial development, whether directly in development code or through the publication of detailed standards and guidelines. An effort was made to collect documents for review from communities that vary in population size, urban or rural character, and geographic region of the country in order to identify a range of strategies that may be of use to the City of Gresham. Many additional communities do not appear on the above list that may indeed have general design standards for commercial development. However, only communities with specific publications or sections of their code devoted to design specifications or guidelines for large-scale retail and commercial development were selected.

Communication between Lauren McGuire and Stacy Humphrey from the City of Gresham and Professor Yang resulted in the following set of urban design principles of particular value to Gresham's planning objectives:

- **Accessibility**
- **Public Space**
- **Human Scale**
- **Safety**
- **Sustainability**

Definitions for each principle are provided in Chapter V.

Students were assigned to review and summarize a community's design standards to identify specific design guidelines or requirements that could be used to attain each of the above principles by directing them to identify standards that would influence development such as elements of site design, building design, signage and lighting, and other aspects. They were also encouraged to include diagrammatic descriptions of prescriptive design requirements when possible. In addition to the summary, students were asked to assess the degree to which the design requirements addressed each urban design value and to state whether each design principle was sufficiently addressed through prescriptive standards, broadly mentioned through general guidelines without details, or not addressed at all in the document.

In order to provide the students with a frame of reference for the design standards review, each student in the class received and reviewed the design standards and guidelines publication for Fort Collins, Colorado. The standards, adopted by Fort Collins in 1995, presented a model for controlling the design of large-scale retail development and are referenced by multiple communities in their own design standards and guidelines documentation. In addition, Professor Yang and Scott Turnoy assembled a preliminary list of common and innovative design guidelines based on an initial review of the standards from Fort Collins; Sequim, Washington; Talent, Oregon; Pasco County, Florida; and Winchester-Clark County, Kentucky. Students received a sample document review grid (see pages 24-27), which includes development aspects from the preliminary list in order to illuminate the relevance of individual design standards to the aforementioned urban design principles.

Upon completing the review for their assigned city, students returned a summary grid listing standards that address each design principle and any comments regarding the extent to which each principle was addressed. Monica analyzed the summary reports to delineate the documents and specific guidelines that provide the best reference for the City of Gresham to develop design standards that effectively address urban design principles.

While a large portion of the students produced quality summaries from the document review, it was necessary to reexamine the original design standards documents before the evaluation and report were completed. It should also be noted that the students are not trained design professionals and do not have equal ability or experience with urban design principles or strategies, which would further inform the present design standards assessment. Rather, the set of best practices related to standards and guidelines presented here should be considered a reference point for planning professionals to discover additional information about the design requirements instituted by communities throughout the country.

The following is a sample grid given to the students as a guide for completion of the assignment:

Table 3 - Sample Table for Review of Large-Scale Retail Project Design Standards

Principles/ Values	Design Guidelines, Standards, Requirements, etc.	Comments
<p>Accessibility</p>	<p><i>Site Design</i></p> <ul style="list-style-type: none"> Example: Walkways shall connect focal points of pedestrian activity such as, but not limited to, transit stops, street crossings, building and store entry points, and shall feature adjoining landscaped areas that include trees, shrubs, benches, flower beds, ground covers, or other such materials for no less than 50 percent of their length. 	
	<p><i>Building Design</i></p> <ul style="list-style-type: none"> Example: At least two sides of a large retail establishment shall feature customer entrances. The two required sides shall be those planned to have the highest level of public pedestrian activity, and one of the sides shall be that which most directly faces a street with pedestrian access. The other of the two sides may face a second street with pedestrian access, and/or a main parking lot area. 	
	<p><i>Signage, lighting, etc</i></p> <ul style="list-style-type: none"> Example: Internal pedestrian walkways shall provide weather protection features such as awnings or arcades within 30 feet of all customer entrances 	
	<p><i>Other</i></p> <ul style="list-style-type: none"> Example: Parking should be distributed around large buildings in order to shorten the distance to other buildings and public sidewalks and to reduce the overall scale of the paved surface. 	
<p>Public Spaces</p>	<p><i>Site Design</i></p> <ul style="list-style-type: none"> Example: Designs shall contribute to the establishment or enhancement of community and public spaces by providing at least two of the following: patio/seating area, pedestrian plaza with benches, transportation center, window shopping walkway, outdoor playground area, kiosk area, water feature, clock tower, etc. 	

Principles/ Values	Design Guidelines, Standards, Requirements, etc.	Comments
Public Spaces (cont'd)	<i>Building Design</i>	
	<ul style="list-style-type: none"> Example: Buildings should be oriented toward and placed in close proximity to the street, defining the public space while creating a consistent and appropriate street edge in the corridor districts. 	
	<i>Signage, lighting, etc</i>	
	<ul style="list-style-type: none"> Example: Areas for outdoor storage, truck parking, trash collection or compaction, loading, or other such uses shall not be visible from abutting streets, nor located within 20 feet of any public street, sidewalk, or internal pedestrian way. 	
	<i>Other</i>	
	<ul style="list-style-type: none"> Example: Ground floor façades that face public streets shall have arcades, display windows, entry areas, awnings, or other such features. 	
	<i>Site Design</i>	
	<ul style="list-style-type: none"> Example: Each retail establishment shall contribute to the establishment of community by providing seating areas that have direct access to the public sidewalk network. 	
	<i>Building Design</i>	
	<ul style="list-style-type: none"> Example: Design strategies that break down the scale of large retail buildings into smaller human-scale volumes and planes should be utilized. 	
Human Scale	<i>Signage, lighting, etc</i>	
	<ul style="list-style-type: none"> Example: No more than 50 percent of the off-street parking area for the lot, tract or area of land devoted to the large retail establishment shall be located between the front façade of the large retail establishment and the abutting streets. 	
	<i>Other</i>	
	<ul style="list-style-type: none"> Example: Where the façade faces adjacent residential uses, an earthen berm, no less than six feet in height, containing at a minimum evergreen trees. 	

Principles/ Values	Design Guidelines, Standards, Requirements, etc.	Comments
Safety	<p><i>Site Design</i></p> <ul style="list-style-type: none"> Example: The design of parking separators shall consider pedestrian movements, conflict points with vehicles, site distance and angles, security site lighting, and safety within the parking lot area. Separations shall be no less than eight feet in width at any point. 	
	<p><i>Building Design</i></p> <ul style="list-style-type: none"> Example: No window or door shall consist of polished (mirrored) or highly reflective colored glass. 	
	<p><i>Signage, lighting, etc</i></p> <ul style="list-style-type: none"> Example: In order to avoid forms of light nuisance and intrusion, such as light pollution, light trespass, and glare from adjacent areas, all outdoor light fixtures, other than fixtures on the building façade, emitting 2,050 or more lumens shall be shielded as follows: light fixtures within 50 feet of the property boundary must be full-cutoff light fixtures; all other outdoor lighting fixtures shall be semi-cutoff or full-cutoff light fixtures. 	
	<p><i>Other</i></p> <ul style="list-style-type: none"> Example: Continuous internal pedestrian walkways, no less than eight feet in width, shall be provided from the public sidewalk or right-of-way to the principal customer entrance of all principal buildings on the site. 	
Sustainability	<p><i>Site Design</i></p> <ul style="list-style-type: none"> Example: Landscape design plans shall incorporate a mix of indigenous and native plants that are hardy and drought tolerant and shall include a minimum of 40 percent evergreen plantings (trees, shrubs, groundcovers, ornamental grasses, and evergreen herbs). 	
	<p><i>Building Design</i></p> <ul style="list-style-type: none"> Example: Predominant exterior building materials shall be of high quality, including brick, wood, sandstone, other native stone, and tinted, textured concrete masonry units. 	

Principles/ Values	Design Guidelines, Standards, Requirements, etc.	Comments
<p>Sustainability (cont'd)</p>	<p><i>Signage, lighting, etc.</i></p> <ul style="list-style-type: none"> • Example: Buildings shall provide generous amounts of windows, skylights, or similar natural-light-producing products to enhance the use of natural light and reduce energy consumption. <p><i>Other</i></p> <ul style="list-style-type: none"> • Example: A minimum of ten percent of the parking area shall be pervious parking. Pervious parking areas shall be constructed of permeable pavement and turf pavement like “turf block,” “turf stone,” and SF-Rima or grass, or some other material. 	

V. Criteria of Design Objectives

Accessibility

Transportation and land use concerns must be linked in any discussion since their relationship is extremely interconnected. Solving any land use problem cannot proceed without addressing transportation issues. In considering large-scale retail as the land use factor and accessibility as the transportation issue, the meaning of accessibility must be explained as it relates to this type of development regarding Gresham's specific needs. In the following pages, this review provides specific examples for how to achieve these broad concepts through concrete, specific design standards.

The structure and layout of the retail site will considerably affect choice of transport. Linking existing transportation networks and fitting into the local context to accommodate multiple modes of transportation while allowing greater, direct, and safe connections to and throughout the site are priority since a single mode of transportation is no longer viable in the United States let alone desirable in the Gresham community (Cullingworth and Caves, 2009; Smart Growth Network). Standards addressing accessibility must therefore be diverse; efficient; and equitable meaning that the site and its surrounding networks can accommodate children or seniors who want more independence, for those who cannot afford to drive a car, and for people who simply prefer to walk or bike.

Accessibility is thus much more than simply establishing a basic system for transport and circulation. It is an integral part of place making because good connectivity not only makes a significant contribution to physical movement, but underpins the economic and social vitality of existing neighborhoods by forming links with adjacent streets and commercial districts (Neal, 2003). By contributing to such goals, plans for accessibility become more comprehensive in nature. These plans should be inclusive regardless of any explicit requirement, as they must be consistent with the broader goals of the region and state. Ultimately, these plans increase citizens' ability to shape the environment in which they live.

Additionally, accessibility contributes to all of the other criteria included in this report. Mentioned above is that circulation becomes an integral part of place making, which helps to meet public space and place making goals. Accessibility contributes to sustainability if the site and its adjacent systems are designed so that multimodal transportation becomes possible and even desirable. It must recognize human scale because if parking areas placed on the sides or front of the building are too expansive, then the distance to the entrance is no longer a comfortable, walkable distance. Lastly, an example of safety addressed through this objective is the consideration of how users of the site compete with each other whether it be a motor vehicle/motor vehicle, pedestrian/motor vehicle, cyclist/motor vehicle, or cyclist/pedestrian concern.



Source: *Design Standards for Large Retail Establishments*, Reno, Nevada

Questions to consider for the development of guidelines and standards

- Do the standards require main entrances on, and direct sidewalk connections to the streets on which they are located? Such standards should limit or prohibit the construction of expansive parking lots between the front and sides of the building and the adjacent streets, thus preventing the unnecessary obstruction of pedestrian access and reducing the scale of paved surfaces.
- Does the site plan include the provision of multiple and visible building entrances? This will reduce walking distances from parked cars, facilitate pedestrian and bicycle access from public sidewalks, and provide convenience where certain entrances offer access to individual stores or identified departments within a store. Multiple entrances also mitigate the effect of the unbroken walls and neglected areas that often characterize building facades that face bordering land uses (City of Fort Collins, Colorado, 1995).
- Are there major entrances into the buildings emphasized through site and building design to ensure that entryway design provides orientation and an attractive appearance to the building, facilitate pedestrian access, and to improve the relationship of the large retail establishments to the surrounding community? Note that the architectural requirements for entryways are placed under human scale because their design greatly affects the approachability of a building. This element is part of accessibility because of visibility factors.
- Are there multiple connections not only to primary streets, but to neighboring areas as well? The connections establish a framework for an internal street system with the development through organization of the site into blocks of building and parking (City of Gresham, 2010).
- Although most of the signage and lighting requirements are provided in the Safety section, how does strategic and effective signage serve as a conduit for the ease by which passers by and customers approach the site and building? More specifically, are the words, while not too large, easy to read from the street? Are the signs placed at appropriate heights? This also leaves room for creativity regarding how people are notified of available parking if it is not placed at the front of the lot.
- How does the surrounding site incorporate opportunity for accessible, well-functioning public transit movement, pullouts, and stops as well as the option for park and ride locations?
- Do the standards set forth plans for public sidewalks and internal pedestrian circulation systems that can provide user-friendly pedestrian access from transit stops as well as for pedestrian safety (i.e. traffic calming features, prominent walkways, etc.), shelter, and convenience within the center grounds?
- While the provision of pedestrian access reduces traffic impacts, creates a more inviting image, and is one of the primary design concerns of these standards, do the standards still account for motor vehicle safety (i.e. speed, roadway width, etc.) and efficient circulation through street classification, traffic impact studies, and site analysis, and design?
- With increased accommodation of multimodal transportation, how is access for larger emergency vehicles provided?

Public Space

The provision of public spaces contributes to the larger effort of looking beyond a retail center as a mere aggregation of people, but rather as a provision of a sense of place within the community. These shared areas encourage activity, gathering, and enjoyment and serve as a conduit along which citizens interact.

Moreover, places that are designed with people in mind show careful attention to the experience each person will have with the street, sidewalk, and the buildings that define the street edge (Smart Growth Network). By recognizing how large-scale retail influences the surrounding environment whether it be visually, environmentally, etc., high quality large-scale retail development proposals provide places for public place-making. Such places should offer attractive spaces for customer interaction and create an inviting image for customers, employees, and the greater public.

Attractive places that foster interaction have concern for both the desired structure on the property and for its relationship to the surrounding environment. The public space criterion is set so that respect for community character through physical design and form (e.g. the visual impacts of development) may be established. Appealing public spaces integrated into the site plan enhance, not replace, poorly designed buildings. Heightened attention to architectural building design is essential- especially when a priority for the strengthening of public spaces along walkways and transportation corridors is to define the street edge.

One approach to defining the street edge is through reducing building setbacks by eliminating unnecessary parking between the front and side façades of the building and the abutting street. If a building was to be placed near the street with the closest proximity possible, passers-by will be able to notice more of the building's aesthetic features and will be affected by the design as a result.

Equally important, though, is the quality of this space. Ordinances will benefit from clearly stating that the area shall be an active, usable area- not a vacant plot of land that wastes space. Public spaces become alive through the provision of site amenities and gathering places, which can vary widely in size, type, and location. Aspects addressed by public space development include specifications for the elements within the public realm (i.e. sidewalks, travel lanes, side streets, street furniture) as well as those placed directly on site such as temporary vendors, courtyards and squares, water features, and art.

This element of the design standards is also largely linked to the human scale aspect. Buildings, trees and enhanced landscaping, walls, topography, and other site features within a commercial center that include a large retail establishment should be oriented and arranged to enclose such gathering places. For example, the use of site amenities can provide pedestrian spaces at the entry to buildings, can break up expanses of parking, and be placed near areas with the highest activity-generating use such as a restaurant (City of Gresham, 2010).

As an additional note to planning staff and related governing bodies, if such a provision proves to be unfeasible on-site then an opportunity should exist for the discussion of alternative allocations of space. One option to achieve the provision of public space under this circumstance may be in the form of an offset through contribution of an open space or a park in an adjacent area.

Questions to consider for the development of guidelines and standards

- Does the building contribute to the improvement of the streetscape as public space through quality design?
- Does the site provide pedestrian-scale features such as benches, pedestrian-scale lighting, kiosks, and open spaces?
- Are the designated open spaces actually usable?
- If little open space is available, is there a variety of public art or other creative element (e.g. a water feature) that may help offset the negative visual impacts brought about by large-scale retail?
- Does the space preserve or enhance the community character? Although a space can be usable, it has to be desirable, which can be determined through effective communication with residents.



Source: *Non-Residential Design Standards*, Joliet, Illinois



LoDo District, Denver, Colorado
Source: <http://www.21stcenturyurbansolutions.com>

Human Scale

This design objective requires finer detail of building placement and architectural composition to ensure compatibility. It allows people to feel comfortable using and approaching the elements of the site, to foster place identity, and enhances the overall aesthetic of the site. Maintaining harmony yet producing diversity so that visual interest may be achieved can be done through the adoption of specific building codes and regulations controlling the configuration, features, and functions of buildings that define and shape the public realm.

The most common strategy to mitigate negative visual impacts of large-scale retail and to reinforce human scale is that of addressing façade articulations amongst other landscaping and architectural design elements. Fort Collins states that façades should be articulated to reduce bulk, industrial qualities, massive scale, and the uniform, impersonal appearances of large retail buildings in order to provide visual interest that will be consistent with the community's character and scale. Specific examples include: articulations such as recesses that appear consistently along the façade, multiple street level windows with a required amount of glazing, awnings, and a variety of landscaped areas throughout the site.

Setback and screening standards should also be employed and are intended to mitigate the potential adverse noise, light/glare, and visual impacts associated with these establishments. However, because of the need to decrease setbacks for greater pedestrian accessibility and specify build-to lines to define the street edge through the provision of other public space amenities, buildings that take up a lot of street frontage can detract from the pedestrian environment if inappropriate design standards are in place or there is a lack of any at all. Heightened attention to design quality is thus essential.

