

AGENDA SUMMARY PAGE
CITY COUNCIL MEETING OF: JANUARY 3, 2007

DEPARTMENT: CITY ATTORNEY

DIRECTOR: BRADFORD R. JERBIC

☐ Consent ☒ Discussion

SUBJECT:

RECOMMENDING COMMITTEE: BILL ELIGIBLE FOR ADOPTION AT THIS MEETING:

Bill No. 2006-68 – Adopts the Union Park Design Standards and integrates them into other provisions that pertain to the Downtown Overlay District. Sponsored by: Mayor Oscar B. Goodman

Fiscal Impact

☒
☐

No Impact

Budget Funds Available

☐

Augmentation Required

Amount:

Funding Source:

Dept./Division:

PURPOSE/BACKGROUND:

This bill will adopt the Union Park Design Standards and integrate them into the Downtown Centennial Plan and other provisions that pertain to the Downtown Overlay District. The essential provisions of the Design Standards were approved by the Planning Commission on October 5, 2006.

RECOMMENDATION:

ADOPTION at 1/3/2007 City Council meeting as a First Amendment pursuant to the 12/19/2006 Recommending Committee.

First Reading – 12/6/2006; First Publication – 12/22/2006

BACKUP DOCUMENTATION:

Bill No. 2006-68

Motion made by LOIS TARKANIAN to Approve

Passed For: 7; Against: 0; Abstain: 0; Did Not Vote: 0; Excused: 0

LOIS TARKANIAN, LAWRENCE WEEKLY, LARRY BROWN, OSCAR B. GOODMAN, GARY REESE, STEVE WOLFSON, STEVEN D. ROSS; (Against-None); (Abstain-None); (Did Not Vote-None); (Excused-None)

Minutes:

Second Reading and bill adopted as recommended as Ordinance No. 5875. Clerk to proceed with second publication.

CITY COUNCIL MEETING OF: January 03, 2007

SCOTT ADAMS, Director of the Office of Business Development, went over the information under the Purpose/Background section. He noted that CHUCK KUBAT was present to answer any questions of the Council.

MR. KUBAT answered for COUNCILMAN WEEKLY that numerous conversations have already been held with the stakeholders in the area. Another meeting has been scheduled for February.



1 **BILL NO. 2006-68**

2 **ORDINANCE NO. _____**

3 AN ORDINANCE TO ADOPT THE UNION PARK DESIGN STANDARDS, TO INTEGRATE
4 THEM INTO OTHER PROVISIONS THAT PERTAIN TO THE DOWNTOWN OVERLAY
DISTRICT, AND TO PROVIDE FOR OTHER RELATED MATTERS.

5 Sponsored by: Oscar B. Goodman, Mayor

Summary: Adopts the Union Park Design
Standards and integrates them into other
provisions that pertain to the Downtown Overlay
District.

6
7
8 THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN
9 AS FOLLOWS:

10 SECTION 1: Attached to this Ordinance is a document entitled the "Union Park
11 Design Standards," the essential provisions of which were approved by the Planning Commission on
12 October 5, 2006. That document, copies of which shall be on file in the office of the City Clerk and
13 in the Planning and Development Department, is hereby adopted by the City. The Union Park Design
14 Standards:

15 (A) Are hereby incorporated into Subsection (B) of Section 19.06.060 of the Las
16 Vegas Municipal Code;

17 (B) Are hereby incorporated into the Development Standards or Design Standards
18 that are applicable to the Parkway Center District in the Downtown Centennial Plan, as the Plan has
19 been adopted and may be amended or replaced from time to time; and

20 (C) Shall apply to all development within that portion of the Parkway Center
21 District bounded by Bonneville Avenue on the south, Grand Central Parkway on the west and north,
22 and the Union Pacific Railroad right-of-way on the east.

23 SECTION 2: Title 19, Chapter 6, Section 60, of the Municipal Code of the City of
24 Las Vegas, Nevada, 1983 Edition, is hereby repealed in its entirety.

25 SECTION 3: Title 19, Chapter 6, of the Municipal Code of the City of Las Vegas,
26 Nevada, 1983 Edition, is hereby amended by adding thereto a new section, designated as Section 60,
27 reading as follows:

28 ...

1 **19.06.060 DOD Downtown Overlay District**

2 (A) Intent. The intent of the Downtown Overlay District is to establish special standards for
3 development within the City's established urban core. The boundaries of the District shall be
4 coterminous with the boundaries of the Las Vegas Downtown Centennial Plan, as adopted by
5 ordinance, and as the boundaries may be amended from time to time.

6 (B) Design Standards. Development within the Downtown Overlay District shall conform to the
7 Design Standards that are included within the Las Vegas Downtown Centennial Plan. Those Design
8 Standards are adopted and incorporated by this reference. In addition, development within the
9 boundaries of any sub-districts within the Downtown Overlay District shall conform to applicable
10 Design Standards that have been adopted for that sub-district. As and when such Design Standards
11 for sub-districts are adopted, they shall be deemed to be incorporated into this Subsection by this
12 reference. Copies of all Design Standards adopted by the City Council (whether published separately
13 or not) shall be on file in the Office of the City Clerk and in the Planning and Development
14 Department. The Downtown Centennial Plan Design Standards are mandatory and shall apply to any
15 property and zoning category within the District, and any Design Standards adopted for any sub-
16 district are mandatory and shall apply to any property and zoning category within the sub-district to
17 which they pertain. Design Standards referred to in this Subsection may be amended from time to
18 time by ordinance or by resolution of the City Council. If the City Council adopts more restrictive
19 design standards for one or more additional sub-districts within the Downtown Overlay District, those
20 more restrictive standards shall apply to the sub-district to which they pertain.

21 (C) Special Provisions. In order to encourage the development of a complex, visually interesting
22 and urbane walkable mixed-use environment, and to encourage transit-oriented development as future
23 transit routes and stations develop within the Downtown area, properties within the Downtown
24 Overlay District are exempt from the automatic application of the mandatory maximum building
25 height, required building setback, maximum lot coverage, residential adjacency, standard landscaping
26 requirements, and standard parking requirements in Section 19.08.040, Section 19.08.050, Section
27 19.08.060, Chapter 19.10, and Chapter 19.12. However, the exemption does not prohibit City staff,
28 the Planning Commission, and the City Council from imposing limitations on the approval of a Site

1 Development Plan. Site Development Plan applications within the Downtown Overlay District shall
2 be evaluated on a case-by-case basis to determine the extent to which those standards shall be
3 required.

4 SECTION 4: If any section, subsection, subdivision, paragraph, sentence, clause or
5 phrase in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or
6 ineffective by any court of competent jurisdiction, such decision shall not affect the validity or
7 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the
8 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
9 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
10 subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,
11 invalid or ineffective.

12 SECTION 5: All ordinances or parts of ordinances or sections, subsections, phrases,
13 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
14 1983 Edition, in conflict herewith are hereby repealed.

15 PASSED, ADOPTED and APPROVED this _____ day of _____, 2006.

16 APPROVED:

17
18 By _____
19 OSCAR B. GOODMAN, Mayor

20 ATTEST:

21 _____
22 BARBARA JO RONEMUS, City Clerk

23 APPROVED AS TO FORM:

24 Val Steel 11-21-06
25 Date

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2006, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2006, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as first introduced and adopted by the following vote:

8 VOTING "AYE": _____

9 VOTING "NAY": _____

10 ABSENT: _____

11

12

APPROVED:

13

14

By _____
OSCAR B. GOODMAN, Mayor

15 ATTEST:

16

17 BARBARA JO RONEMUS, City Clerk

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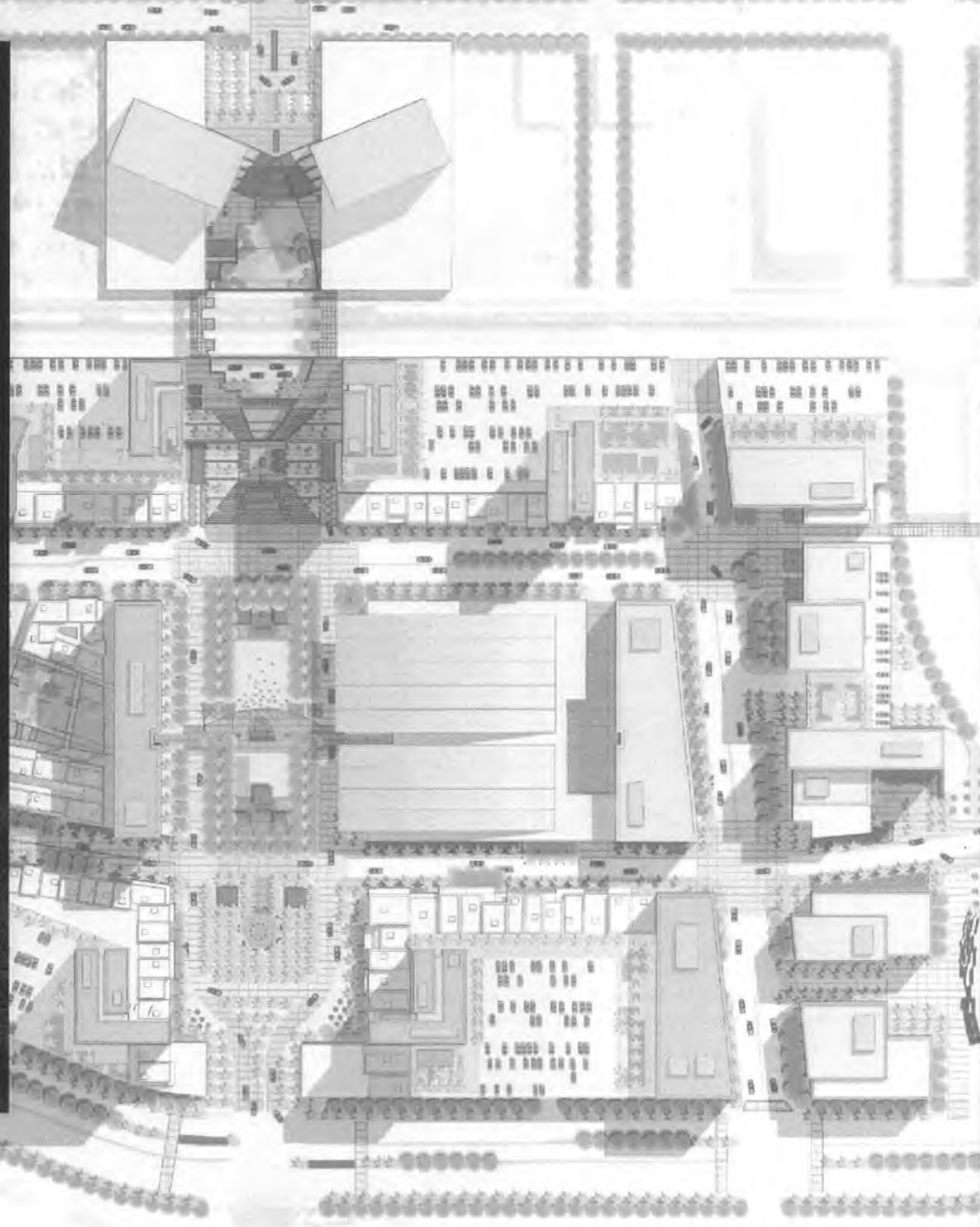
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UNION PARK DESIGN STANDARDS

November 1, 2006





Prepared for
**NEWLAND
COMMUNITIES**

Prepared by:

RNL

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DESIGNWORKSHOP

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Salt Lake City, Utah 84101

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In 2000, the City of Las Vegas launched a re-urbanization plan for Downtown, looking ahead to a Downtown renaissance by 2020. Population increases have fueled a demand for denser infill housing and urban living near Downtown. The 61 acre Union Park parcel is a critical element in the City's renaissance plan. Union Park will be a new urban environment for the Downtown area, a walkable downtown village with a compelling identity, appealing landscaped environments and a variety of entertainment and dining choices.

Creation of Urban Density The plan focuses on maximizing density rather than limiting it, to generate the multiplicity of activities and urban excitement that will make Union Park memorable.

To generate the high density that creates a mixed use urban district, every block must be developed efficiently and densely to achieve the critical mass of residents and visitors that will make it an exciting urban district. The expectations at buildout for land uses in Union Park include the following:

- *Diversity of residential building types including low rise town houses and high rise apartments, enough to create an urban village*
- *Medical and general office space creating an employment center in Union Park*
- *A critical mass of destination retail, restaurant and entertainment uses to enliven the urban neighborhood*
- *A choice of business, boutique and entertainment-related hotels for visitors*
- *A world-class performing arts center on Symphony Park as a regional draw for Union Park*
- *Parking in each block for each use, serving daytime and evening uses with equal convenience.*

Development Concept To create the exciting urban skyline that is expected, building heights are anticipated to be high. The only limitation on building height is the availability of parking on the parcel or in the immediate area. All off-street parking will be in multi-story structures, some below grade and most above grade. The structures will be wrapped by other uses in most cases except for some instances where they may be exposed.

Development Parcels The 61-acre site is divided into 17 development parcels. The sale parcels consist of all the land behind the back of curb lines on each block. Owner/developers will provide the streetscape of the sidewalks, and all development behind the back-of-curb line, which is also the build-to line referred to later in this booklet. In this way, the sidewalks are all private property, and the moving and parking lanes are public. Public streetscape, landscape, lighting and signage are intended to create visual amenity and durability while protecting land values and the private investment.

The City's Roles The City will build the Union Park streets (between the curb lines) and infrastructure serving each block. The City will also convene a Design Review Committee who will review and approve designs for each project design submittal.

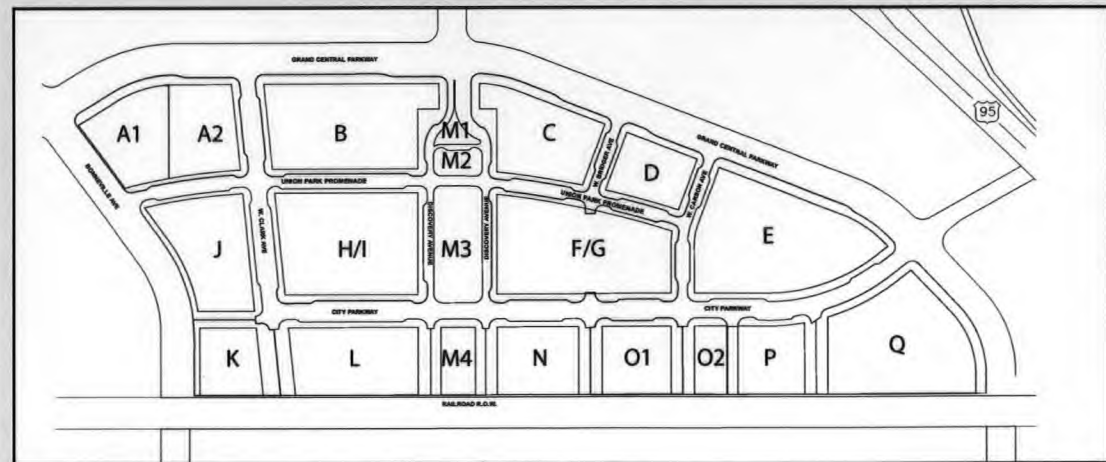
Development Timeline and Process Union Park is a multi-phase project, with projects proceeding on coordinated timetables. Some blocks will be phased so that later phase—more intensive—development will be initiated with structured parking and high rise buildings replacing temporary surface parking.