The City may choose to also implement development regulations along with these design standards. One approach is to establish maximum square footages, which can ensure the desired and appropriate scale of development. Another is to raise the required site and building design features as the square footage increases. Other alternatives may be determined, but upon discussion with Gresham City staff, a combination of the two as a hybrid approach is likely to best suit the needs of the community.



Source: *Non-Residential Design Standards*, Joliet, Illinois

Questions to consider for the development of guidelines and standards

- If there is a parking area between the front of the façade or any façades with major entrances and the abutting street, is it a reasonable distance so that pedestrians and cyclists feel that the building is still approachable?
- Does the building have adequate landscaped features so that the built components are broken up with natural elements?
- Of the architectural features, is there enough variation in color, depth, and material so that the building does not appear uniform and impersonal?
- Do the windows account for at least 50 percent of the major façades (those that are highly visible)? An ideal amount for a building to be considered approachable is 70 percent (Crandall Arambula PC, Rick Williams PC; 2009), but that is on the extreme level provided that there is enough funding and it is feasible to do so.
- Are the windows at an appropriate height so that pedestrians may see in and be attracted to the retail and so that customers and employees may see out?
- Do the signs also fit with the architectural style of the building and the community's character so that they are not detracting from what should be the focal point?
- Are the industrial and mechanical equipment screened or completely hidden from view from the front and sides of the lot? The screening may also apply to the backsides of a building that abuts parcels zoned for residential uses.



Source: *Commercial Design Standards*, Bentonville, Arkansas

Safety

The principle of safety applies to customers, pedestrians and passers-by, neighboring residents, and employees, which means its definition should address many issues. While the interaction between vehicles (e.g. trucks, transit, and automobiles) and pedestrians must remain as a primary concern, other forms of safety must also be considered because of the issues discussed in the accessibility section. The accessibility criteria places greater emphasis on multimodal transportation as a viable option for the area meaning that more people are likely to choose to arrive to the retail site using other methods than cars.

Therefore, instances of an added concern might be that of a possible hazard between cyclists, vehicles, and pedestrians or for conflict between pedestrians in the sense of the possibility of crime occurring in the area. For example, through the human scale requirement of adding detailed building design features such as awnings, overhangs, and building recesses, these could create spaces where people could easily hide, particularly at night. Customers, employees, and passers-by may be accommodated through lighting design and should be provided in the parking lots as well as near the building.

An additional building design feature that contributes to increased safety is the use of transparent building materials (e.g. non-reflective glass), which is intended to provide a pedestrian friendly environment at the ground floor level. This addition to building design standards enhances pedestrian safety wherever possible by allowing visibility of parking areas and on-site walkways from building interiors.

Regarding site design, pedestrian friendly street standards such as small curb radii, pedestrian crossing improvements, on-street parking that separates pedestrians from traffic, planted edge strips, and designing roads to better accommodate cyclists are only a few examples of how safety can be addressed under this development aspect. Less obvious but equally important to consider are the provision of bicycle storage facilities, proper storage and screening of equipment and seasonal merchandise, and orienting the building toward areas of high public activity for as much visibility as possible.



Source: <http://www.techtransfer.berkeley.edu>

Questions to consider for the development of guidelines and standards

- Does the site plan avoid, to the extent possible, impacts to the existing adjacent street system—specifically the continued ability of an adjacent arterial to function as designed?
- Do the pullouts and stops designated for public transit interfere with the safety of vehicle traffic and pedestrians?
- Is the placement of driveways appropriate so that roadways are not obstructed and vision is not impaired? Recognize that landscaping can obstruct vision if not maintained or planted with safety in mind.
- Is lighting placed throughout the entire site (i.e. along walkways and throughout the parking lot) rather than only near the building?
- Is said lighting the appropriate brightness and height so that the area is well lit at night yet not so bright that it causes too much glare and disturbance to neighboring residents?
- How does the building design and orientation contribute to or detract from the above explained safety considerations?



Source: Daily News for Seattle's Ballard Neighborhood, <http://www.myballard.com>

Sustainability

With growing pressure on our environmental resources, the need to adopt a sustainable approach to urban planning is increasingly critical. The true meaning of sustainability remains to be fully understood yet it is the flexibility and vagueness of the word's meaning that allows it to become applicable to countless fields of study and day-to-day practices. This not only makes the word attractive to many, but it is exactly this concept that lends it to an overuse that may cause confusion rather than being beneficial.

Despite the controversial nature of this topic, there is some agreement on what fundamental pieces underlie the achievement of this goal. General consensus reveals that sustainability should recognize the “triple bottom line,” which encompasses economic diversity and viability, social equity and the well being of human settlements, and the protection of complex ecosystems so that they may preserve their integrity. Consequently, there is an interdependence and tension: development is necessary to further economic and social ends, but in maintaining the principle, it must be done in a way so that the impacts on the natural functions of landscapes, hydrologic systems, and habitats are limited. It must also address the intergenerational quality of these factors: many sources include the need to proceed in a way that enables us to meet the needs of the present without compromising the ability of future generations to meet their own (Neal, 2003; City of Corvallis Internal Plan definition).

While all aspects must be recognized, the emphasis to which sustainability is attached to each of these factors varies depending on the given situation and consequent definition (Wong, 2006). For example, sustainability can extend across a local to global spectrum and it can address concerns related to energy consumption or the protection of an endangered species and their critical habitats. For the purposes of this analysis and report, sustainability will be applied to a development perspective as it pertains to Gresham's large-scale retail design standards and development regulations although further changes to the definition for Gresham's unique needs remains to be seen (City of Gresham, 2010).

In its *Retail Design and Development Standards Design Analysis: Existing Conditions and Precedent Study* background statement, the City of Gresham recognizes that environmental quality is critical to the livability of its community. Through the vital role of the local government in fostering sustainability by adopting, implementing, and maintaining sustainable practices, the City will ensure its ability to attract and maintain successful businesses and the jobs they provide. In the Mayor's proclamation on climate change and related initiatives for recycling, toxics and waste reduction, and alternative energy use, four issues facing Gresham are:

- Climate Change
- Constrained natural resources (e.g. water, power, land, ecosystems, etc.)
- Community livability and social equity
- Financial stability

By successfully addressing these issues, consistency with the City's vision to be regionally recognized as a leader and model for the development and implementation of “green” practices will come forth. It will be known as a great place with a source of highly skilled employees; its system of well-linked, well-distributed, and well-maintained parks; and will be an area with a healthy abundance of trees, greenspaces, and streams supporting salmon, trout, and other wildlife. The community will be universally aware of the ecological services the environment provides, and the natural resources we all consume. Collaborative public and private work will strive to reduce the City's environmental footprint.

Questions to consider for the development of guidelines and standards

- Does the development recognize the significance of natural landscapes and hydrological systems as integral components of urban development so that the negative environmental impacts of development are mitigated?
- Does the development integrate sustainable design not only through human scale and public space techniques, but through function in landscape and building design (an example might be, if practicable, the use of a greenroof system; catch basins; energy-saving windows, heating, and ventilation equipment; reusable construction and recycled materials.)?
- In what ways does the development reduce long-term operational and maintenance costs?
- Are issues of stormwater drainage through vegetative swales, detention ponds, on-site storage, and permeable pavements to promote infiltration into the underground water table and aquifers addressed? Note that stormwater management in particular is a development feature that Gresham wishes to address.
- Is there a water quality protection plan through the preservation and restoration of natural landscapes, stream buffers, and wetlands that filter and remove pollutants?
- Does the development include the strategic use of native and non-native landscaping in combination with the solar system processes to regulate building temperature through passive design?
- How does the use of tree cover to promote rainwater transpiration into the atmosphere?
- Do the plans address an efficient use of floor space? Specific to large-scale retail, there could be an incentive system provided by the City to developers by authorizing alternative bonuses for density or floor area ratio. This could also increase the feasibility of greater use of public transportation in the sense that these goals are inextricably linked.



Broadway Place, Eugene, Oregon
Source: <http://www.c-m-g-s.com/projects/broadway-place>

The following questions are taken from ideas in Gresham's Retail Design and Development Standards Design Analysis: Existing Conditions and Precedent Study Guiding Principles:


- Do City staff and developers approach problems from a systems perspective, defining mutually supportive economic, social, and environmental goals and objectives?
- Do City staff and developers incorporate a long-term and global perspective of human activities and environmental conditions when making decisions and establishing policies?
- Do City staff and developers account for the social and environmental costs and benefits, as well as making explicit the inherent value of the natural environment?
- Does the City exercise caution in public policy when there are threats of serious or irreversible environmental or public health damage?
- Does the City align regulations, fees, and taxes to encourage the widespread adoption of best practices?
- Does the City inspire and promote public action as much as possible to help Gresham achieve this vision and goals?




A view of the courtyard at Oakway Center- Eugene, Oregon Source: <http://www.bing.com>

VI. Example Community Design Principles


The course examined the design standards and guidelines in 27 communities across the country. From these 27 communities, there are several communities that warrant more detail, particularly in the examined areas of accessibility, public space, human scale, safety, and sustainability. The table of contents below provides a list of communities with good examples of design principles for each of five criteria. Following an assessment of design principles (Table 4) are example design standards and guidelines for each of the five criteria.




Accessibility - Albuquerque, NM; Eugene, OR; Fort Collins, CO; Moscow, ID; Portland, OR; Reno, NV; Steamboat Springs, CO; Troutdale, OR **44**




Public Space - Albuquerque, NM; Fort Collins, CO; Fort Worth, TX; Joliet, IL; Reno, NV; Steamboat Springs, CO; Talent, OR **54**



Human Scale - Albuquerque, NM; Fort Collins, CO; Joliet, IL; Medford, OR; Moscow, ID; Reno, NV; Steamboat Springs, CO; Talent, OR; Tucson, AZ **61**



Safety - Albuquerque, NM; Bellingham, WA; Fort Collins, CO; Reno, NV **73**



Sustainability - Albuquerque, NM; Moscow, ID; Newberg, OR; Steamboat Springs, CO **78**

Table 4 - Assessment of Design Standards and Guidelines by Community

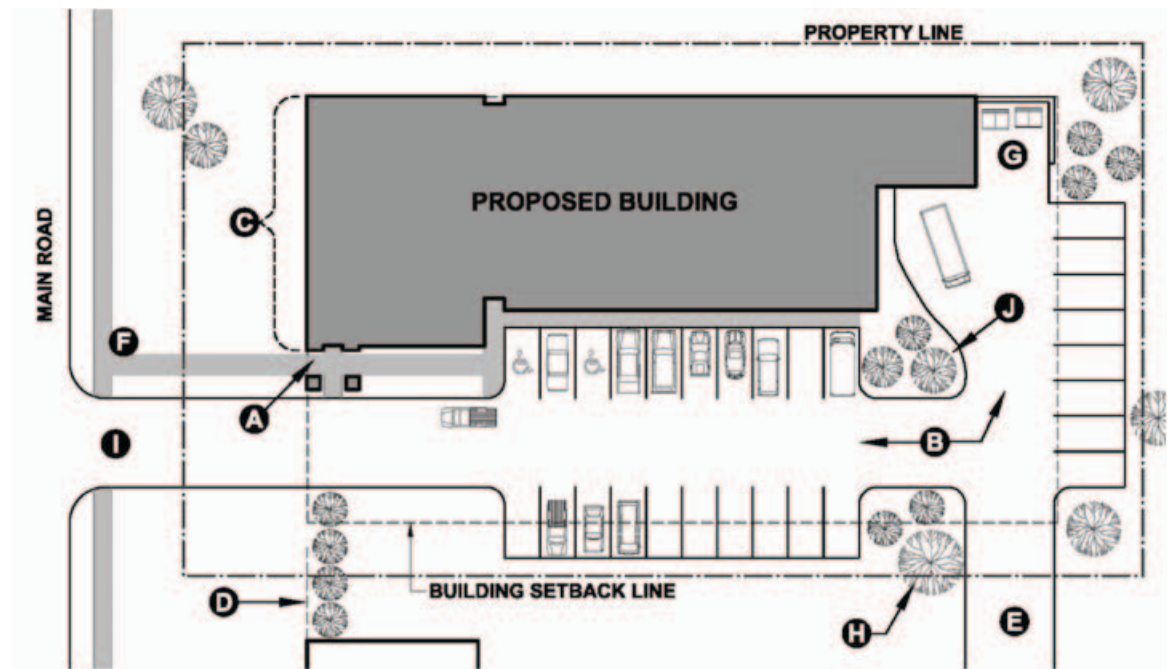
City/Community	Applicability in thousands of sq ft	Accessibility	Public Space	Human Scale	Safety
Albuquerque, NM (2007)	75+	✓	✓	✓	✓
Bellingham, WA (-)	-	✓	✓	✓	✓
Bennington, VT (-)	-	✓	✗	✓	✗
Bentonville, AR (2008)	-	✓	✓	✓	✗
Bozeman, MT (2007)	-	✗	✗	✗	✗
Cheyenne, WY (2009)	50+ (20+ if expansion)	✓	✓	✓	✗
Eugene, OR (2010)	25+	✓	✓	✓	✗
Fort Collins, CO (1995)	25+	✓	✓	✓	✓
Fort Worth, TX (-)	60+	✗	✗	✓	✓
Hood River, OR (2002)	25+	✓	✗	✓	✗
Joliet, IL (-)	-	✗	✓	✓	✗
Largo, FL (2000)	50+ (20+ if expansion)	✓	✗	✓	✗
McMinnville, OR (2008)	25+	✓	✗	✓	✓
Medford, OR (-)	-	✓	✓	✓	✗
Moscow, ID (2008)	65+	✓	✓	✓	✓
Newberg, OR (2007, 2009)	30+	✗	✗	✗	✗
Pasco County, FL (2004)	25+	✓	✓	✓	✓
Portland, OR (2010)	-	✓	✓	✓	✓
Reno, NV (2008)	-	✓	✓	✓	✓
Rockville, MD (2005)	25-65	✓	✓	✓	✓
San Diego, CA (2007)	50+	✗	✗	✓	✓
Steamboat Spgs, CO (2009)	12-40	✓	✓	✓	✓
Talent, Or (2007)	30+	✓	✓	✓	✓
Taos, NM (1999)	30-80	✗	✗	✓	✗
Troutdale, OR (-)	-	✓	✗	✗	✓
Tuscon, AZ (-)	-	✓	✓	✓	✓
Winchester- Clark County, KY (2003)	50+	✓	✓	✓	✗

Sustainability	Student Comments
	The document is text-heavy. Sustainability is really between a “yellow” classification and “green” because it could go into more depth about stormwater retention, but it is better than many of the others.
	Unique ideas and good supporting visuals. The language is not direct enough; words such as “should,” “can be,” “recommended,” and “encouraged,” are used too much.
	Good images, but too broadly addressed. This seems like something that the general public would want to look at and would understand.
	Language is vague and indirect being that there are only a few guiding principles. This student had to look at several documents in order to get any picture of design objectives for this community.
	General and nothing too unique. Also accounts for expansion and remodeling, as do a few of the others.
	Sustainability is “yellow” instead of “red” only because the Accessibility section is so good.
	Sustainability “yellow,” but has unique ideas.
	Good visuals, but the text is too general. The landscaping appears immature, but it could have been the season during which the pictures were taken that affected this observation.
	Although Accessibility is “yellow,” the standards allow too much parking between the front façade and the abutting street.
	It could be argued that it should be “red” because the standards related to this section are broad.
	Sustainability does not address stormwater, though. This document is really good for guidelines and reasoning behind the intents.
	Sustainability could be “yellow” because there is a cost issue related to the requirements. See the report for more details.
	Sustainability is only “yellow” because when looked at overall, part of sustainability is achieved through the other criteria, but there is no mention of stormwater and groundwater retention and regulation.
	Also see Impact Assessment Analysis in their document. There are no visuals and the “standards” are more embedded in the text and provided at the end of the document as revisions and amendments.
	Human Scale is “yellow,” but is quite general. Public Space is not accounted for, but one good thing that this city does is require architectural unity and consistency with the community’s character.
	Three of the objectives are classified as “red” because the criteria are not stipulated as design standards or guidelines. They are in an “Additional Conditions and Requirements” section.
	Acknowledges all criteria, but indirectly. The Grading, Drainage, and Wash Treatment section is a missed opportunity for addressing sustainability.
	What makes this document useful is the provision of definitions.

Table 4 (pages 40-41) presents the analysis and evaluation of each municipality’s design standards with the corresponding criteria. The numbers in the first column indicate the square footage required for the standards to become applicable. If there are two numbers, the second indicates that a limit is placed on the size of the development. The cells under the columns designated for the five principles are a broad evaluation of the success to which the standards addressed each measure with a green checkmark being sufficiently or even exceptionally, yellow checkmark being somewhat, and a red “X” as poor quality, not addressed at all, or if not of poor quality, are not suitable for Gresham’s purposes. The “yellow” classification has two meanings: 1) the ideas are there, but are too vague within each standard or not enough is covered by all of the standards, and 2) the standards, while sufficient, are not unique enough to recommend staff to read the original document.