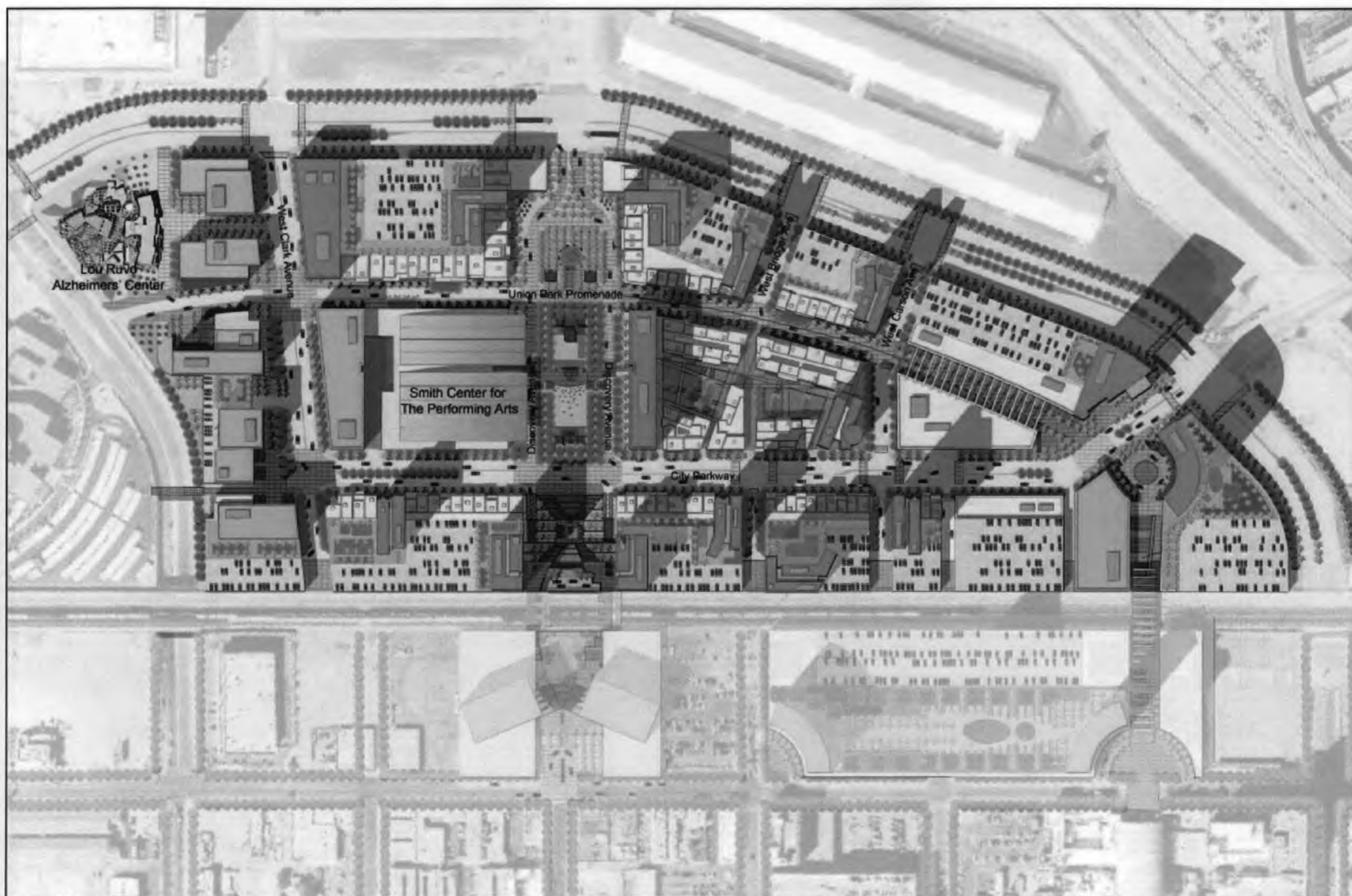
Mixed Use The greater the mix of uses, the more urban the Union Park experience. The high-rise environment provides opportunities for both vertical and horizontal mixed uses.

Critical Housing Density Developers will be expected to create housing densities that are comparable to Chicago, New York or Vancouver, while creating a great number of units closer to the street in liner buildings that create street continuity, and towers that create a distinctive skyline and views.

Environmental Conditions The 61 acre site was formerly owned by the Union Pacific Railroad. Analysis of contaminated soils has been conducted. Maps of this information are available from the City of Las Vegas Office of Business Development and/or Newland Communities.

Entitlements The City will work closely with Union Park developers to entitle each project in a timely manner.





Union Park Illustrative Master Plan

DESIGN STANDARDS

Design Standards are graphic and written principles of design which are to be incorporated into the design of each development block in a project area. In this case, they are an aid to achieving a high level of design excellence at Union Park. The success of Union Park as a place depends upon each developer and designer becoming familiar with all parts of these Design Standards and incorporating them into the designs for each block.

Relationship to Other Documents

These design standards shall apply to all development in the project area. Where these development standards are in conflict with Title 19 of the Las Vegas Municipal Code, the City of Las Vegas 2020 Master Plan, or the standards of the Las Vegas Downtown Centennial Plan, then the more restrictive standard shall apply. Where these design standards are silent on a particular issue, the requirements of Title 19 of the Las Vegas Municipal Code, the City of Las Vegas 2020 Master Plan, or the standards of the Las Vegas Downtown Centennial Plan shall apply.

Design Standard Philosophy

Union Park Design Standards will guide developers and architects through the process of creating a pedestrian-oriented, visually cohesive and economically viable urban community. The Standards promote a clear and consistent process for the development of parcels. While they keep a perspective on the vision, they are also flexible in accommodating a mix of uses while helping to shape a variety of building forms. They do not mandate particular architectural styles or building materials. Instead, the Standards do the following:

- Recognize that Union Park will be built and evolve over time

- Create and maintain a standard of quality that will sustain real estate values
- Promote a cohesive development pattern while allowing for diversity and variety in the design and construction of individual projects
- Assist designers, City Staff, developers and others in making consistent design choices that reinforce the vision.
- Provide clear guidance to the process of Design Review and public approvals.

Each development will be reviewed for compliance with the Design Standards, according to the Design Review process described in the back of this book. This book of Design Standards is organized into four major parts:

SECTION 1

UNION PARK ORIENTATION: a section that orients the project developer and designer to the systems and requirements that affect not only the individual sites but also the site as a whole. Items such as parking and access, site drainage, public open space and solar orientation are covered in this section.

SECTION 2

STREETSCAPE AND OPEN SPACE: this section delineates the major characteristics of all the streets in Union Park, including their cross sections, design themes and streetscape elements. This is important for each developer because it includes design back of the curb line which will be the responsibility of the developer.