Some of the municipalities with “yellow” assessments, however, do have some standards worth examining if time permits. In order to limit the size of this document and to provide the best examples, only the communities with categories assessed as “green” are included in the tables below (Tables 5 - 24). Cities such as Bellingham, Washington, Bennington, Vermont, and Fort Worth, Texas fit this observation. Below, for example, are figures from Bennington, Vermont related to Accessibility and Human Scale.

Figure 2 - Example of Accessibility Considerations in Sample Site Layout



The letters correspond to textual explanations below the image in the original document. This page addresses location and orientation of the building, entrances, the placement of parking, access for pedestrians, and the integration of landscaping.

Source: *Planned Commercial District Design Standards*, Bennington, Vermont

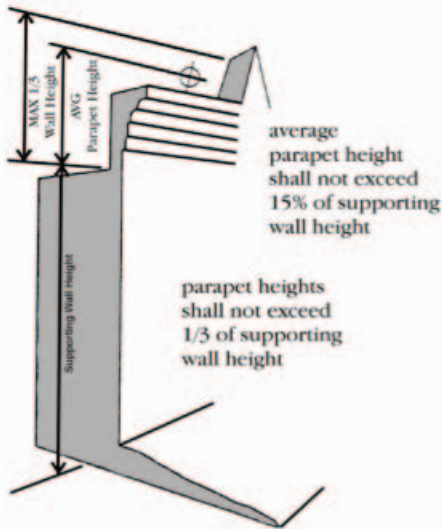
Figure 3 - Example of Human Scale Considerations in Building Massing



This diagram and corresponding page discuss placement of the building’s mass (more important volumes closest to the front lot line abutting a primary street) whilst breaking up large, uninterrupted areas of blank wall through architectural detail/design elements, which reduce the perceived architectural scale of large-retail buildings. These standards discourage the use of long, continuous picture windows along the front of the building. Materials, colors, and proportions are also explained in diagrams that follow in the original document.

Source: *Planned Commercial District Design Standards*, Bennington, Vermont

Figure 4 - Example of Human Scale Considerations in Parapet Standards



Source: *Planned Commercial District Design Standards* Bennington, Vermont

Accessibility

All accessibility standards address the other four criteria on some level. Safety is both directly and indirectly considered whether it be through efficient traffic flow or pedestrian accommodation. Some of the architectural requirements (building design) that provide for accessibility are more applicable to the Human Scale section. What is addressed for building design regarding accessibility is the number of required entrances according to the building's orientation, size, and lot lines abutting the street. A noted trend is that many of the standards lack in signage and lighting for accessibility. However, many of the signage and lighting requirements are placed under the safety section.

For site design, pedestrian connections and walkways, proximity to streets according to classification, setbacks, lot frontages, and parking limits through the number of square feet or allotted percentages are consistently addressed throughout many of the documents. The standards vary in scope (e.g. some are heavily oriented toward the accommodation of automobile traffic, whereas others examined the need to accommodate pedestrians, cyclists, and public transit users); the detail to which each city addresses a particular element differs; and although some of the ideas are similar, such as placing less parking at the front of the building, the numbers vary. The given numbers are provided for what is best for each area depending on population, trip numbers, site location, etc. Provided here are the more extreme limits so that Gresham may adjust accordingly for its unique needs.

Table 5 - Example Site Design Standards and Guidelines for Accessibility

Examples of Site Design Standards and Guidelines for Accessibility	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: Large retail facilities containing 75,000 to 124,999 square feet are required to be located adjacent to and have primary and full access to a street designated as at least a collector and have access by 2 (75,000- 90,000 square feet.) or 4 (90,001- 124,999 square feet) through traffic lanes.</p> <p>Standard: For large retail facilities containing 125,000 square feet or greater of the Net Leasable Area- The development must be located within 700 feet of the intersection of two roadways, both of which are designated as at least a collector street... and shall have full access to these roadways.</p> <p>Standard: The entire site shall be planned or platted into maximum 360' x 360' blocks. Parking requirements may be met by spaces located on a block immediately adjacent to the structure creating the parking demand.</p> <p>Standard: If a structure, or structures, including Retail, Suite Liners, occupies more than 80 percent of a planned or platted block, the Off Street parking shall be placed on another block. Parking shall be distributed on the site to minimize visual impact from the adjoining street. Parking shall be placed on at least two sides of a building and shall not dominate the building or street frontage.</p> <p>Standard: Petroleum products retail facilities shall be located at a street or driveway intersection. The frontage of the principal structure shall face and line the two streets and follow the setback and glazing Retail Suite Liner standards.</p>	<p>Some of this site design summary goes well with the sustainability principle because of the use of minimum densities in a high density, R-3 zone. See the Sustainability section's comments as well.</p> <p>The traffic regulations in the site design element also apply to safety measures; these regulations result in efficient and safe access for both vehicles and pedestrians from roadways to neighborhoods in the vicinity of large retail facilities.</p> <p>The required through traffic lanes can threaten sustainability and human scale goals unless designed properly because these indicate reliance on the automobile as well as higher speeds.</p> <p>There is also a human scale and sustainability undertone to these policies because of the maximum block size in addition to how close a building must be to the street.</p>

Examples of Site Design Standards and Guidelines for Accessibility

Comments

Albuquerque, NM (cont'd)

Standard: Fuel pumps, service facilities, ATMs, storage areas, and repair bays are to be screened from the major street by the principle structure. If the structure between the street and the fueling island is not at least the length of the canopy that is over the fueling island, or if there is no service facility structure, the perimeter of the facility shall be screened by either a landscaped berm three feet in height or wall at least three feet in height.

Standard: Parking Areas may front onto roadways identified as limited access in the Mid Region Council of Governments' Metropolitan Transportation Plan, provided that they are adequately screened with landscape walls and plantings. If a project has multiple phases the final phase site plan, if proposed, shall show the elimination of surface parking areas but may include parking structures.

Standard: Every third double row of parking shall have a minimum ten-foot wide continuous walkway dividing that row. The walkway shall be either patterned or color material other than asphalt and may be at grade. The walkway shall be shaded by means of trees, a trellis or similar structure, or a combination thereof. Tree wells, planters or supports for shading devices may encroach on the walkway up to three feet. In no case shall the walkway be diminished to less than five feet width at any point.

Standard: On-street Parking Standards: Arterial or Collector roadways abutting a Large Retail Facility with a posted speed limit of 35 miles or less per hour shall have on-street parking utilizing a parking/queuing lane under the following standards and if approved by the Traffic Engineer: On-street parking may use the existing adjacent outside lanes on an arterial or collector. The parking/queuing lane may be provided by moving the curb lines within the property line and dedicating the parking/queuing lane to the City. The existing through lanes shall not be used as the parking/queuing lane unless a traffic analysis indicates that this will not result in unacceptable degradation of traffic flow, though existing can be restriped in a narrower configuration to provide space for the parking/queuing lane. The parking/queuing lane has a maximum width of 16 feet.

Standard: Curb extensions/bumpouts shall be constructed at the ends of each block.

Eugene, Oregon

Standard: No off-street parking shall be located between the front facade of any new building(s) and the primary adjacent street.

Human scale is thus addressed by requiring these areas to be closer and therefore more approachable, which also will hopefully achieve some sustainability goals of providing comfort for the use of alternative modes of transportation.

By linking structures with pedestrian connections to external neighborhoods and other uses, use of a variety of transportations modes will also be possible. For the on-street parking, this deals with a perception issue- Even if there is ample parking elsewhere the same distance as the sports in front of the service, people will claim that there is "no parking" anywhere if no on-street spots are provided (Rick Williams, PC). This also means more opportunity for business and economic success of the region in the long run because people are drawn to storefront, on-street parking.

Examples of Site Design Standards and Guidelines for Accessibility

Comments

Eugene, OR (cont'd)

Standard: Individual parking areas may be no larger than 55,000 square feet in size. Separation between individual parking areas may be achieved by placement of internal accessways. Such accessways used to separate parking areas shall have at least one travel lane, curbs, and sidewalks at least eight feet in width on both sides of the accessway.

Standard: For development sites that abut an arterial or collector street, at least one internal vehicle accessway connection must be made between the subject development site and adjacent sites zoned for commercial use.

Standard: Shopping streets are part of the general circulation system, are designed to provide a comfortable and pleasant shopping environment for the pedestrian, and may be either public or private streets. Shopping streets must include the following elements: two travel lanes, sidewalks (minimum twelve feet in width) on both sides of the street; street trees planted within planting strip and with an average spacing of 50 feet, pedestrian-scale lighting; curb extensions at intersections and on-street parking.

Fort Collins, Colorado

Standard: Sidewalks at least eight feet in width shall be provided along all sides of the lot that abut a public street.

Standard: Internal pedestrian walkways provided in conformance with Part (b.) above shall provide weather protection features such as awnings or arcades within 30 feet of all customer entrances.

Standard: All internal pedestrian walkways shall be distinguished from driving surfaces through the use of durable, low maintenance surface materials such as pavers, bricks, or scored concrete to enhance pedestrian safety and comfort, as well as the attractiveness of the walkways.

Moscow, Idaho

Standard: Whenever feasible, the primary vehicular access point to the site shall not be via an adjacent arterial street. Public transit access and bus stops shall be located in areas that do not conflict with primary vehicular access points, internal traffic flows, or adjacent street traffic flows.

Standard: Public transit pullouts shall be provided on each adjacent street having a primary building entrance facing it, unless an alternate location can be shown to meet the distance requirement below. The designated off-street parking areas (parking lot) shall be designed such that every 140 parking stalls (a parking "pod") must be separated by a minimum 30-foot wide landscaped and pedestrian walkways or walkway and bike lane in combination. The above pod separation is in addition to the requirement that parking areas or "bays" of over 30 contiguous stalls be divided by landscaped strips. The width of internal

Note that while the public transit pullout and distance requirement standard provides pedestrian and bicycle access throughout the lot this way, access to these paths must be designated and stated in words as well (shown in visual) so that pedestrians and cyclists do not have to cross the landscaping. These accessways should be ramped.

What is commendable is that the standards regarding accessibility include bicycle parking requirements, but they should specify being well lit.

Examples of Site Design Standards and Guidelines for Accessibility

Comments

Moscow, ID (cont'd)

landscaped strips. The width of internal landscaped strips in large retail parking lots must be at a minimum six feet wide.

Standard: The maximum number of parking spaces for any large retail establishment shall not exceed 150 percent or 1½ times the minimum required of the use by the zoning code Sec. 6-5.E Off-Street Parking Schedule (60 plus 3⅓ spaces per 1,000 square feet of retail building space in excess of 25,000 square feet).

Standard: Internal vehicle circulation routes that provide direct access from public streets or paths to the principal entrances of principal buildings on the site shall be designed to accommodate bicycles. If a bicycle route is required to accommodate walkways, those walkways must be twelve feet wide; otherwise, all walkways are to be eight feet wide. At a minimum, the width of the vehicle circulation route should be wide enough for a motor vehicle and bicycle to travel safely side by side within a lane. Bicycle lanes, at least four feet in width, with standard striping and signage are preferred along these routes.

Standard: Bicycle parking shall be provided at the rate of at least one space for every ten customer motor vehicle parking spaces provided for the principal retail use. Bicycle racks shall be of a U, A, or similar style.

Standard: Bicycle parking shall be located adjacent to each principal building entrance. At least 50 percent of required bicycle parking shall be sheltered from the weather.

Portland, Oregon

Standard: Uncovered stairways and wheelchair ramps that lead to one entrance on the street-facing façade of a building may fully extend into a street setback.

Standard: Internal accessways that are similar to streets must divide the site into parking areas that are no greater than 55,000 square feet. These accessways must connect to the transit street, or street in a Pedestrian District, at least every 250 feet.

Standard: Each internal accessway must have at least one auto travel lane, curbs, and unobstructed sidewalks on both sides.

One of the following must be met:

- The sidewalks must be at least ten feet wide and planted with trees a maximum of 30 feet on center. Trees must be planted in the center of unpaved tree wells at least 18 square feet, with a minimum dimension of three feet. The unpaved area may be covered with a tree grate. Tree wells must be adjacent to the curb, and must be located so there is at least six feet of unobstructed sidewalk; or standard, except that trees cannot be grouped.

From Portland's Ordinance: *"The intent of these regulations is to allow deeper street setbacks for very large retail stores locating along transit streets or in Pedestrian Districts in exchange for a pedestrian and transit-friendly main street type of development. These large retail sites can still be transit-supportive and pedestrian-friendly by placing smaller commercial buildings close to the street and by creating an internal circulation system that is similar to streets to separate the parking area into blocks. The intent is to encourage development that will, over time, form a pedestrian-friendly main street along the perimeter of the parking blocks and provide connectivity within the site and to adjacent streets and uses."*

Examples of Site Design Standards and Guidelines for Accessibility

Comments

Portland, OR (cont'd)

- The sidewalks must be at least six feet wide. There must be a planting strip at least four feet wide. The planting strip must be between the curb and the sidewalk, and be landscaped to at least the L1

Standard: Along each internal accessway that intersects a transit street, parking must be provided between both sidewalks and the auto travel lanes except for within 75 feet of the transit street intersection, measured from the street lot line, where parking is not allowed.

Standard: Curb extensions that are at least the full depth of the parking must be provided, as shown in Figure 130-5, at the intersections of internal accessways that have parking.

Standard: Sites with more than one street frontage. Where the site has more than one street frontage, the following must be met:

- The standard of B.1.a(1) must be met to connect the main entrance of each building on the site to the closest sidewalk or roadway if there are no sidewalks.
- An additional connection, which does not have to be a straight line connection, is required between each of the other streets and a pedestrian entrance. However, if at least 50 percent of a street facing façade is within ten feet of the street, no connection is required to that street.

Standard: All sites with at least one frontage on a transit street, for portions of a building within the maximum building setback, at least one main entrance for each tenant space must:

- Be within 25 feet of the transit street;
- Allow pedestrians to both enter and exit the bldg; and
- Either:
 - Face the transit street; or
 - Be at an angle of up to 45 degrees from the transit street, measured from the street property line.

By contributing to a pedestrian-friendly main street, this is applicable to public space because main streets can influence public gathering and interaction. Also note that Sites with a building having at least 100,000 square feet of floor area in Retail Sales And Service uses are exempt from the maximum setback requirement of Table 130-3 and the vehicle area frontage limitations of 33.266.130.C.3 if all of the requirements of this paragraph are met. For sites with frontage on more than one transit street or more than one street in a Pedestrian District, this exemption may be used only along one transit street frontage or frontage along a street in a Pedestrian District.

Reno, Nevada

Guideline: Large parking areas should be divided into smaller lots and distributed around buildings in order to provide safe and convenient access, shorten the distance between primary buildings and public streets, and break up the massive scale of large paved surfaces.

Standard: In order to reduce the scale of the paved surfaces and to shorten the walking distance between parked cars and a building containing a large retail establishment, the Front Parking Quadrant shall contain no more than 50 percent of the off-street surface parking spaces provided for all uses located in the building containing a large retail establishment. Note that in instances when the building housing a large retail establishment is sited on a side or rear setback line, it may be impossible to site any off-street parking spaces in the "quadrant" adjoining the side or rear setback line.

If buildings containing large retail establishments are located closer to streets, then the scale is reduced, pedestrian traffic is encouraged, and architectural details of the building take on added importance.