SECTION 3

GENERAL SITE AND BUILDING DESIGN STANDARDS: Divided into Intents and Standards, each of the sections covers a different non-geographic feature such as building articulation,

signage, site lighting and active building frontages. Each of these contributes to the success of the urban environment by adding functional and aesthetic note to the overall look and feel of Union Park.

SECTION 4

CHARACTER OF THE BLOCKS: This last section describes allowable and encouraged buildings, setbacks, active frontages, parking access and other parameters of each land parcel (block). Setbacks, open space features, view corridors and other features are displayed so that the designer has a logical starting point for design.

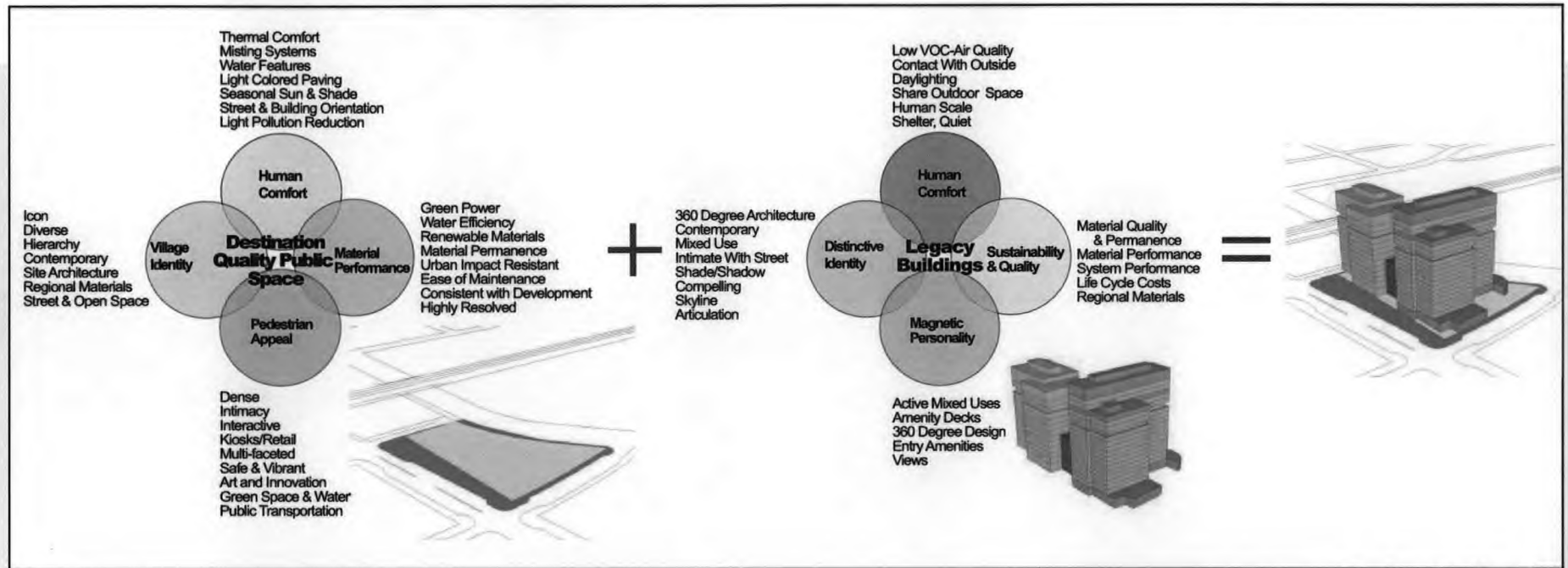
Each Design Standard is organized into a hierarchy of Intents and Standards. The Intent is a statement of the purpose or goal behind each design Standard. In the event that specific language of each Standard is not definitive, the Design Review Committee reserves the discretion of making decisions on the basis of their understanding of the Intent. This interpretation shall govern.

Each principle is either a required or a recommended standard. Required standards are accompanied by the language of "shall do" rather than "should" or "it is encouraged." Recommended standards are suggested components, termed as "should do" or "is encouraged." Overall the quality of Union Park may depend on the developer following most if not all of these optional elements. However, they also provide negotiation points if either the developer or the Design Review Committee wishes to resolve differences of viewpoint on a design. Some sections include "acceptable" standards which describe something that is allowable or desirable.



I UNION PARK ORIENTATION

Site-wide urban design features are illustrated in this section. These include street types, parking and service access, storm water management, view corridors, active streets and the pedestrian open space system. Each development block relates to each of these site-wide features in a unique way. By understanding how these systems work and applying this knowledge, each designer will help to create a more successful environment in Union Park.



THE FEATURES OF THE PLAN

The Illustrative Plan demonstrates the key concepts for architectural design to create the high quality urban district that is Union Park. Foremost among these concepts, illustrated on the following pages, are:

Human-Scale Buildings

- A rich, human-scale band of lower building elements at and near the street level.
- Bases of each block enriched with continuous active building facades of retail and restaurant activity on several streets.
- Active uses, awnings, interesting storefronts and signage create an exciting urban environment.

Comfort

- Human comfort and amenity are the major design emphasis of the streets and public open spaces.
- Everything in these spaces should be designed and selected for appropriateness to climate, neighborhood concept and sustainability.

Sustainability

- Environmentally-responsible urban buildings set a high standard

Art Is Integral

- Civic nature of the neighborhood
- Themes of streetscape
- Performing arts
- Well-designed buildings and art pieces
- Integral art in streetscape and architecture

Active Uses at the Build-To Line:

- Pedestrian-oriented environment
- Parking structures are concealed behind residential and commercial building wraps.

Parking

- Simple, predictable system of parking and service entrances
- Vehicle access should be secondary to pedestrian movement.

Building Scales

- Tall towers with articulated shapes
 - Recognizable urban skyline
- Shapes, massing and locations allow views to the mountains and the Strip

Residential Diversity

- A diversity of residential types
 - High rise apartment buildings
 - Mid-rise connecting towers
 - Low-rise townhomes
- Conveniences and attractions make a true urban neighborhood.

Quality Design

- High quality architectural and landscape design
- State-of-the-art environment in a hot desert climate

THE CONTEXT OF UNION PARK

Union Park is in a prime location surrounded by the Las Vegas downtown and numerous development projects. The downtown office core is directly east; the casino center is also across the railroad tracks, with Fremont Street being a center and draw for the entire area. Las Vegas' re-urbanization plan, begun in 2000, is aimed at a Downtown renaissance. The city's population exceeds 550,000 and is expected to reach more than 700,000 by 2020, creating a demand for denser in-fill housing near downtown. Property values have risen accordingly.

Adjacent Development

Several development projects are underway or have been completed adjacent to Union Park. Taken together, they represent a wide variety of downtown uses that will create markets for residential units, restaurants, retail shops and office space.

WORLD MARKET CENTER A 1.3 million SF Phase 1 of the wholesale design center, housing a 10 story collection of furniture showrooms, drawing thousands of people to each of its regular conventions. Later phases are planned to increase the showroom area to 12 million SF.

INTERMODAL TRANSIT CENTER Design is underway for the transit center. The facility will be the central regional transportation facility, housing local and express buses, Bus Rapid Transit, a monorail stop and a stop of the future high-speed, inter-city rail system.

LAS VEGAS PREMIUM OUTLET MALL Recently completed, this 435,00 s.f. premium outlet mall west of the Clark County Government Center is already providing a high traffic count of shoppers to the area.