Examples of Site Design Standards and Guidelines for Accessibility	Comments
<p><i>Reno, NV (cont'd)</i></p> <p>Standard: In order to reduce the scale of parking areas, all surface parking areas shall be broken up into smaller parking blocks containing no more than 40 spaces.</p> <p>Standard: Parking blocks shall be oriented to buildings to allow pedestrian movement down and not across rows (typically with parking drive aisles perpendicular to customer entrances).</p> <p>Standard: On-site pedestrian walkways shall connect each primary entrance of a commercial building to the adjacent parking blocks, structures, or site amenities.</p> <ol style="list-style-type: none"> 1. The primary entrance or entrances to each building in a commercial center development, including free-standing (pad) buildings; 2. Any sidewalks or walkways on adjacent properties that extend to the boundaries shared with the commercial center development; 3. Any public sidewalk system along the perimeter streets adjacent to the commercial center development; 4. Where practicable and appropriate, adjacent land uses and developments; and 5. Where practicable and appropriate, any adjacent public park, greenway, or other public or civic use including but not limited to schools, places of worship, public recreational facilities, or government offices. <p>Standard: Connections between the on-site (internal) pedestrian walkway network and any public sidewalk system located along adjacent perimeter streets shall be provided at regular intervals along the perimeter street as appropriate to provide easy access from the public sidewalk to the interior walkway network. At a minimum, "regular interval" shall mean mid-block or one connection for every 400 feet of perimeter public sidewalk length, whichever distance is shorter.</p> <p>Standard: Continuous pedestrian walkways shall be provided along the full length of a primary building along any façade featuring a customer entrance and along any facade-abutting customer parking areas. Such walkways shall be located at least six feet from the facade of the building to provide planting beds for foundation landscaping, except where features such as arcades or entryways are part of the facade. As an alternative to the six-foot planting bed, tree grates with decorative paving may be utilized along 50 percent of the facade. For all options, a minimum eight-foot unobstructed pathway shall be maintained on the pedestrian walkway.</p> <p>Standard: All site walkways connecting parking areas to buildings shall have a minimum, unobstructed width of six feet. In addition, planting areas, including trees, shrubs, benches, flowerbeds, ground cover, and other such materials, shall be installed along no less than 50 percent of the entire length of the walkway. Where landscaping is provided along the walkway, the combined minimum width of the walkway plus the landscape area shall be 15 feet to accommodate car overhangs.</p>	<p>These regulations encourage limiting the number of surface off-street parking spaces located between the front door of a large retail establishment and the primary, abutting street. This is achieved by controlling the amount of parking located within a building's "Front Parking Quadrant." The applicant must designate the "Front Parking Quadrant" on all proposed development and site plans.</p> <p>The "Front Parking Quadrant" is defined by connecting each of the four corners of the building containing a large retail establishment to the closest property line. This exercise will create four quadrants. The one quadrant located between the building's front door and the primary abutting street is the "Front Parking Quadrant." Fort Collins does this as well; the process is explained in more detail in their document.</p> <p>Steamboat Springs uses this idea, but allows only 30 percent of the off-street parking to be located between the front façade and the primary abutting street or front setback line.</p> <p>Rather than the eight-foot continuous, unobstructed walkway along the front of the façade, which Fort Collins and Reno address, McMinnville, Oregon increased the requirement by widening it to ten feet.</p>

Examples of Site Design Standards and Guidelines for Accessibility	Comments
--	----------

Steamboat Springs, Colorado

Standard: Entrances shall be emphasized by on-site traffic flow patterns. The building's entrance should be located closest to the off-street parking and in the center of the site.

Standard: Placement and orientation must facilitate appropriate land use transitions and appropriate traffic flow to adjoining roads and neighboring commercial areas and neighborhoods. Where buildings are proposed to be distant from a public street, as determined by the planning commission, the overall development design shall include smaller buildings on pads or out lots closer to the street.

Standard: The entire development shall provide for exceptional, safe, and convenient bicycle access to all uses within the development, connections to existing and planned public pedestrian and bicycle facilities, and connections should link the public sidewalks with the customer entrances and to adjacent properties. Furthermore, the development shall provide secure, integrated bicycle parking at a rate of one bicycle rack space for every 25 vehicle parking spaces.

Standard: To encourage use by pedestrians and decrease the need for solely oriented patronage, the Large Format Retail Overlay must reinforce the urban character of the surrounding neighborhoods and shall therefore continue a connected system of walkable street frontages by preserving a consistent urban frontage along adjacent streets. Acceptable frontages include storefronts, galleries and loading docks.

Standard: There are block face and block perimeter size requirements in documents that are referenced through which building footprints may not be larger than a single block.

Standard: In order to minimize under-utilized parking lots, the required commercial parking within the Large Format Retail Overlay must be treated as a single consolidated pool of parking that is shared between the various commercial uses. While the initial development of the Large Retail district may require higher parking ratios, at full build-out the maximum allowed parking ratio shall be three spaces/1,000 square feet of commercial space.

Standard: Alleys required by the Subdivision Standards may function as drive aisles within a common surface parking area.

Standard: Vehicle access shall be designed to accommodate peak on-site traffic volumes without disrupting traffic on public streets or impairing pedestrian safety. This shall be accomplished through adequate parking lot design and capacity; access drive entry throat length, width, design, location, and number; traffic control devices; and sidewalks.

In the first part of the text, the principles for these standards are embedded throughout the minutes in the first part of the document. Direct standards are listed in the final pages. Dan McAuliffe, LEED AP and Associate Planner for the City of Gresham's Department of Urban Design and Planning, provided some of the context for these standards.

Discussed in this document is the actual placement of such property with issues regarding urban expansion, economic growth, placing large retail closer to the city center so that they may employ mixed uses/provide for multimodal transportation or if it should be placed further out, traffic as it is related to travel time and congestion, and larger issues of the town beginning to implement smart growth principles in the context of an expanding area. Moreover, this city is adamant about preserving its unique character. Pages six through nine, 15 through 17, and 22 are good examples of these ideas throughout the discussion. Page nine mentions an interesting point about putting parking on top of the structure or by simply constructing a parking structure near the site.

Accessibility

Examples of Site Design Standards and Guidelines for Accessibility	Comments
<p><i>Troutdale, Oregon</i></p> <p>Standard: Where practicable, on-site walkways shall connect with walkways, sidewalks, bike paths, alleyways, and other bicycle or pedestrian connections on adjacent properties used as, or planned for, industrial parks, commercial, multiple-family, or community service uses.</p> <p>Standard: A required walkway or walkway connection need not be provided where another required sidewalk or walkway route provides a reasonably direct alternate route. An alternate route is reasonably direct if the walking distance increases by less than 50 percent, but not more than 100 feet, over the other required route.</p> <p>Standard: When an accessway would reduce walking or cycling distance to an existing or planned transit stop, school, commercial or industrial development, or park by 300 feet and by at least 50 percent over the other available pedestrian routes and a street connection is not feasible. Other available pedestrian routes include sidewalks and walkways, including walkways within commercial centers, planned developments, and industrial parks. Routes may be across parking lots on adjoining properties if the route is open to public pedestrian use, hard surfaced, and unobstructed (e.g., not through landscaped areas unless step stones are provided).</p> <p>Standard: Accessways shall include at least a 15-foot wide right-of-way and a ten-foot wide usable surface.</p> <p>Standard: Where possible, accessways shall connect to street intersection corners. Mid-block accessway openings shall be avoided.</p> <p>Standard: Buildings shall be setback no more than 50 feet from a transit street. Where the site is adjacent to more than one transit street, a building is required to meet the maximum 50-foot setback standard on only one of the streets.</p>	<p>Could benefit from addressing walkway materials in more depth.</p>

Table 6 - Example Building Design Standards and Guidelines for Accessibility

Examples of Building Design Standards and Guidelines for Accessibility	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: Drive-up windows must be located on or adjacent to the side or rear walls of service or retail structures and the window shall not face a public right of way.</p>	

Examples of Building Design Standards and Guidelines for Accessibility	Comments
<p><i>Fort Collins, Colorado</i></p> <p>Standard: At least two sides of a large retail establishment shall feature customer entrances. The two required sides shall be those planned to have the highest level of public pedestrian activity, and one of the sides shall be that which most directly faces a street with pedestrian access. The other of the two sides may face a second street with pedestrian access, and/or a main parking lot area. All entrances shall be architecturally prominent and clearly visible from the abutting public street. Movie theaters are exempt from this requirement.</p>	
<p><i>Reno, Nevada</i></p> <p>Standard: When additional commercial establishments under separate ownership are located in the same primary building as a large retail establishment, each such establishment shall have an exterior customer entrance that complies with the visually prominent entrance requirement below, except that such entrance shall include a minimum of two visual prominence features listed in subsection (4)d of the document. Restaurants containing less than 2,000 square feet of gross floor area are excluded from this requirement for an exterior customer entrance, except that if such an entrance is provided, the entrance shall comply with the visually prominent entrance requirements below.</p>	

Table 7 - Example Signage, Lighting, Etc Standards and Guidelines for Accessibility

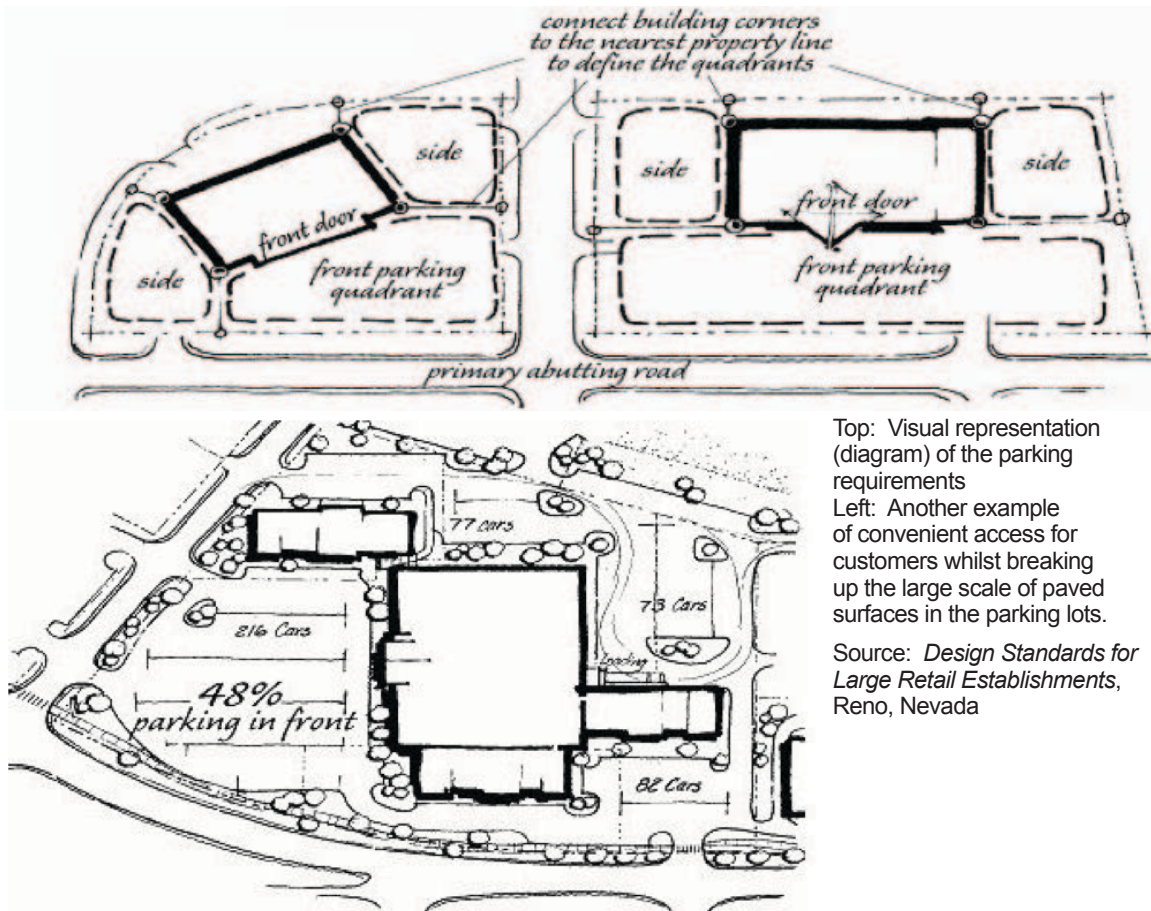
Examples of Signage, Lighting, Etc Standards and Guidelines for Accessibility	Comments
<p><i>Moscow, Idaho</i></p> <p>Standard: All public transit stops shall be designed to facilitate existing or future planned bus routes on adjacent streets and be located within 100 feet of a primary building entrance(s), incorporate well-lit, easily identified signs, loading/unloading areas, and be a minimum of ten feet in width as measured from the adjacent street curb (also see Section 7—Central Features and Community Spaces).</p>	<p>This standard focuses primarily access, but addresses safety as well. This was the only city to set aside a standard as direct as this in order to integrate public transit stops as part of the accessibility through site design. Future developments as well as the redesign of existing sites and structures could make use of strategic, well-placed, and identifiable signage for wayfinding (this does not necessarily mean that there should be more signage; what is in place, if not appropriate can be changed to increase effectiveness and if added, should not detract from safety or the quality of the site).</p>

Accessibility

Table 8 - Example Other Standards and Guidelines for Accessibility

Examples of Other Standards and Guidelines for Accessibility	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Additional Requirement: It shall be the general duty of the Traffic Engineer to determine the installation and proper timing and maintenance of traffic control devices; conduct engineering analysis of traffic accidents and devise remedial measures; conduct engineering investigation of traffic conditions; cooperate with other city officials in the development of ways and means to improve traffic conditions; and carry out such additional powers and duties as are imposed by this code and other city ordinances.</p> <p>The Traffic Engineer shall be responsible to the Mayor to designate such areas with special restrictions as authorized by this Traffic Code for the safe and efficient control of traffic and for the encouragement of either nonmotorized modes of travel or public transportation systems. Those areas shall include but not be limited to: bicycle lanes and paths, footpaths, and paths or roads for other nonmotorized modes of travel.</p>	

Figure 5 - Examples of Accessibility Considerations for Parking



Top: Visual representation (diagram) of the parking requirements
 Left: Another example of convenient access for customers whilst breaking up the large scale of paved surfaces in the parking lots.
 Source: *Design Standards for Large Retail Establishments*, Reno, Nevada

Accessibility

Public Space

The requirement of providing “x” amount of features in the designated public space area is consistent throughout most of the city standards who provide this section in their ordinances. Albuquerque, New Mexico, and Cheyenne, Wyoming, require additional square footage designated for aggregated (it is important to specify aggregated) public space as the size of the retail facility increases, which is consistent with the fourth, tiered development requirement approach Gresham is considering. Seating, attractive and functional walkways, water features, kiosks, a required amount of landscaping (additional standards that supersede the minimum site requirements is ideal), and public art satisfy this category. Playgrounds and temporary food vendors satisfy this requirement in some communities, but remains an uncommon specification. Signage and lighting for this category is included because it contributes to consistency with the community’s identity. Standards that are applicable to human scale also apply here because what can be seen from the street and nearby properties is part of a shared visual space.

Table 9 - Example Site Design Standards and Guidelines for Public Space

Examples of Site Design Standards and Guidelines for Public Space	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: Usable open space: pursuant to the R-3 zone. At least 50 percent of the required open space shall be provided in the form of shared or aggregate open space.</p> <p>Standard: Pedestrian walkways shall contribute to the attractiveness of the development and shall be a minimum of eight feet in width and constructed of materials other than asphalt. Pedestrian walkways along internal driveways or streets internal to the site shall also be lined with shade trees and pedestrian-scale lighting.</p> <p>Standard: Large retail facility sites that include a main structure less than 125,000 square feet in size shall provide public space pursuant to Zoning Code. Large retail facility sites 125,000 square feet or greater shall provide a pedestrian plaza space in the amount of 400 square feet for every 20,000 square feet of building space. A minimum of 50 percent of the required public space shall be provided in the form of aggregate space that encourages its use and that serves as a focal point for the development (e.g. linkage to the main entrance of the principle structure and public sidewalk and inclusion of adequate seating areas).</p>	<p>The use of the word “usable” in the first standard is an important piece to include so that the space will be functional; not dead space that takes up room with no purpose. There should be examples of what Albuquerque deems usable although the generality of the word might imply creativity/flexibility for said space.</p>

Examples of Site Design Standards and Guidelines for Public Space	Comments
<p><i>Fort Collins, Colorado</i></p> <p>Guideline: Buildings should offer attractive and inviting pedestrian scale features, spaces, and amenities. Entrances and parking lots should be configured to be functional and inviting with walkways conveniently tied to logical destinations. Bus stops and drop-off/pick-up points should be considered as integral parts of the configuration. Pedestrian ways should be anchored by special design features such as: towers, arcades, porticos, pedestrian light fixtures, bollards, planter walls, and other architectural elements that define circulation ways and outdoor spaces. Examples of outdoor spaces are plazas, patios, courtyards, and window-shopping areas. The features and spaces should enhance the building and the center as integral parts of the community fabric.</p> <p>Standard: Each retail establishment subject to these standards shall contribute to the establishment or enhancement of community and public spaces by providing at least two of the following: patio/seating area, pedestrian plaza with benches, transportation center, window shopping walkway, outdoor playground area, kiosk area, water feature, clock tower, or other such deliberately shaped area and/or a focal feature or amenity that, in the judgment of the Planning and Zoning Board, adequately enhances such community and public spaces. Any such areas shall have direct access to the public sidewalk network and such features shall not be constructed of materials that are inferior to the principal materials of the building and landscape.</p>	<p>Other cities' standards repeat this paragraph; this is the original.</p>
<p><i>Joliet, Illinois</i></p> <p>Guideline: Open space should be included in the overall design and provide public "living rooms" in the urban setting. Amenities provided within the open space can enhance the connectivity of the various design elements making up these spaces. Appropriate characteristics of good open space include:</p> <ol style="list-style-type: none"> 1. Clearly defined entrances into open spaces with direct access from adjacent streets and adequate buffering from vehicular traffic; 2. Open spaces that are visible and inviting to the pedestrian; 3. Open spaces, which utilize an aesthetically coordinated marriage between hardscape (buildings, planters, lighting, walls, fences, paving, etc.) and landscape (trees, shrubs, annuals, perennials, etc.) elements. Large open spaces broken into smaller, human-scale spaces through the use of changes of grade, planters, pots, landscaping, sculpture, fences, walls, etc.; 4. Open spaces designed to relate and connect to adjacent properties; 5. Seating appropriate to the scale and function of the open space. Seating may include park benches, the tops of garden/planter walls, monumental stairs, etc.; 6. The location of public art in accessible open spaces designed and located so as to enrich the pedestrian experience and create a stronger sense of place. 	<p>Good to recognize a mix of hardscape and green landscaping as effective public spaces.</p>