CLARK COUNTY GOVERNMENT CENTER This civic center employs several thousand daytime county and Regional Transportation Commission office workers. A master plan for enlarging the center is being evaluated, including supplementing the on-site parking.



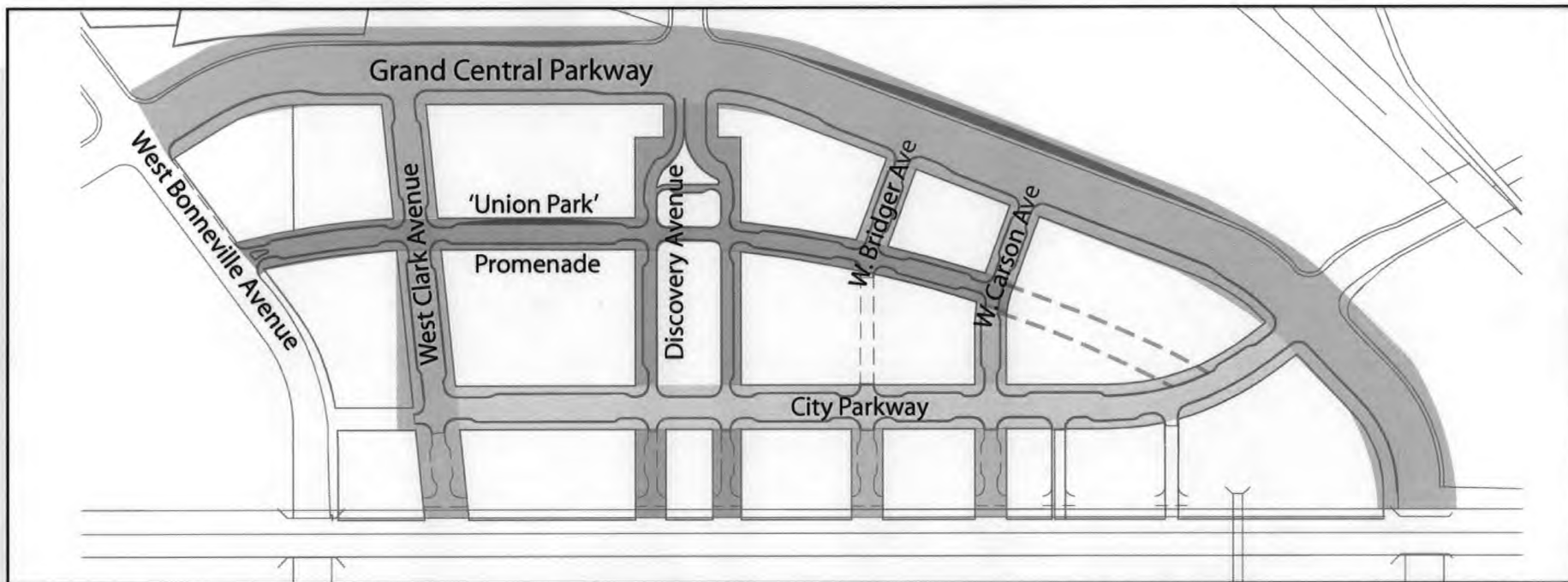
Union Park and Downtown Las Vegas

INTERNAL REVENUE SERVICE Construction is nearing completion on the mid-rise IRS building complex by the Molasky Companies, north of Ogden Street. This will provide an even greater midday worker population in the area.

PRIVATE MAIN STREET LAND HOLDINGS A private owner holds much of the strip between Main Street and the railroad tracks, with ambitions to develop these properties.

ARTS DISTRICT Along Charleston, south and east of the site, a district of arts-related and residential projects is envisioned and is taking shape.

These projects are the recent signs of a renaissance of downtown Las Vegas setting up the conditions for an exciting mixed-use high rise development district.



Street Hierarchy and Network

STREETSCAPE NETWORK

Union Park will establish a new precedent for Las Vegas with innovative urban streetscapes that incorporate sustainability practices, enhanced comfort, distinctive and artistic identity and provide destination qualities that define the urban community.

Streets will efficiently move traffic into and through the site, provide direct access to parking and offer comfortable, inviting and safe environments for pedestrians. Vehicle access into and through this site is well distributed, interconnected and coherent, and responds directly to the existing Las Vegas street network.

Designed as a system of linear open spaces, the streets of Union Park offer cool and animated areas to gather and connect people to work, home, shopping and public spaces. Rights-of-way and building massing are proportioned to enhance solar comfort. Dining, shopping and public events such as fairs, markets and celebrations are meant to take place in this realm without impeding

pedestrian or vehicular circulation. These activities create a lively and activated urban environment.

The Union Park streetscape network is comprised of varied street types, each distinguished by function and identity. Grand Central defines the arterial edge of the village and downtown. City Parkway and West Clark combine to provide through circulation from a future highway interchange at F Street. City Parkway is envisioned with a retail emphasis, and the West Clark and its esplanade anchors the medical district and provides a key address opportunity. The Union Park Promenade animates the village with retail and a mix of other uses, functioning as the primary strolling space. Discovery Avenue straddles and is defined by Symphony Park, the organizing space of the village. West Bridger and Carson Avenues function primarily as residential streets.

The Union Park streetscape network is comprised of several street types, each distinguished by function and identity.

City Parkway

A wide 4 lane boulevard with left turn pockets and on-street parking, direct connection from I-15.

Union Park Promenade

A narrow two lane shopping street, with on-street parking; no parking entries off the street.

Discovery Avenue

A wide street that becomes a one-way way pair just east of Grand Central Parkway flanks Symphony Park on both sides.

West Clark Avenue

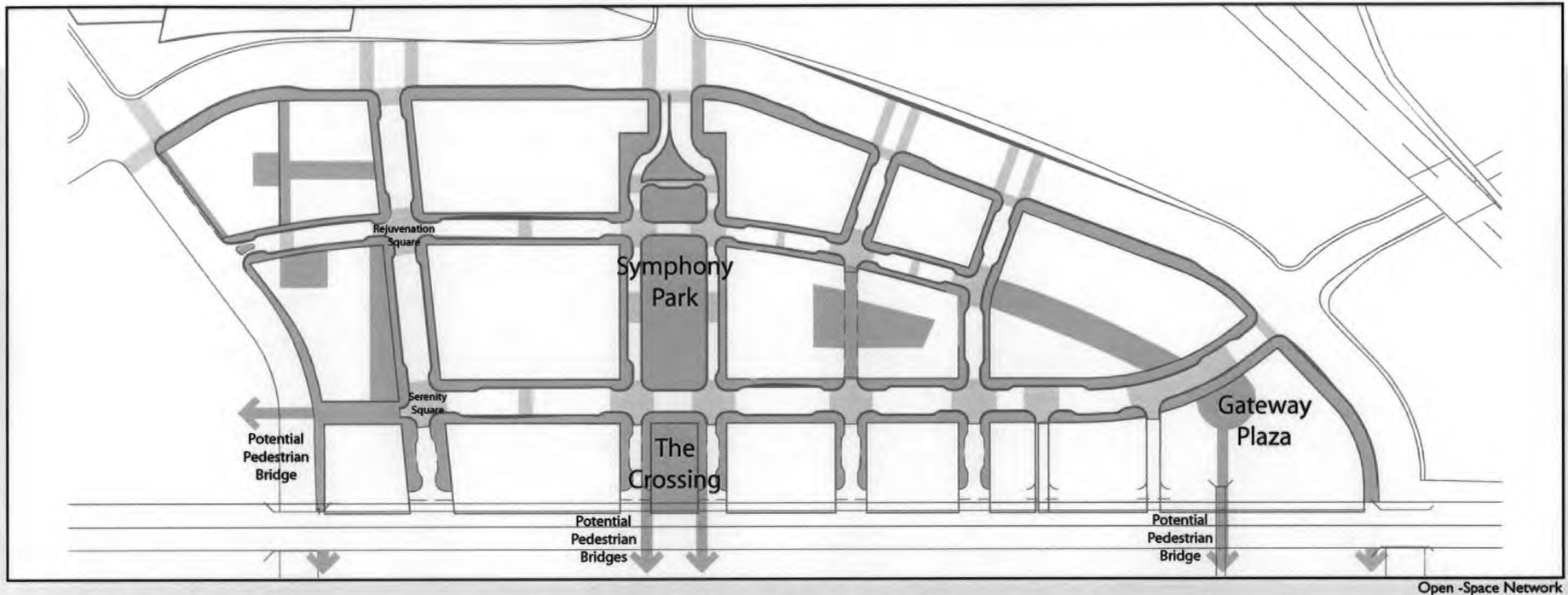
A wide four-lane boulevard with on-street parking, left turn lanes and wide sidewalks as the centerpiece for the office district.

West Carson and West Bridger Avenue

Two-lane service streets that connect from Grand Central Parkway.

Grand Central Parkway

A wide, higher speed boulevard with Bus Rapid Transit added to the median.



OPEN-SPACE NETWORK

The Union Park open-space system is organized around an urban framework based in principles of building integration, regional design and street-level comfort. Comprised of a hierarchy of parks, plazas, streetscapes and courtyards, this open-space system offers a variety of spaces intended to attract a diverse mix of residents and uses.

Designed to celebrate and accommodate both urban living and visitor experiences, the open-space system at Union Park will be built for enduring quality. Distinct and durable materials, furnishings and finishes will create a visually cohesive system that will establish a standard of quality that complements the intended building quality.

Extreme climatic variations in southern Nevada require an open-space system that provides comfortable outdoor environments by managing solar orientation and creating favorable microclimates. Through careful solar design, parks, plazas, streetscapes and courtyards will extend the daily and seasonal pedestrian experience within this desert village.

The primary organizing axis of the public space network runs east-west along the City's Lewis Street corridor, with streets named Discovery Avenue to the west of the railroad tracks. A collection of open spaces and active uses along this corridor are intended to establish a strong and direct relationship to downtown Las Vegas. Three primary spaces are positioned as a sequence within Union Park: a forecourt at the project entrance on Grand Central Parkway, a major urban park currently known as Symphony park, and a stepped plaza and associated bridges which allow pedestrians to cross the railroad tracks. This area is currently known as "The Crossing."

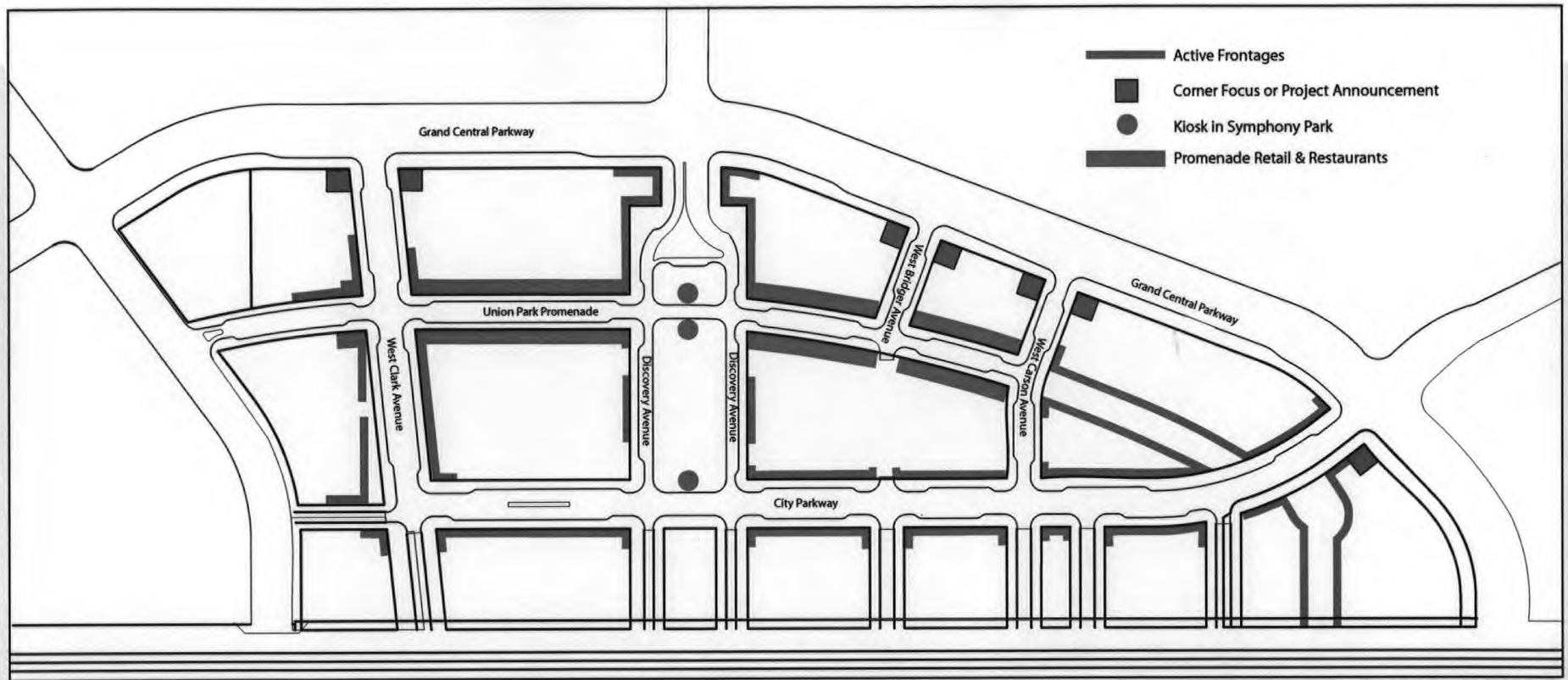
The primary north-south open space within the Union Park village is a pedestrian-oriented street known as the Promenade. The Promenade is uniquely designed as a signature public space within the development, linking several districts and public spaces along its north-south orientation.

The Promenade is anchored at its northern end by Gateway Plaza, a public space that organizes an

entertainment district and transitions Union Park to Fremont Street in downtown Las Vegas. On the southern end, the Promenade arrives at a medical district. While medical and supporting uses may be organized around an internal open space system, the primary address for the area is West Clark Avenue. This street has been planned as a cool, green esplanade, with opportunities for both strolling and gathering.

Union Commons is a semi-public space defined by residential uses, intended to primarily serve these residents, but not be gated. Views, sight lines and pedestrian circulation to and from adjoining streets is intended.

A final component of the open space system at Union Park is represented by the pedestrian streetscapes, places of comfort, distinctive identity and sustainable quality.



Active Frontage Locations

INTENT:

- To create energized urban streets which support a pedestrian environment.
- Active frontages are comprised of retail and restaurant uses, as well as residential and office building lobbies (and some other uses).

REQUIRED

1.5.1 Active Frontages along the Promenade

The promenade will be the most vibrant and energized pedestrian corridor within the site. It shall be continuously lined with active building frontages.