Examples of Site Design Standards and Guidelines for Public Space	Comments
<p><i>Joliet, IL (cont'd)</i></p> <p>Guideline: Buildings should offer attractive and inviting pedestrian scale features, spaces and amenities that create an inviting and entertaining environment. A number of the following would be suggested:</p> <p>Inviting brick walkways (sidewalk system) within the parking area that are tied to logical destinations (store entrances, sidewalks and bus stops) and include special design features (focal points) such as:</p> <ol style="list-style-type: none"> 1. Towers; 2. Arcades; 3. Porticos; 4. Pedestrian light fixtures; 5. Bollards; 6. Planter and retaining walls. <p>C. Public spaces such as:</p> <ol style="list-style-type: none"> 1. Patio/seating areas; 2. Pedestrian plaza with benches; 3. Brick walkways; 4. Kiosks, clock towers, steeples, towers, gazebos, arbors and similar focal or identifying features; 5. Masonry planters and planting areas; 6. Pedestrian and patron designed water features with fountains or cascades. 	
<p><i>Medford, Oregon</i></p> <p>Standard: In addition to the requirements for public plazas in Section 10.012, Definitions, Specific, public plazas provided by large retail structures shall comply with the following provisions:</p> <ol style="list-style-type: none"> i. Seating areas shall be provided in the public plaza and shall be shaded with trees, cloth canopies, or structures over 50 percent of their area. ii. A minimum of 20 percent of the public plaza shall be landscaped with live plantings subject to the landscape and irrigation requirements in Section 10.780, General Landscape and Irrigation Requirements. iii. Abutting large retail structures may connect their public plaza areas. <p>Standard: Each public plaza shall have focal points and/or other amenities. The focal points and other amenities shall be constructed of materials that are equal or superior to the principal materials of the building and landscaping. Focal points and/or amenities may include the following:</p> <ol style="list-style-type: none"> i. An outdoor playground with safe play structures for children; ii. A water feature, clock tower, or similar focal feature; iii. A covered community bulletin board (kiosk); iv. Art works; v. Space for small or temporary food vendors. 	<p>These standards are similar to others, but include a playground and food vendors as a possibility.</p>

Examples of Site Design Standards and Guidelines for Public Space	Comments
<p><i>Moscow, Idaho</i></p> <p>Standard: Each retail establishment subject to these standards shall be required to contribute to the establishment of community and public spaces by providing either a patio, a plaza, or a picnic area, each no less than 800 square feet in area. Additionally, at least two of the following are to be provided, one of which shall be at the rear side of the building: patio/seating area; pedestrian plaza with benches; public transit stop amenities (benches, shelter, etc.); outdoor playground area; water feature; public art feature; landscaped picnic area or other such deliberately shaped area; and/or a focal feature or amenity that, in the judgment of the Board of Adjustment, adequately enhances such community and public spaces. Any such area shall have direct access to the public sidewalk network and such features shall not be constructed of materials that are inferior to the principal materials of the building and landscape. A designated Park and Ride area may be used to satisfy one of the community spaces requirements. Park and Ride areas shall be a minimum of ten parking spaces (not to be included in satisfying minimum parking lot space requirements).</p>	<p>These standards are an expansion upon Fort Collins's standards, but are better in some areas as are Albuquerque, New Mexico's.</p>
<p><i>Reno, Nevada</i></p> <p>Standard: In addition to the connections required above, on-site pedestrian walkways shall connect each primary entrance of a commercial building to a pedestrian network serving:</p> <ol style="list-style-type: none"> 1. All parking blocks, parking areas, or parking structures that serve such primary building. <p>Standard: All development subject to this Section's design standards shall provide a minimum of ten square feet of site amenities, open areas, and public gathering places for each ten parking spaces provided. In commercial center developments containing more than one building, the required area may be aggregated into one larger space, provided such space is within easy walking distance of the large retail establishment and other major tenants in the center.</p> <p>Standard: All site amenities within a commercial development shall be an integral part of the overall design and within easy walking distance of major buildings, major tenants, and any transit stops.</p> <ol style="list-style-type: none"> i. Any such amenity/area shall have direct access to the public sidewalk network. ii. The amenity/area shall be constructed of materials that are similar in quality to the principal materials of the primary buildings and landscape. 	

Examples of Site Design Standards and Guidelines for Public Space	Comments
<p><i>Steamboat Springs, Colorado</i></p> <p>Standard: Loading areas, service areas, and trash disposal facilities shall not face Public Open Space or front or side streets.</p> <p>Standard: The development shall provide internal pedestrian furniture in appropriate locations at a minimum rate of one bench seat for every 5,000 square feet of gross floor area. Seating in foodservice areas, or other areas where food or merchandise purchasing activities occur shall not count toward this requirement. A minimum of four seats shall be located within the store, with a clear view through exit doors to a passenger pick-up or drop-off area.</p>	<p>The second standard also applies to safety.</p>
<p><i>Talent, Oregon</i></p> <p>Standard: To establish build-to lines, buildings shall be located and designed to align or approximately align with any previously established building/sidewalk relationships that are consistent with this standard. Accordingly, at least 30 percent of the total length of the building along the street shall be extended to the build-to line area. If a parcel, lot, or tract has multiple streets, then the building shall be built to at least two of them.</p> <p>Standard: Exceptions to build-to line standards shall be permitted: In order to form an outdoor space such as a plaza, courtyard, patio or garden between a building and the sidewalk. Such a larger front yard area shall have landscaping, low walls, fencing or railings, a tree canopy and/or other similar site improvements along the sidewalk designed for pedestrian interest, comfort, and visual continuity.</p> <p>Standard: Such an alternative to the street sidewalk must include a connecting walkway(s) and may include internal walkways or other directly connecting outdoor spaces such as plazas, courtyards, squares, or gardens. An alternative walkway may also be approved if it implements the goals and recommendations of the adopted Greenway Master Plan.</p> <p>Standard: Each retail establishment subject to these standards shall provide one square feet of plaza space per ten square feet of building square footage by providing at least four of the following: patio/seating area, a mixture of areas that provide both sunlight and shade, trees (one tree per 500 square feet), pedestrian plaza with benches, transportation center, window shopping walkway, outdoor playground area, areas protected from wind and rain, community kiosk, water feature, art, self supporting street clock, or other such deliberately planned area and/or a focal feature or amenity that, in the judgment of the City Planner, Planning Commission, or City Council, adequately enhances such community and public spaces.</p>	

Public Space

Table 10 - Example Building Design Standards and Guidelines for Public Space

Examples of Building Design Standards and Guidelines for Public Space	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Guideline: The design of structures shall be sensitive to and compliment the aesthetically desirable context of the built environment, e.g., massing, height, materials, articulation, colors, and proportional relationships.</p> <p>Standard: Where patios are provided, at least one of the recessed walls shall contain a window for ease of surveillance and the patio shall contain shading and seating. Where retail suite liners are provided, they shall be accessible to the public from the outside.</p>	<p>This is more of a general guideline and also goes with the Human Scale category, but sensitivity to architectural design matters when concerning this objective because a building (or group of buildings) influence the character, or “feel” of the community. If Gresham is looking to reduce setbacks, the architectural and aesthetic components will also be of greater importance due to increased visibility from the street.</p>

Table 11 - Example Signage, Lighting, Etc Standards and Guidelines for Public Space

Examples of Signage, Lighting, Etc Standards and Guidelines for Public Space	Comments
<p><i>Joliet, Illinois</i></p> <p>Guideline: Buildings should offer attractive and inviting pedestrian scale features, spaces and amenities that create an inviting and entertaining environment. A number of the following would be suggested:</p> <p>On-site lighting that limits light trespass (non-glare shielding fixtures)</p> <p>Modest signage in scale and proportion to building and surroundings:</p> <ol style="list-style-type: none"> 1. Low, ground-lit monument style signage with masonry base material complementary to the primary buildings is encouraged (pylon/pole signs are excluded). 2. Channel letter wall signage is strongly encouraged over box panel signage (large panel signs are excluded). 3. Additional window signage, movable message centers and temporary signs are strongly discouraged. 	
<p><i>Talent, Oregon</i></p> <p>Guideline: Historic, single-globe lights are strongly encouraged to create an enhance streetscape that respects the traditional street lamp standard found in small towns.</p>	<p>This is classified as a guideline because of its lack of assertiveness with the use of “strongly encouraged,” rather than “shall.”</p>

Table 12 - Example Other Standards and Guidelines for Public Space

Examples of Other Standards and Guidelines for Public Space	Comments
<p><i>Steamboat Springs, Colorado</i></p> <p>Additional Requirement: Prior to the approval of any project subject to these standards an impact analysis and mitigation plan shall be prepared at the applicant's cost by a city-approved consultant with appropriate experience to complete the necessary work. Based upon the determination that certain impacts are minimal or unlikely, the Planning and Community Development Director may waive any or all of the associated impact assessment elements. Unless waived, the impact assessment and mitigation plan must be completed to the satisfaction of the city for the following:</p> <ul style="list-style-type: none"> (12) The proposed development provides appropriate functional streetscape improvements such as public plazas, atriums, gathering spaces, or street furniture. (13) Cultural resources protection. The proposed development plan restores or enhances an important cultural resource that has a specific reference to the past, or contributes to the identity of the city. 	

Human Scale

All criteria are heavily catered to pedestrians and those who will be in close proximity to the site at any point. Comfort, safety, and aesthetically pleasing environments created through building and site design all contribute to a development that achieves the human scale objective.

Regarding site design, the key points addressed in these standards are: 1) How much (usually indicated as a percentage) of the front façade is to reach the lot line in order to provide x amount of street frontage. This requirement may satisfy human scale because of how approachable a well-designed building is by placing it closer to the primary street(s) as opposed to it being placed a great distance from the sidewalk. And 2) Landscaping is required in almost all of the documents where a given percentage along building facades, walkways, and distribution throughout the parking lot is specified. Many state that between a six and ten-foot buffer alongside the building and adjacent to walkways is necessary. Some cities, such as Albuquerque, New Mexico, state that one shade tree is required for a given amount of parking spaces. Furthermore, it is essential to indicate the number of trees or other mature landscaping is preferred because developers could satisfy a vague landscaping requirement by planting only shrubs.

Building design is more consistent throughout the various standards when addressed. All have similar ideas, but what separates the recommended documents from the others is that some are more detailed and explicit. Building articulations, roof design, materials, and color account for the visual aspects; the colors are generally neutral, and reflective or fluorescent colors are only allowed as accents. The preferred materials are brick and stone, while concrete, steel, and other prefabricated materials are discouraged. Windows are another part of building design that again requires a certain amount to cover the designated facades; placement of windows regarding height is also a factor.

Another common requirement is that building recesses and projections are to cover at least 20 percent of the façade with a depth of three percent of the length of the façade. Additionally, shelter (pedestrian weather protection) is to be provided at along at least 30 percent of the primary façade. Many are also similar in that no façade may have an uninterrupted length of 100 feet or more, but others have more strict standards in place. Bennington, Vermont, adds that the architectural elements should be proportional, which seems obvious but is important to include nonetheless. Rockville, Maryland, is unique in stating that parking structures shall use the same treatments as the primary building. This serves not only the purpose of architectural unity and consistency with community identity, but also as a first and last impression of the entire development because when customers park, the parking structure is the first structure associated with the retail experience and is the last thing they see when leaving.

The signage and lighting element is not extensive as it relates to human scale. As mentioned in the accessibility section, most of these standards are placed under the safety objective. What could be done for lighting as it is related to human scale is to design it in a way that is also aesthetically pleasing and takes into account the community's character. Appropriate spacing and height of the lighting, while also a safety consideration, applies to this section because if too high and sparsely placed, this does not serve the needs of customers and other pedestrians.

Fort Worth, Texas and Portland, Oregon, serve as a good basis for the “other” category; screening (although applicable to building design), storage, fencing, and outdoor display (which can be considered as safety) are included. The most noteworthy aspect is that architectural consistency is called for even under smaller details of site and building design—mechanical equipment and other industrial functions are to be screened with architectural consistency especially when a rear wall faced a residential neighborhood, and fuel station roofs should be constructed in the same manner as the primary building.

As with accessibility, the more extreme numeric examples are provided so that Gresham may adjust in order to fit its priorities.

Table 13 - Example Site Design Standards and Guidelines for Human Scale

Examples of Site Design Standards and Guidelines for Human Scale	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: Façades adjacent to a public right of way or internal driveway and façades that contain a primary customer entrance shall contain features that provide shade along at least 40 percent of the length of that façade for the benefit of pedestrians. Pedestrian walkways along internal driveways or streets internal to the site shall also be lined with shade trees and pedestrian-scale lighting.</p> <p>Standard: Main structures shall be screened from the adjacent street by means of smaller buildings, retail suite liners, or 20-foot wide landscape buffers with a double row of trees.</p> <p>Standard: Building façades shall occupy at least 50 percent of the street frontage.</p> <p>Standard: Every third double row of parking shall have a minimum ten-foot wide continuous walkway dividing that row. The walkway shall be either patterned or colored material other than asphalt and may be at-grade. The walkway shall be shaded by means of trees, a trellis, or similar structure, or a combination thereof. Tree wells, planters, or supports for shading devices may encroach on the walkway up to three feet.</p> <p>Standard: One shade tree is required per eight parking spaces. Shade trees may be located at the center of a group of four to eight parking spaces, clustered in parking row end caps, or located along internal pedestrian ways.</p>	

Human Scale

Examples of Site Design Standards and Guidelines for Human Scale	Comments
--	----------

Fort Worth, Texas

Standard: An eight-foot masonry wall of brick, stone, split block or concrete cast to simulate such materials shall be constructed along the common boundary line of the adjacent residential property, or as close as practicable in the event of intervening alleys, easements and drainage channels. If the large retail store property and residential property are separated by intervening property under separate ownership that is less than 20 feet wide, a wall shall be constructed along the property line of the large retail store facing the residential property. In addition to the landscape requirements of Section 6.301, a 20-foot wide irrigated and landscaped bufferyard shall be provided with three-inch caliper canopy trees with a mature height of 25 feet by industry standards planted every 20 feet in an overlapping pattern such that the canopy creates a solid visual screening at maturity and live groundcover.

Standard: In addition to the bufferyard and landscape requirements of Sections 6.300 and 6.301, a minimum 20-foot irrigated and landscaped bufferyard shall be provided along all street frontages to screen the view of the property from the public rights-of-way. Such screening shall be provided using hedges, berms or mass plantings to a height of not less than 24 inches with live groundcover. A minimum of one three-inch caliper canopy tree every 50 feet shall be provided with a mature height of 25 feet by industry standards.

Standard: Landscaping in parking lot. In addition to the bufferyard and landscape requirements of Sections 6.300 and 6.301 and the 20-foot landscaped bufferyard described above, one three-inch caliper tree within an irrigated landscape island of not less than 150 square feet with live groundcover shall be provided for every 100 parking spaces, or fraction thereof. A separate irrigated landscape island is required for every 100 parking spaces; the required 150-square foot landscape areas cannot be combined to create fewer, larger landscape islands. In addition, each end of a parking strip shall have an irrigated landscape island planted with a minimum of one three-inch caliper tree and three shrubs within an area of not less than 300 square feet with live ground cover. Additional landscaping is required if parking exceeds one space per 250 square feet of gross floor area, in accordance with Subsection A (10) below.

Reno, Nevada

Standard: The minimum rear or side yard setback for any building containing a large-scale retail establishment shall be 35 feet from the nearest property line. Where such building façade also faces an abutting residentially zoned property, either a six-foot high decorative masonry wall or an earthen berm no less than six feet high shall be provided, in addition to a 20-foot wide landscape buffer containing at a minimum evergreen trees planted at intervals of 20 feet on center or in clusters.