1.5.2 Active Frontages along Grand Central Parkway

Grand Central Parkway will be one of the site's busiest vehicular corridors, and exposed parking will be permitted along it. Active building frontages are encouraged along the Parkway at its intersection with Discovery Avenue and other corners.

1.5.3 Active Frontages along West Clark Avenue

This street is an address for the medical/office neighborhood and an important pedestrian conduit within the site, and shall be lined with active frontages.

1.5.4 Active Frontages along Discovery Avenue

Discovery Entrance shall be lined with active uses to mark its significance as the primary entrance into the site.

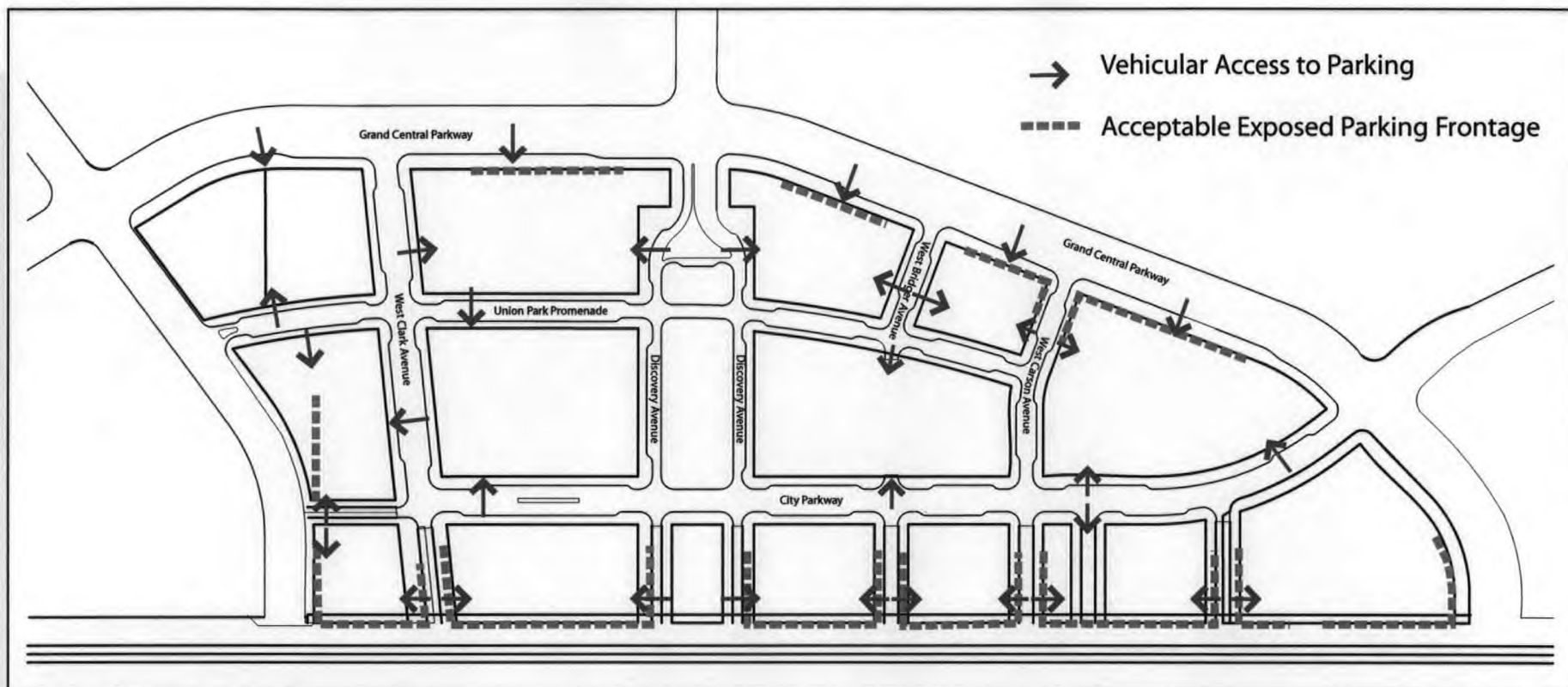
1.5.5 Union Park Promenade

On The Union Park Promenade, emphasize only retail and restaurant uses. The Union Park Promenade shall be terminated at its south end by a knot of active frontages at its intersection with West Clark Avenue. This is the most intensive grouping of active day and night-time uses. Uses along The Union Park Promenade from Discovery Avenue to West Carson Avenue should include service oriented businesses for the residences of Union Park.

RECOMMENDED

1.5.6 Grand Central Parkway

Corners on Grand Central Parkway should be developed as spot retail, restaurants and display space at the ground level.



Parking Access and Allowable Exposed Parking

INTENT

- To provide a simple, easy to navigate system of parking access.
- To conceal parking from public view to the greatest extent possible.
- To minimize vehicular access (curb cuts) on primary building frontages and to reinforce a clear hierarchy and organization of circulation within Union Park.

REQUIRED**1.6.1 Vehicular Movement**

Vehicular movement on site is shown on the diagram. All streets shall be two-way, with the numbers of lanes sized to the anticipated traffic volume, varying from street to street.

1.6.2 Parking Access

Parking requirements for the project shall be accommodated within parking podiums and below grade parking structures. Generally, vehicle access is allowed in the midsection of each block as shown on the diagram.

Vehicle access is allowed on more than one block face. However, each block may have only one such access on any block face. Details of block access are illustrated in the individual block guidelines. These guidelines also maximize uninterrupted public sidewalks and minimize conflicts between vehicles and pedestrian.

1.6.3 Vehicular Access Along The Union Park Promenade

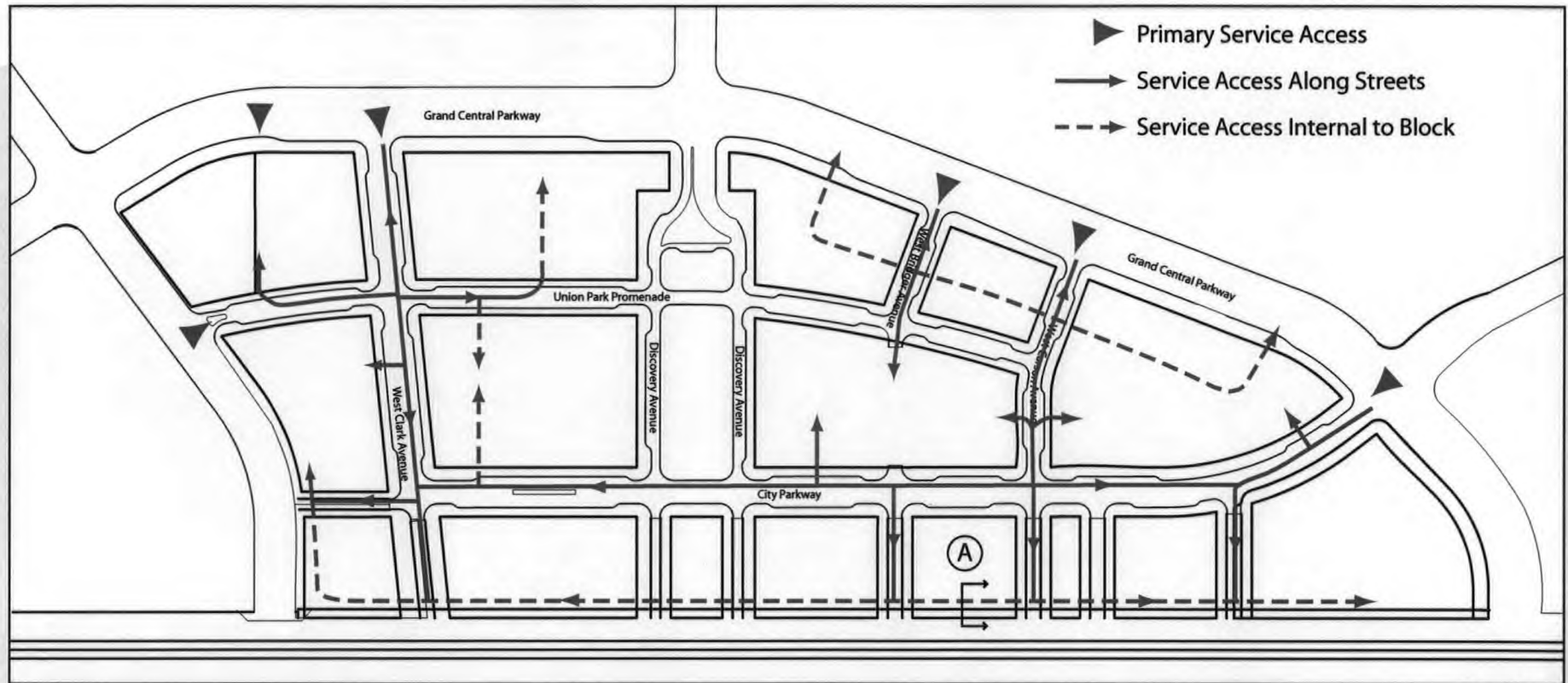
The northern portion of the Promenade shall not be used for vehicle site access between Discovery Avenue and West Carson Avenue. All other streets may have vehicle access as shown.