Human Scale

Table 14 - Example Building Design Standards and Guidelines for Human Scale

Examples of Building Design Standards and Guidelines for Human Scale	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: Awnings and minor ornamental features over pedestrian ways must be more than eight feet above the finished grade.</p> <p>Standard: For the Retail Suite Liner, the vertical offset shall be a visible change (minimum six inches), a change in material may be used for articulation at the same interval and the visible change in roof plane or parapet height shall be a minimum of 18 inches. Façades adjacent to a public right-of-way or internal driveway and façades that contain a primary customer entrance shall contain features that provide shade along at least 40 percent of the length of the façade for the benefit of pedestrians.</p>	
<p><i>Fort Collins, Colorado</i></p> <p>Standard: Façades greater than 100 feet in length, measured horizontally, shall incorporate wall plane projections or recesses having a depth of at least three percent of the length of the façade and extending at least 20 percent of the length of the façade. No uninterrupted length of any façade shall exceed 100 horizontal feet.</p> <p>Standard: Ground floor façades that face public streets shall have arcades, display windows, entry areas, awnings, or other such features along no less than 60 percent of their horizontal length.</p> <p>Guideline: The presence of smaller retail stores gives a center a “friendlier” appearance by creating variety, breaking up large expanses, and expanding the range of the site’s activities. Windows and window displays of such stores should be used to contribute to the visual interest of exterior façades. The standards presented in this section are directed toward those situations where additional, smaller stores, with separate, exterior customer entrances are located in principal buildings.</p> <p>Standard: Where principal buildings contain additional, separately owned stores which occupy less than twenty 25,000 square feet of gross floor area, with separate, exterior customer entrances:</p> <ul style="list-style-type: none"> The street level façade of such stores shall be transparent between the height of three feet and eight feet above the walkway grade for no less than 60 percent of the horizontal length of the building façade of such additional stores. Windows shall be recessed and should include visually prominent sills, shutters, or other such forms of framing. 	<p>In addressing the 60 percent of the horizontal length, Rockville, Maryland added to this by emphasizing that these features should allow the light to fill the features, which also helps fulfill the safety criteria for visibility as well as the creation of public space due to a more vibrant environment for people passing by.</p>

Human Scale

Examples of Building Design Standards and Guidelines for Human Scale

Comments

Fort Collins, CO (cont'd)

Guideline: Buildings should have architectural features and patterns that provide visual interest, at the scale of the pedestrian, reduce massive aesthetic effects, and recognize local character. The elements in the following standard should be integral parts of the building fabric, and not superficially applied trim or graphics, or paint.

Standard: Building façades must include a repeating pattern that shall include no less than three of the elements listed below. At least one of these elements shall repeat horizontally. All elements shall repeat at intervals of no more than 30 feet, either horizontally or vertically.

- Color change;
- Texture change;
- Material module change;
- Expression of architectural or structural bay through a change in plane no less than twelve inches in width, such as an offset, reveal, or projecting rib.

Standard: Roofs shall have no less than two of the following features:

- a. Parapets concealing flat roofs and rooftop equipment such as HVAC units from public view. The average height of such parapets shall not exceed 15 percent of the height of the supporting wall and such parapets shall not at any point exceed one-third of the height of the supporting wall. Such parapets shall feature three-dimensional cornice treatment;
- b. Overhanging eaves, extending no less than three feet past the supporting walls;
- c. Sloping roofs that do not exceed the average height of the supporting walls, with an average slope greater than or equal to one foot of vertical rise for every three feet of horizontal run and less than or equal to one foot of vertical rise for every one foot of horizontal run;
- d. Three or more roof slope planes.

Guideline: All façades of a building, which are visible from adjoining properties and/or public streets should contribute to the pleasing scale features of the building and encourage community integration by featuring characteristics similar to the front façade.

Standard: All building façades, which are visible from adjoining properties and/or public streets shall comply with the requirements of Article I.1. of these Design Standards and Guidelines.

Examples of Building Design Standards and Guidelines for Human Scale

Comments

Fort Worth, Texas

Guideline: Façades should be articulated to reduce the massive scale and the uniform, impersonal appearances of large retail buildings and provide visual interest.

Standards: Architectural features on building façades that are visible from adjoining properties and/or public streets (excluding façades facing residential property that are screened by an eight-foot masonry wall and façades facing the side or rear of property zoned and used for commercial purposes or industrial purposes) shall address the visual impact of long uninterrupted walls by providing a minimum of three of the following elements. No uninterrupted length of any façade shall exceed 100 feet.

Wall plane projections or recesses having a depth of at least three percent of the length of the façade and extending at least 20 percent of the length of the façade, Variation of a minimum of two feet in the height of parapets. Variation to parapet height may include pilasters and projecting raised entrance features;

Variation of a minimum of two feet in height of parapets. Variation to parapet height may include pilasters and projecting raised entrance features;

Pilasters projecting from the plane of the wall by a minimum of 16 inches. The use of pilasters to interrupt horizontal patterns such as accent banding is encouraged;

Canopies projecting a minimum of ten feet from the plane of the primary façade walls; and repetitive ornamentation including decorated applied features such as wall-mounted light fixtures or applied materials. Repetitive ornamentation shall be located with a maximum spacing of 50 feet.

Guideline: Exterior building materials and colors comprise a significant part of the visual impact of a building. Therefore, they should be aesthetically pleasing and compatible with materials and colors used in the surrounding area.

Standards:

Materials: All building façades that are visible from adjoining properties and/or public streets (excluding façades facing residential property that are screened by an eight-foot masonry wall) shall be of architectural block, brick, stone, or tinted, textured concrete masonry units. Tilt-up concrete construction is permitted, provided the exterior surface is textured or covered with brick, stone, or material fabricated to simulate brick or stone. Stucco and EIFS (Exterior Installation Finished System) are permitted, up to a maximum of 30 percent of a façade area. Smooth concrete block and prefabricated steel panels are prohibited.

Examples of Building Design Standards and Guidelines for Human Scale

Comments

Fort Worth, TX (cont'd)

Colors: Except for brick or stone, surfaces shall be painted in subtle, neutral or earth tone colors, specifically including without limitation white, tan, brown and gray. Trim and accent areas may feature brighter colors, including primary colors. Metallic or fluorescent colors are prohibited. Accent colors on each façade shall be limited to a maximum of 25 percent of the façade area for logo colors and a maximum of ten percent of the façade area for other accent colors. A logo color is a color commonly used by a large retail store as an identifying characteristic.

Joliet, Illinois

Standard: Awnings and canopies should not have interior lighting except at the entryway and must be segmented if longer than 25 feet. They may not cover more than 25 percent of the front windows.

Standard: Exterior lighting fixtures must be architecturally consistent with the building façade and are limited to mounting on the first floor.

Standard: Signs should be generally limited to the building front. Only wall signs and projecting signs should be permitted. Materials should be limited to those of a historical line. Interior lighting of signs is discouraged. Signs should not obscure more than 25 percent of a storefront window area.

Standard: Both street-facing sides of corner buildings will be treated like front façades.

Standard: Windows should cover 50-75 percent of the lower building front and 30-50 percent of the upper façade. Building front windows should be vertically oriented and begin between two and three feet above the sidewalk.

Standard: A well-defined cornice or fascia should be located at the top of the first floor front and at the roofline.

Standard: Fencing should be ornamental (wrought-iron, decorative aluminum, etc.). The use of chain link in the front yard area and barbed-wire is prohibited.

Guideline: While new buildings and major additions should possess their own character, they should not be obtrusive or have extreme contrasts with adjacent structures.

Guideline: Alignment: In most cases, infill structures should have zero setback at the street and side lot lines. Façades should be flush with the adjacent buildings to reinforce the rhythm and consistency of the streetscape.

Examples of Building Design Standards and Guidelines for Human Scale

Comments

Joliet, IL (cont'd)

Standards:

Materials and Colors: Exterior building materials and colors comprise a significant part of the visual impact of a building. Therefore, they should be aesthetically pleasing and compatible with materials and colors used throughout a large commercial subdivision and in adjoining neighborhoods when applicable. Materials with integral color are recommended over materials that require painting.

- a. Predominant exterior building material shall be a high quality brick material.
 - i. Standard brick, face-brick, veneer (gray & thin brick are excluded)
- b. Subsidiary exterior building material should be used for unique applications when it is essential to a theme or to achieve an effect.
 - i. Cut-faced block/CMU (gray & standard flat block are excluded);
 - ii. EIFS/dryvit (suggested for illusion of stone and other natural material);
 - iii. Glass;
 - iv. Limestone;
 - v. Other native stone or veneers;
 - vi. Stucco;
 - vii. Wood (cedar) or Hardie fiber cement siding (vinyl siding is excluded).
- c. Stamped, thin-brick and tilt-up masonry units may be allowed when a sample of an aesthetically pleasing/ high quality material is provided and approved by the City Manager or his designee.
- d. Detailing (moldings, cornices, etc.) and banding should consist of a different tint and texture. Materials not listed on the predominant or subsidiary lists may be utilized for detailing and banding such as textured concrete masonry.

Reno, Nevada

Standard: All primary buildings shall be constructed or clad with materials that are durable and of a quality that will retain their appearance over time, including, but not limited to, natural or synthetic stone; brick; stucco; integrally-colored, textured, or glazed concrete masonry units; high-quality prestressed concrete systems; Exterior Installation Finish Systems (EIFS); or glass. 2. The following exterior building materials are prohibited:

- i. Vinyl siding;
- ii. Field-painted or pre-finished standard corrugated metal siding; or
- iii. Smooth-faced gray concrete block, painted or stained concrete block, tilt-up concrete panels. These materials may be used as main framing materials with an exterior treatment or finish that replicates materials specified in subsection 1 above.

Examples of Building Design Standards and Guidelines for Human Scale

Comments

Reno, NV (cont'd)

Standard: Exterior building material shall be continued down to within nine inches of finished grade on any elevation.

Standards: Color schemes shall aesthetically integrate building elements together, relate separate (free-standing) buildings within the same commercial center development to each other, and shall be used to enhance the architectural form of a building. All building projections, including, but not limited to, chimneys, flues, vents, and gutters, shall match or complement in color the permanent color of the surface from which they project.

Intense, bright, black, or fluorescent colors shall be used sparingly and only as accents; such colors shall not be used as the predominant color on any wall or roof of any building. Permitted signs shall be excluded from this standard.

Building trim and accent areas may feature brighter colors, including primary colors; however, neon tubing shall only be an acceptable trim near customer entrances.

Standard: All buildings within the same commercial center shall be architecturally unified. Architectural unity means that buildings shall be related and compatible in style, color scheme, and quality and type of exterior building materials.

*Standard: In order to provide clearly defined and highly visible entrances, all building and store fronts subject to subsection (f)(4)'s building design and architecture standards shall have customer entrances featuring no less than three of the following:

1. Canopies, arcades or porticos that, while satisfying weather protection requirements of subsection (4) f, also lend visual prominence to the entrance;
2. Overhangs, recesses or projections;
3. Raised corniced parapets over the door;
4. Peaked roof forms;
5. Tower features integrated with the building design that extend above the building roof line;
6. Arches;
7. Outdoor patios;
8. Display windows;
9. Integral planters or wing walls;
10. Entrance atriums with visual connections to outside;

Standard: The principal customer entrance to any building shall feature at least two elements from the following:

1. Clerestory windows;
2. Windows flanking main entrance door;
3. Large entrance door(s)—Transparent, and double hung;
4. Ornamental light fixtures.

*Visual prominence is encouraged. However, it must be aesthetically pleasing (see the seventh standard provided immediately to the left).

Examples of Building Design Standards and Guidelines for Human Scale	Comments
<p><i>Reno, NV (cont'd)</i></p> <p>Standard: All sides of the building shall include articulation, materials, and design characteristics consistent with those on the primary front façade in terms of quality and detail, unless the public's view of a rear or side building elevation from a public street or from an adjacent residentially zoned property is blocked by intervening buildings, topography, or other similar feature.</p> <p>Standard: A minimum of 60 percent of any ground floor façade between two feet and ten feet above grade fronting on a public street or containing a principal customer entrance shall be comprised of windows for window shopping, with views into interior areas for merchandise display, shopping, and/or other customer services. A minimum of 25 percent of ground floor façades that face parking lots shall also be comprised of windows.</p> <p>Standard: If actual doors and windows are not feasible on side or rear walls that face walkways because of the nature of the use of the building façade, such walls shall include false windows, either glazing or pattern, and defined by frames, sills, and lintels, or similarly-proportioned modulations of the wall.</p> <p>Standard: Ground floor building façades that face public streets shall have arcades, display windows, entry areas, awnings, or other such features along at least 60 percent of their horizontal length.</p>	

Table 15 - Example Signage, Lighting, Etc Standards and Guidelines for Human Scale

Examples of Signage, Lighting, Etc Standards and Guidelines for Human Scale	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: All signage shall be designed to be consistent with and compliment the materials, color, and architectural style of the building(s).</p> <p>Standard: The maximum height of any monument sign shall be 15 feet.</p> <p>Standard: Wall signs are permitted within the area between the second story floor line and the first floor ceiling within a horizontal band not to exceed two feet in height. Letters shall not exceed 18 inches in height or width.</p>	<p>Placement of lighting, pedestrian amenities, and trash receptacles are addressed under the pedestrian plaza space, but explain that they should be designed to conform to "pedestrian scale" standards.</p>
<p><i>Fort Worth, Texas</i></p> <p>Standard: Attached on-premises signs shall be limited to ten percent of each wall face. No wall signage shall be backlighted or illuminated to such an intensity or brilliance as to cause glare or impair vision.</p>	

Human Scale

Examples of Signage, Lighting, Etc Standards and Guidelines for Human Scale	Comments
<p><i>Fort Worth, TX (cont'd)</i></p> <p>Standard: Detached on-premises signage shall be limited to one sign per large retail store; provided, however, two signs shall be permitted when the large retail store is located on a corner lot or through lot. A sign shall be located at the main entrance to the property. The sign(s) shall be of monument type no larger than 128 square feet in area and eight feet high.</p> <p>Standard: Lighting within the 20-foot bufferyard adjacent to residential property shall not exceed one foot candle at ground level. Light poles within 140 feet of residential property shall not exceed 20 feet in height and shall be shielded away from residential property. All other light poles shall not exceed 35 feet in height. All light poles shall be painted black, dark gray, or dark green or have bronze oxidant protective coating.</p>	

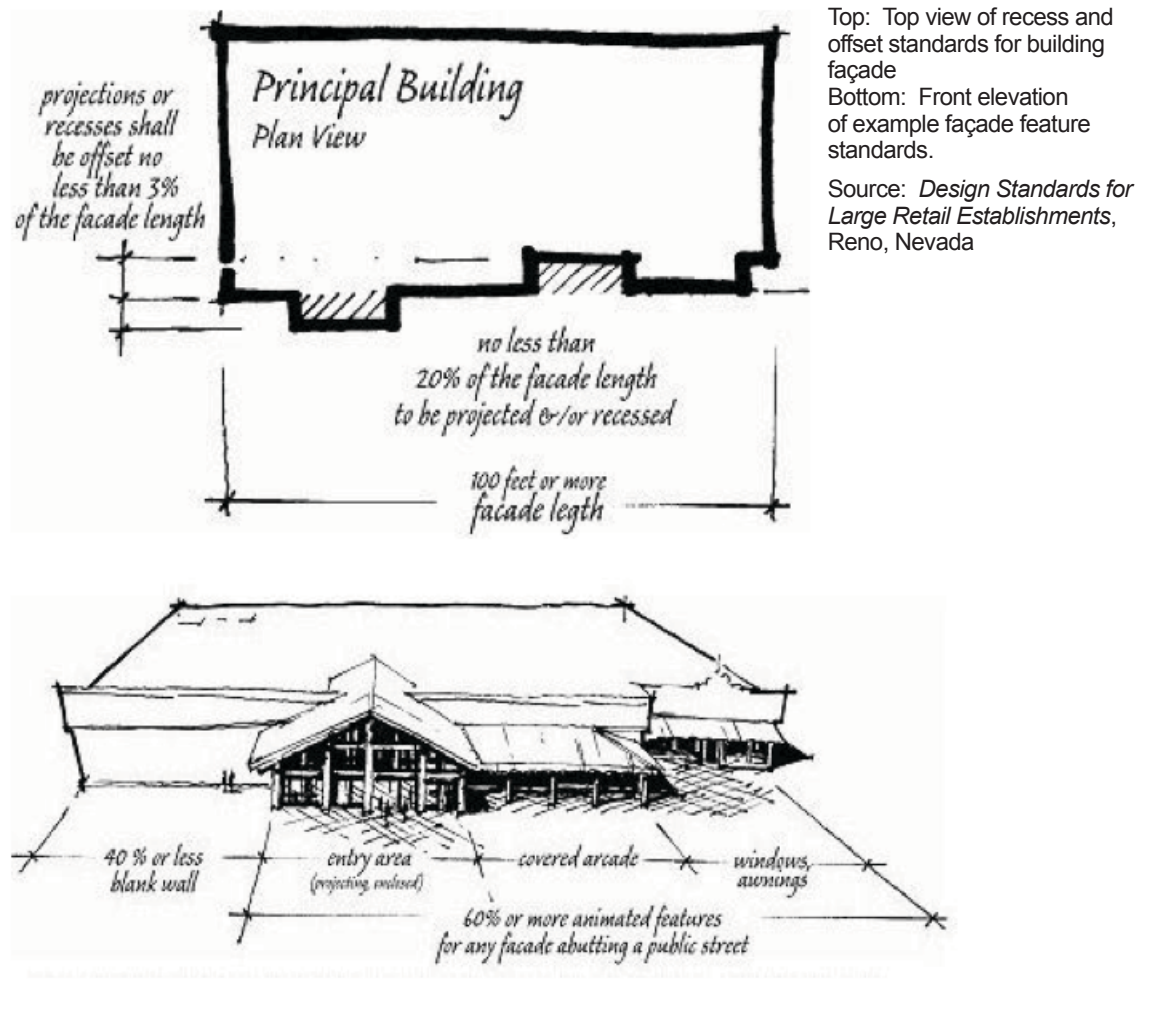
Table 16 - Example Other Standards and Guidelines for Human Scale

Examples of Other Standards and Guidelines for Human Scale	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: If a transit stop exists or is planned adjacent to a large retail facility, it shall include a covered shelter with seating.</p> <p><i>Fort Worth, Texas</i></p> <p>Standard: Permanent outdoor display, sales and storage: Merchandise may be stored or displayed for sale to customers on the front or side of the building in accordance with this paragraph. The total square footage of all permanent outdoor storage, display and sales areas permitted by subsections (1), (2) and (3) shall be limited to ten percent of the footprint of the building, but in no event shall exceed 15,000 square feet. Permanent outdoor storage, display and sales shall be contiguous to the building and shall not be permitted within 100 feet of residential property.</p> <p>Standard: Outdoor storage, display and sales of plumbing fixtures and large household appliances, including without limitation hot tubs, washers, dryers, refrigerators, dishwashers and trash compactors, is prohibited.</p> <p>Standard: Permanent outdoor display, storage and sales: General merchandise stores: The permanent storage, display and sales area shall be enclosed by a minimum eight-foot wall of like appearance to the building or a base of like appearance to the building topped by wrought iron or tubular steel fencing, with a minimum total height of eight feet. No merchandise other than trees shall be visible above the wall or fence.</p>	

Human Scale

Examples of Other Standards and Guidelines for Human Scale	Comments
<p><i>Fort Worth, TX (cont'd)</i></p> <p>Standard: Permanent outdoor display, storage and sales: Home improvement stores: The permanent storage, display and sales area shall be enclosed by a chain link fence covered with windscreen or wall of like material to the building with a minimum height of eight feet. Windscreen shall be maintained in good repair and free of tears. Merchandise may be stacked up to 25 feet high or level with the top of the adjacent side wall, whichever is lower, but may not be stacked above the height of the wall or fence. The roofline on the front façade shall have architectural features, such as gables or parapets, to obscure merchandise stored in the area.</p> <p>Standard: Rear storage. Bulk merchandise may be stored behind the building.</p>	

Figure 6 - Examples of Human Scale Considerations for Building Façade



Safety

The two major components to this section are site design and signage/lighting. Site design primarily attempts to mitigate potential hazards caused by conflict points:

- Vehicle speed
- Emphasized pedestrian walkways or those buffered by landscaping to and throughout the site
- Interaction between vehicles on the adjacent streets (e.g. between public transit and automobiles)
- Vehicle access points in relation to street classification
- Minimized driveway crossings

Also discussed in the site design piece are building orientation and proximity to the street as part of a safe environment for pedestrians.

Signage and lighting expands upon lighting more than signage although both share the principle of not being too bright so as to cause glare. The signage standards, however, have room to be further developed because placement and size play important safety roles. The main points concerning lighting are that it shall not be directed upward (better serving the pedestrian and causing less distraction to nearby properties), height restrictions are in place, and cutoff shield specifications are provided depending on where light poles are placed within and along the site.

Bellingham, Washington's document is unique in that it states that areas designated for bike racks must also be well lit. It will be beneficial to specify that there should be pedestrian-scale lighting throughout the entire site, rather than simply along the façades of the building and near the entryways. Some cities account for the former, but it is uncommon throughout most standards. Furthermore, employee safety should be a priority, especially if the hours extend into the late evening/early morning hours.

For building design, window and glazing requirements as well as the height and depth of the overhangs, canopies, and awnings addressed are the major concerns indicated in the cities' documents. What should also be considered is the depth of the recesses and projections because while they provide visual interest, people may hide behind them.

The "other" category addresses fencing, equipment storage, and cart corral requirements. Fencing standards are useful in the prevention of equipment and merchandise spillover. Moreover, fences also pose a threat to safety if not designed or constructed properly so sight obstruction requirements must be in place (i.e. transparency/opacity and height). Also included are several precautions that do not fit into these aspects and are only addressed by one to only a few cities.

Table 17 - Example Site Design Standards and Guidelines for Safety

Examples of Site Design Standards and Guidelines for Safety	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: Parking areas may front onto roadways identified as limited access, provided that they are adequately screened with landscape wells and plantings.</p> <p>Standard: Every third double row of parking shall have a minimum ten-foot wide continuous walkway dividing that row. The walkway shall be either patterned or colored material other than asphalt and may be at-grade. The walkway shall be shaded by means of trees, a trellis, or similar structure, or a combination thereof. Tree wells, planters, or supports for shading devices may encroach on the walkway up to three feet.</p> <p>Standard: Where patios are provided, at least one of the recessed walls shall contain a window for ease of surveillance.</p> <p>Standard: Arterial or collector roadways abutting a large retail facility with a posted speed limit of 35 mph or less shall have on street parking utilizing a parking/ queuing lane.</p> <p>Standard: Curb extensions/bumpouts shall be constructed at the ends of each block.</p>	<p>Narrower streets and curb extensions will also reduce speed and noise levels, therefore making pedestrians or cyclists feel safer when crossing the street or when walking on the sidewalk. It is good that the walkways will be emphasized as separate from the street by raising them as well as providing landscaped buffers so that automobile users will (or should) recognize pedestrians as a central part of the streetscape. However, because the policy says “may be at-grade,” this will be an excuse for developers to not use raised intersections, which are appropriate at times.</p>
<p><i>Bellingham, Washington</i></p> <p>Standard: Walkways shall be designed for pedestrian safety and shall avoid or mitigate vehicle and pedestrian route conflicts through lighting, bollards, and other features.</p> <p>Standard: Cart corrals shall not encroach on walkways.</p>	
<p><i>Reno, Nevada</i></p> <p>Standard: Sidewalks at least six feet wide shall be provided along all sides of the parcel or lot that abut a public street. The sidewalk shall be separated from the street curb by a landscaped parkway at least eight feet wide; or the required front yard setback, whichever is greater.</p> <p>Standard: All internal pedestrian walkways shall be distinguished from driving surfaces through the use of durable, low maintenance surface materials such as pavers, bricks, or scored and tinted concrete to enhance pedestrian safety and comfort, as well as the attractiveness of the walkways. At each point that the on-site pedestrian walkway system crosses a parking lot or internal street or driveway, the walkway or crosswalk shall be clearly marked through the use of a change in paving materials distinguished by their color, texture, or height.</p>	

Table 18 - Example Building Design Standards and Guidelines for Safety

Examples of Building Design Standards and Guidelines for Safety	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: Where patios are provided, at least one of the recessed walls shall contain a window for ease of surveillance.</p> <p>Standard: Drive-up windows must be located on or adjacent to the side or rear walls of service or retail structures and the window shall not face a public right of way.</p> <p>Standard: Awnings and minor ornamental features over pedestrian ways must be more than eight feet above the finished grade.</p> <p>Standard: Building façades shall occupy at least 50 percent of the street frontage.</p>	<p>The placement of the drive-up windows is a safety concern for traffic flow and pedestrians—meaning this is also applicable to the accessibility principle. Glazing, frontage, and awning requirements also belong in the safety section (it is in human scale because these design components affect the attractiveness of the site) because more eyes on the street are allowed by increased glazing.</p>
<p><i>Reno, Nevada</i></p> <p>Standard: Ground floor building façades that face public streets shall have arcades, display windows, entry areas, awnings, or other such features along at least 60 percent of their horizontal length.</p> <p>Standard: A minimum of 60 percent of any ground floor façade between two feet and ten feet above grade fronting on a public street or containing a principal customer entrance shall be comprised of windows for window shopping, with views into interior areas for merchandise display, shopping, and/or other customer services. A minimum of 25 percent of ground floor façades that face parking lots shall also be comprised of windows.</p> <p>Standard: The street level façade of stores shall be transparent between the height of three feet and eight feet above walkway grade for no less than 60 percent of the horizontal length of the building façade.</p>	<p>These standards are also present in Fort Collins, Colorado’s document.</p>

Table 19 - Example Signage, Lighting, Etc Standards and Guidelines for Safety

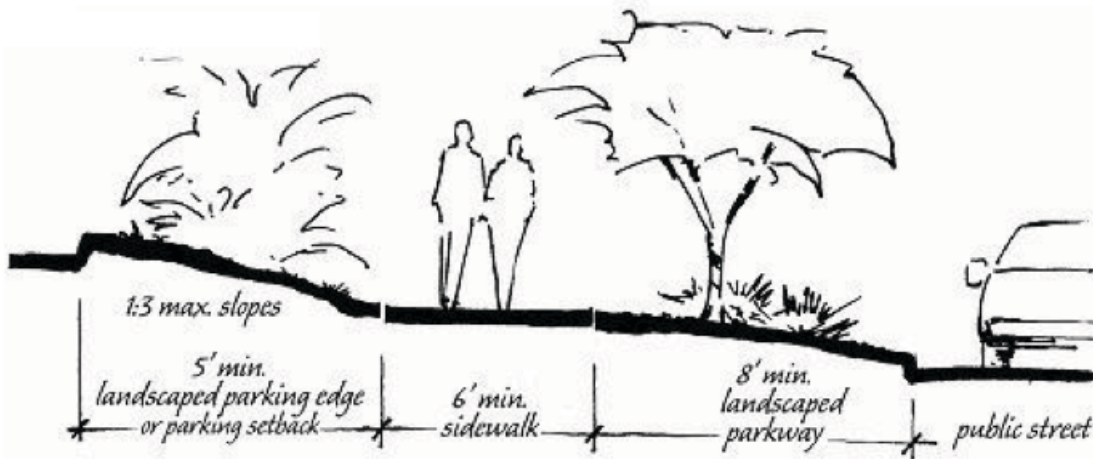
Examples of Signage, Lighting, Etc Standards and Guidelines for Safety	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: All freestanding signs shall be monument style (so as to prohibit instability and falling on passers-by).</p> <p>Guideline: Pedestrian plazas should be designed for security and be visible from the public right of way as much as possible and have pedestrian scale lighting and pedestrian amenities such as kiosks.</p> <p>Standard: Pedestrian scale lighting that provides at least an illumination of 1.2 to 2.5 foot candles or the equivalent of foot lamberts at a maximum of 16 feet in height for ornamental poles and 20 feet for light poles.</p>	<p>While the amount of lighting matters, the height at which the bulb is placed does as well. If it is too high, then the sidewalk/street will not be adequately lit, but if it is placed at too low a level, there are other safety concerns regarding vandalism and fire hazards.</p>

Examples of Signage, Lighting, Etc Standards and Guidelines for Safety	Comments
<p><i>Albuquerque, NM (cont'd)</i></p> <p>Standard: No flashing, traveling, animated, or intermittent lighting shall be on or visible from the exterior of any building.</p>	<p>The lighting requirement of the signs addresses safety from the street because it can reduce drivers' visibility, but the policy also addresses a larger context of safety within a building depending on what activities take place inside that might be distracted by such lighting.</p>
<p><i>Bellingham, Washington</i></p> <p>Standard: Bike racks shall be located in a well-lit area close to building entrances.</p> <p>Standard: All outdoor lighting shall be sized and directed to avoid adverse impact and spillover onto adjacent properties. Upward directed lighting is prohibited.</p> <p>Standard: Outside parking lot lighting shall not be less than one foot candle per IES minimum lighting standards at the property line, and shall be designed to minimize glare and spillover onto adjacent properties.</p> <p>Standard: Building and aesthetic lighting must be shielded to prevent direct glare and/or light trespass in excess of one foot candle at the property line.</p> <p>Standard: Night lighting shall be provided for all pedestrian walkways.</p> <p>Standard: All exterior lighting shall utilize cutoff shields or otherwise be designed to conceal the light source from adjoining uses and streets.</p> <p>Standard: The maximum height of light poles in parking lots abutting residential zones shall not exceed 18 feet.</p>	<p>The night lighting for pedestrian walkways should be more specific.</p>
<p><i>Reno, Nevada</i></p> <p>Standard: The principal customer entrance to any building shall feature at least two elements from the following: clerestory windows, windows flanking main entrance door, large entrance door(s)—transparent, and double hung, and ornamental light fixtures.</p>	

Table 20 - Example Other Standards and Guidelines for Safety

Examples of Other Standards and Guidelines for Safety	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: ...shall have...narrower streets and lanes with two ten-foot travel lanes with parallel parking alongside.</p> <p>Standard: Ponds, retention and detention areas shall be shallow to prevent the need for security fencing, yet have capacity to manage stormwater.</p> <p>Standard: Maintenance of vacant or abandoned buildings- Includes landscaping, outdoor security lighting, parking areas cleaned of dirt and litter, and maintenance of building façades.</p>	<p>Efficient traffic controls (addressed in the City's Neighborhood Area Traffic Study) means appropriate signaling so as to mitigate speeding, but signaling should also move traffic through as efficiently as possible; there must be a balancing act because too slow of speeds can also be dangerous. Narrower streets will allow pedestrians to feel comfortable crossing and will slow traffic. Further detailed description of whether the street is a one- or two- way would be relevant because one-way streets can at times be uninviting to pedestrians because they allow traffic to flow more quickly.</p>

Figure 7 - Example of Safety Considerations in Parkway and Setback



Design standards for parkway (planter strip), sidewalk and landscaping.
 Source: *Design Standards for Large Retail Establishments*, Reno, Nevada

Sustainability

Overall, this area requires more improvement- especially in building design. While the City of Gresham is specifically looking for stormwater and groundwater management as well as parking lot design to reduce heat islands, other standards are relevant to this section. For example, many of the human scale and accessibility standards pertain to sustainability because building design through use of materials (e.g. energy efficient windows), building orientation, and site design as it affects multimodal transportation access are all factors contributing to this overall goal.

Some of the landscaping requirements mentioned in Human Scale could be applicable to sustainability, but are placed in the former section because they enhance the attractiveness of the site, create a less intimidating atmosphere, and reduce the negative visual impacts caused by the uniformity of the building’s construction. Though landscaping can help to satisfy other criteria, it does not mean that it should not be seen as its own, separate section. Landscaping does not automatically mean sustainability, although it is a step in that direction. Although it is generally better to have something rather than nothing, placing a patch of grass or certain plants in an area does not deem it sustainable unless it functional and appropriate for the specific environment.

Not included in the matrix below are Portland, Oregon’s standards, but the reason for this merits discussion. This document has landscaping and tree standards, but they are not specific (e.g. 15 percent of the site shall be landscaped). This document is still worth looking at in more depth as compared to other cities’ so it is rated “yellow” in the large matrix for this category. One note is that it requires all landscaping to be at ground level, as do most cities. The ground level landscaping makes sense for the human scale, safety, and public space aspects, but landscaping should be considered for below grade planting (see Winchester- Clark County, Kentucky standards) in order to serve as a catch basin. Above ground landscaping in the form of greenroofs can be permitted so that they could serve as a water collection system in conjunction with catchment basins or bioswales. The issue with greenroofs, though, is that it will be more expensive regarding initial construction costs because of the sturdy materials required in order to support such a system.

Table 21 - Example Site Design Standards and Guidelines for Sustainability

Examples of Site Design Standards and Guidelines for Sustainability	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: Usable open space: pursuant to the R-3 zone. At least 50 percent of the required open space shall be provided in the form of shared or aggregate open space.</p> <p>Standard: One shade tree is required per eight parking spaces. Shade trees may be located at the center of a group of four to eight parking spaces, clustered in parking row end caps, or located along internal pedestrian ways.</p> <p>Standard: Parking spaces that meet infiltration basins or vegetated storm water controls should be bordered by permeable paving. Grasses and other ground vegetation should be near edges to help filter and slow runoff as it enters the site.</p> <p>Standard: Where possible, transport runoff to basins by using channels with landscaped pervious surfaces.</p>	

Examples of Site Design Standards and Guidelines for Sustainability	Comments
<p><i>Moscow, Idaho</i></p> <p>Standard: A minimum of 15 percent of the area of the lot, shall be landscaped subject to the following requirements:</p> <ul style="list-style-type: none"> • The applicant shall submit a complete landscape plan, drawn to scale, showing all live plant materials, associated species list, and non-plant materials to be installed on the site in order to meet the landscape requirement. • All plant materials, except existing native plants not damaged during construction or xeriscape species shown not to require regular watering, shall be irrigated by underground sprinkler systems set on a timer in order to obtain proper watering duration and ease of maintenance. • The use of certain attractive non-plant materials as a part of the landscape plan is required. These materials shall include at least one of the following: large landscape quality boulders, wood or concrete soil retaining devices, hillocks and swales, gravels, concrete garden amenities, approved mulch materials, stepping stones and water features. Borders for landscape beds abutting parking areas shall be extruded or poured-in-place concrete, retaining walls, sidewalks and /or other features acceptable to the Board of Adjustment. <p>Standard: Minimum vegetative placement and plant size at the time of planting shall be regulated as follows:</p> <p>(i) Planting Beds. Planting beds shall be of sufficient width to accommodate the plants at maturity. The planting beds along the perimeter of a building shall incorporate a mix of trees, shrubs and ground covers to buffer the building and reduce the apparent mass of the building as viewed from the street. The plant materials within the planting bed shall not create hiding areas or other security concerns.</p> <p>(ii) Trees. A variety of tree species is encouraged as a way to provide visual interest and to protect against same species die-out or disease. Acceptable tree species shall be those trees which are listed in the City of Moscow Tree Selection Guide or as approved through the City of Moscow Parks and Recreation Community Forestry Program as being species that are appropriate to the Moscow area. Selected trees species shall be disease resistant and not create unusual maintenance problems. All deciduous trees shall be a minimum of two inches in diameter. Larger diameter trees are encouraged if soil conditions allow. There shall be one native coniferous species planted for every four deciduous trees required to be planted on the site. All coniferous trees, except Ponderosa, shall be a minimum of six feet in height at the time of planting. Ponderosa trees shall be a minimum of three feet in height.</p>	<p>This was rated as “green,” although stormwater was not mentioned.</p>

Sustainability

Examples of Site Design Standards and Guidelines for Sustainability	Comments
<i>Moscow, ID (cont'd)</i>	
<p>(iii) Shrubs. All shrubs shall be a minimum of three gallons in size at the time of planting. Shrubs adjacent to parking areas shall be planted at least three feet from the parking curb or wheel stop. Shrubs shall not be placed closer to other materials than the plant spread at maturity. At least 40 percent of the shrubs in the landscape plan shall include evergreens. The use of a variety of shrub types is encouraged.</p> <p>(iv) Ground Covers. All ground covers shall be of sufficient size and quantity to provide for maximum coverage in five years based upon the species and growth pattern.</p> <p>(v) Annual Plants. Annual type plants will not be counted as part of the landscaping requirement unless permanent architectural or other non-movable features are specifically created for these types of plants.</p> <p>(vi) Site Distribution. Plantings shall be distributed such that they maximize shading of paved areas as well as focal areas of activity. Street tree selection, placement and maintenance shall be regulated by the City of Moscow Parks and Recreation Community Forestry Program.</p>	
<p>Standard: Areas of vehicle maneuvering, parking, loading, or storage shall be landscaped in addition to the development site landscape requirement of 15 percent and screened as follows:</p>	
<ul style="list-style-type: none"> • Parking lot landscaping shall consist of a minimum of seven percent (not including the thirty foot wide pod separation areas) of the total parking area plus a ratio of one tree per eight parking spaces to create a canopy effect. • Landscaping in a parking or loading area shall have a width of not less than five feet and shall be located in defined landscaped areas which are uniformly distributed throughout the parking or loading area. • Landscape buffers between parking abutting a property line shall have a minimum width of ten feet or comply with the zoning code Sec. 6-9 Buffer Yard Requirements, whichever is greater. 	
<p>Standard: Vegetative coverage of the landscape area shall be 50 percent at the time of installation and 90 percent within five years of planting.</p>	
<i>Steamboat Springs, Colorado</i>	
<p>Guideline: Design features that would support a finding of project excellence include:</p>	
<p>The proposed development plan confines cuts, fills, grading, excavation, vegetation removal, and construction to designated building envelopes so mass grading if the site does not occur (provided that site disturbance necessary to install and maintain utilities, roadways, trails, irrigation ditches, fences, and landscaping may occur outside of these envelopes).</p>	

Sustainability

Examples of Site Design Standards and Guidelines for Sustainability	Comments
<p><i>Steamboat Springs, CO (cont'd)</i></p> <p>The proposed development plan provides connections from preserved wildlife habitat and other preserved resource lands in the site to contiguous preserved lands on adjoining sites and does not fragment wildlife habitat, including movement and migration corridors.</p> <p>The proposed development plan restores or enhances the riparian environment within a required waterbody setback that has been previously disturbed and incorporates the area into the plan as an amenity for the users and/or the public. A restoration or enhancement plan prepared by a qualified consultant shall be required to demonstrate compliance with this public purpose.</p> <p>Guideline: Parking areas should be designed to minimize hard surface and provide on-site stormwater quality. Use of landscaped areas as porous landscape detention, grass buffers, or other vegetated treatments are encouraged. Stormceptors are discouraged.</p>	

Table 22 - Example Building Design Standards and Guidelines for Sustainability

Examples of Building Design Standards and Guidelines for Sustainability	Comments
<p><i>Newberg, Oregon</i></p> <p>Standard: All new large-scale retail development shall be LEED certified as defined by the U.S. Green Building Council. The terms of approval are as follows:</p> <p>The applicant shall demonstrate to the Director the extent to which the applicant has complied with the commitment to earn a LEED New Construction Certification rating for a completed project. Demonstration of LEED certification shall be completed prior to the issuance of final Certificate of Occupancy for the new structure by submitting a report analyzing the extent credits earned toward such a rating from the U.S. Green Building Council or another independent entity approved by the director.</p> <p>With specific regard to the LEED Stormwater Design category, all buildings shall obtain a total of at least two points in this category.</p> <p>With specific regard to the LEED Water Efficiency category, all buildings shall obtain a total of at least one point in this category.</p> <p>The LEED Existing Building rating system shall be used during retrofit projects of existing structures.</p>	<p>Other cities recognize LEED certification, but while this is a good thing to try to achieve, the cost to developers might deter them from developing in the area (construction may be infeasible due to cost) or will influence them to cut corners elsewhere. It is good that categories of LEED certification are addressed, so there might be an opportunity to require certification only in the area's of concern (e.g. stormwater design). If there are incentives provided to developers, this possibility will become more likely.</p> <p>If the City is adamant on proof of LEED certification, demonstration should not only be from the Certificate of Occupancy, but should require a report at approximately one year after occupancy in order to see if the building's function remains at the initial level of the time of 1) construction and 2) initial occupancy.</p>

Sustainability

Examples of Building Design Standards and Guidelines for Sustainability	Comments
<p><i>Steamboat Springs, Colorado</i></p>	<p>Steamboat Springs, Colorado requires that all buildings shall obtain LEED certification in design, materials, and construction.</p> <p>It was interesting that none of the cities addressed greenroofs as a possibility for new construction (it can be too expensive to retrofit an older building's infrastructure to be able to support such a weight).</p>

Table 23 - Example Signage, Lighting, Etc Standards and Guidelines for Sustainability

Examples of Signage, Lighting, Etc Standards and Guidelines for Sustainability	Comments
<p>N/A</p>	<p>None of the documents sufficiently addressed signage and lighting as something that can be used for the attainment of sustainability goals.</p>

Table 24 - Example Other Standards and Guidelines for Sustainability

Examples of Other Standards and Guidelines for Sustainability	Comments
<p><i>Albuquerque, New Mexico</i></p> <p>Standard: Bare patches shall be revegetated as soon as possible to avoid erosion.</p> <p>Guideline: Water from roof runoff should be directed or stored and used to assist all trees and landscaping.</p> <p>Standard: Water conservation techniques shall be utilized where possible and as approved by the City Hydrologist or City Engineer. Such techniques may include water harvesting and permeable paving.</p>	

Examples of Other Standards and Guidelines for Sustainability	Comments
<p><i>Steamboat Springs, Colorado</i></p> <p>Additional Requirement: The development shall provide long-term funding and/or other resources necessary to successfully implement the impact mitigation plan required. The planned unit application shall clearly demonstrate the provision of land use, multimodal transportation, utility, stormwater management and community character components, and patterns that clearly forward the objectives of the Steamboat Springs’s Area Community Plan, as determined by the Planning Commission and City Council.</p> <p>Additional Requirement: Each project shall meet the erosion control and stormwater management standards found in the CDC. In addition, post development runoff rates shall not exceed pre-settlement rates. In general, existing natural features shall be integrated into the site design as a site and community amenity. Maintenance of any stormwater detention or conveyance features are solely borne by the developer/owner unless dedicated and accepted by the City.</p> <p>The proposed development will preserve the most valued natural and scenic resource lands on the property. These lands may include wetlands, riparian areas, sensitive wildlife habitat, scenic corridors, visually significant meadows, ridgelines, and public vista/view corridors. The proposed development shall also avoid natural and geologic hazard areas, including steep and unstable slopes and floodplains.</p>	

VII. Summary Points

Gresham City staff as well as any stakeholders who may be involved in this process will be able to reach an overall understanding of what must be considered in the large-scale retail development process after reviewing this assessment in its entirety. With the intent of providing a final, concise section that will allow readers to glean and come away with the focal points of this review, the central development and design strategies as they relate to the five criteria (Accessibility, Public Space, etc.) are listed below in a general manner. To reiterate, this document serves as a reference guide with the provision of only the best practice examples regarding these design standards. However, if City staff so choose, further examination of the standards categorized as both “green” and “yellow” would be beneficial.

Accessibility

- Recognizing the use of multimodal transportation (the site plan considers public transit, pedestrians, automobiles, and cyclists similarly, not heavily catering to automobile use only).
- Understanding how the site accounts for surrounding land uses (e.g. are direct connections to the building from adjacent residential lots provided?).
- Considering the use of multiple (if appropriate) and strategically placed, prominent entrances.
- Signage that is visible from the street (i.e. suitable height, size, and sizing of letters).
- Reducing setbacks to define the street edge and to allow for greater pedestrian accessibility.
- Disbursing parking around the site rather than placing the entire parking area in the front of the lot between the primary façade and the abutting street. Parking may even be placed entirely behind the building or between buildings so the area may be shared by more than one property as a solution to saving space rather than attempting to finance a parking structure or underground parking. Keep in mind that there are many safety concerns associated with this objective (i.e. speed, emergency vehicle access, visibility, etc.). This may also help to achieve sustainability goals.

Public Space

- Planning seating areas (benches, plazas, etc.) intentionally from the outset as usable, active areas-not as afterthoughts.
- Orienting storefronts, windows, and entrances toward these spaces as well as the abutting streets.
- Taking into account “public space” as part of the streetscape and incorporating aesthetically pleasing building design as contributors to this objective; specific elements include, but are not limited to: water features, public art, kiosks, artistic lighting, temporary food vendors, additional landscaping that is treated separately from the basic landscaping requirements stated in other sections.

Human Scale

- Building modulations and articulations (i.e. recesses, projections, windows, height variations, etc.) that reduce the monotonous, bulky, and intimidating size of these structures and sites-these must be consistently and evenly distributed on all façades of the building. The rearmost façade may have less, but if there is a residential zoning adjacent to this site exists, then the building must remain attractive as well as properly screened with landscaped buffers.
- Using more than one high quality building material (cost permitting) to add variation (i.e. brick, stone, etc.). These materials must fit in with the community's character and bright colors may only be used as accents and trim.
- Screening and storing mechanical equipment properly as it detracts from the site's appeal.
- Incorporating landscaping to the attractiveness of the site and providing it along façades of the building as well as throughout the site. Keep in mind that parking areas relate to human scale because of the large size.

Safety

- Screening mechanical equipment, seasonal merchandise, and outdoor displays with the human scale aspect still in mind.
- Providing signage and lighting that does not impair vision (e.g. cause glare by being too bright).
- Lighting pedestrian and bicycle walkways and paths properly to and throughout the site-lighting is at the appropriate height, cutoff, and is provided throughout and around the entire site.
- Emphasizing pedestrian and bicycle walkways and paths (i.e. different materials, buffered from traffic, raised, etc.) in all areas of the site but especially at possible conflict points, such as at intersections or driveway crossings.
- Orienting building and design for high visibility to deter crime.
- Maintaining and placing the landscaping so it does not impair vision- especially at driveways and intersections.

Sustainability

- Completing an environmental impact assessment with a corresponding inventory of any environmentally sensitive habitats, natural resources, and endangered species.
- Being consistent with landscaping throughout the lot-the amount may be determined as a proportional percentage to the square footage of the site. Here, below ground landscaping (e.g. bioswales) and rain gardens should be considered.
- Using less impervious paving throughout the site to diminish heat islands as well as to allow for better regulation of stormwater and runoff.
- Taking into account how building design with the use of materials contributes to this goal (but recognizing and planning for associated cost issues).
- Orienting buildings to attract as much natural light as possible.
- Incorporating landscaping near the building to not only contribute to the human scale aspect, but to provide an opportunity for usable space (not just a patch of concrete or dirt) to make use of native vegetation and deciduous trees in order to be most effective at providing shade during the summer months and to insulate during the winter months.

VIII. Conclusion

The standards primarily related to accessibility and human scale are decidedly the most detailed within each document and most popularly addressed by all cities, while those associated with the sustainability principle and the signage and lighting subcategory have room for improvement throughout all of the documents.

One of the approaches of this review was to collect documents from communities that vary in population size, urban or rural character, and geographic region of the country in order to identify a range of strategies that may be of use to the City of Gresham. While it is common practice to use what works in the realm of policy making, it was unfortunate to see that many communities used Fort Collins's document not as a model for development of their own standards, but as a set of verbatim policies. Some communities may lack necessary resources to create quality standards; in this sense using what works in another city is better than having nothing in place at all.

The most effective design strategy as it relates to the five criteria used in this compilation is the use of both discretionary guidelines and enforceable standards that are tailored to the community's specific needs. These regulations, provided with graphic representations will communicate inspiring objectives and visions so that they are understandable to all stakeholders who are critical parts of the development process.

The continued efforts of Gresham City staff to cooperatively engage the public about these standards and subsequent development strategies demonstrate commendable willingness to create an environment desired by all. However, the City's ability to successfully communicate expertly informed decisions with all parties involved is crucial. Some authority must be in place so that City goals will guide development in a clear direction, as there are many objectives involved in this type of development.

Controversy in terms of what is determined as "good design" may arise with the objectives that compete with one another: aesthetics; economics; public welfare; and the protection against urban problems such as crimes, slums, and traffic congestion depending on whose perspective is applied to the evaluation.

During a design review, retail developers may argue to the zoning board that immediate recognition of their facility by its traditional design is critical to their financial viability although the newly implemented design standards would dramatically improve the building's appearance. Regarding site design, they may argue that parking must be placed at the front of the lot adjacent to the abutting street so that customers will know that the building is easily accessible even if there are ways to work around the issue (Heart, Humstone, Irwin, Levine, and Weisbord, 2002). The appropriate balance between authority, education, and willingness to compromise will help to alleviate more explicit concerns.

Despite these concerns, the direct and indirect benefits for developers and the community at large outweigh the immediate conflicts. Through recognizing the importance of design, this presents an opportunity to live in an economically competitive area. Developers improve financial values (i.e. through accelerated sales pace or greater appreciation of real estate assets) and gain a positive reputation. The public, in turn, may reap benefits such as increased public revenues derived from quality design, not to mention the fundamental strengthening of a sense of community and increased civic pride, which will be the true indicator of success (Porter, 2008).

Caves, Roger W. & Cullingworth, Barry (Eds.). (2009). *Planning in the USA: Policies, Issues, and Processes* (3rd ed.). New York: Routledge.

City of Corvallis, Oregon. Internal plan definition provided by City of Gresham Senior Planner, Lauren McGuire- RLA, ASLA.

City of Gresham, Oregon. (2010a). *Retail Design and Development Standards Design Analysis: Existing Conditions and Precedent Study*.

City of Gresham, Oregon (Associate Planner, Dan McAuliffe- LEED AP). (2010b) *Retail Design and Development Standards Approaches to Large Retail Format Size Limitations*.

Crandall Arambula, PC & Rick Williams, PC. (June, 2009- February, 2010 presentations and discussions at the City of Springfield, Oregon Downtown Technical and Citizen Advisory Committees and the Downtown Parking Advisory Subcommittee).

Freilich, Robert H., Murray, Kate, F. & White, S. (2008). *21st Century Land Development Code*. Chicago: American Planning Association.

Heart, Bennet, Humstone, Elizabeth, Irwin, Thomas F., Levine, Sandy, & Weisbord, Dano. Conservation Law Foundation Vermont Forum on Urban Sprawl. (2002). *Community Rules: A New England Guide to Smart Growth Strategies*. Smart Growth Network.

Land Use and Growth Management class (2010). University of Oregon, Department of Planning, Public Policy, and Management.

Neal, Peter (Ed). *HRH The Prince of Whales*. (2003). *Urban Villages and the Making of Communities*. London and New York: Spoon Press, an imprint of Taylor & Francis.

Porter, Douglas R. (2008). *Managing Growth in America's Communities* (2nd ed.). Washington D.C.: Island Press.

Smart Growth Network. (Accessed August, 2010). *This is Smart Growth*. <http://www.smartgrowth.org/library/articles.asp?art=2367&res=2560>

Wong, Cecilia. (2006). *Indicators for Urban and Regional Planning: the Interplay of Policy and Methods*. London and New York: Routledge.