1.6.4 Exposed Parking Frontages

Exposed parking shall be restricted to those building frontages along the railroad tracks and Grand Central Parkway and as otherwise shown in the individual parcel diagrams. Exposed parking shall be avoided along the Promenade, and shall be minimized (and avoided, if possible) along West Clark Avenue and City Parkway. Exposed parking shall be treated architecturally consistent with adjacent buildings.

1.7 Service Access

8



Service Access

INTENT

- To minimize and mitigate the negative visual and noise impacts of service and loading areas, trash storage and mechanical equipment on adjoining streets, public spaces and property.

Vehicle access is defined to include service and emergency vehicles as well as general traffic.

REQUIRED

1.7.1 Service Access Along Union Park Promenade

Service access shall not be located along the northern portion of Union Park Promenade, so as not to disrupt the street's character as the primary pedestrian conduit within the site.

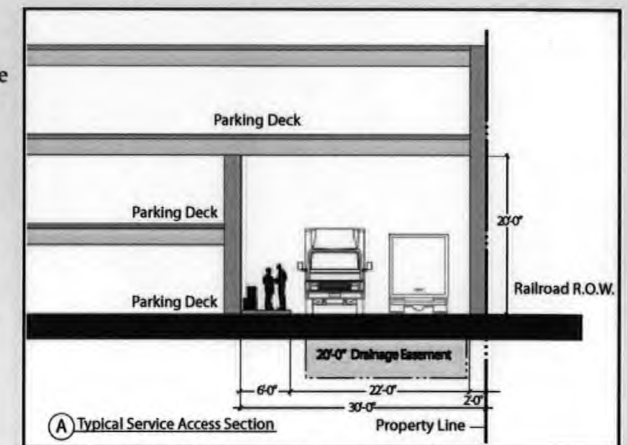
1.7.2 Service / Delivery Locations

Building deliveries, trash pickup and other service needs shall take place primarily in the interior areas of the plots, and shall be screened from primary public view.

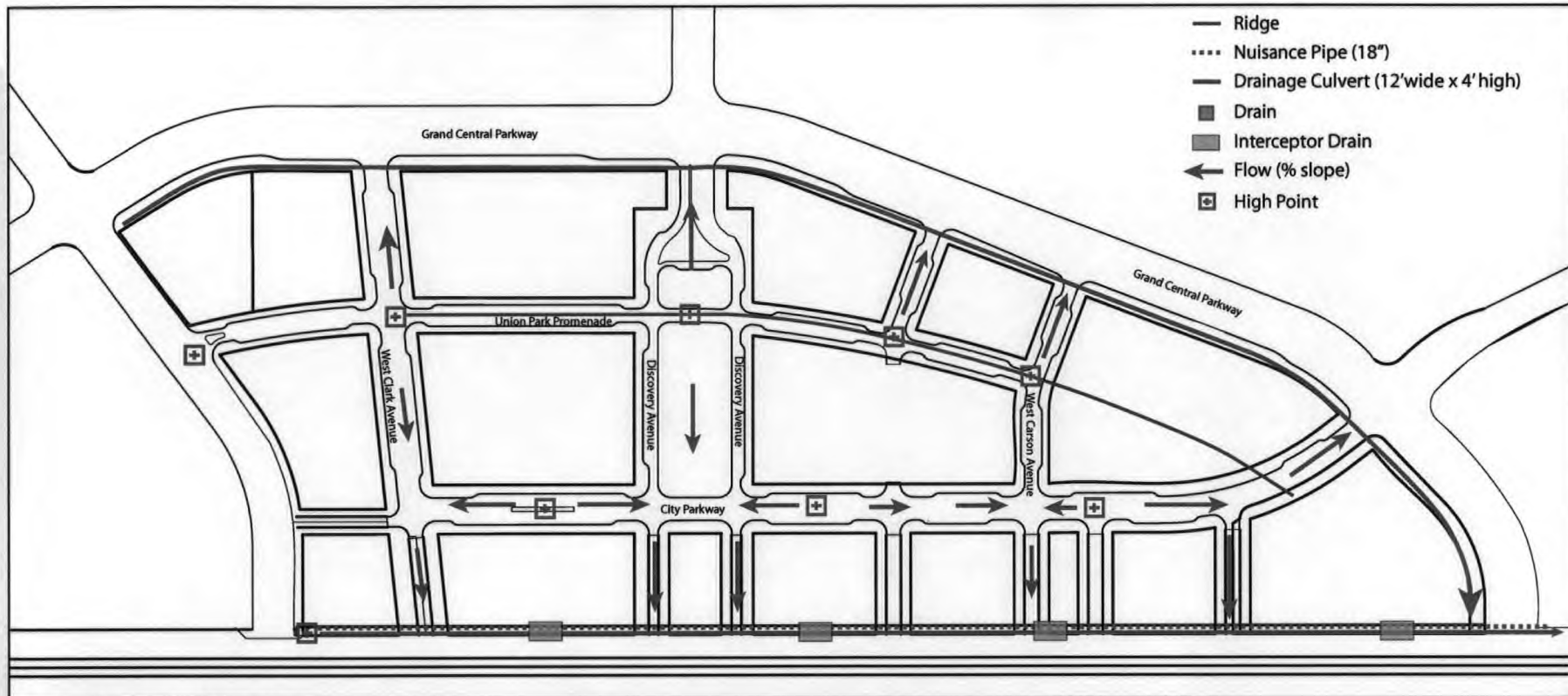
ACCEPTABLE

1.7.3 Shared Service Access

Service vehicles may enter at the same locations as general public or resident parking. Service access is also provided through alleys that run along the interiors of the blocks.



Typical Service Access Section (Along Railroad)



Stormwater Management and Drainage Features

INTENT

The site is graded to:

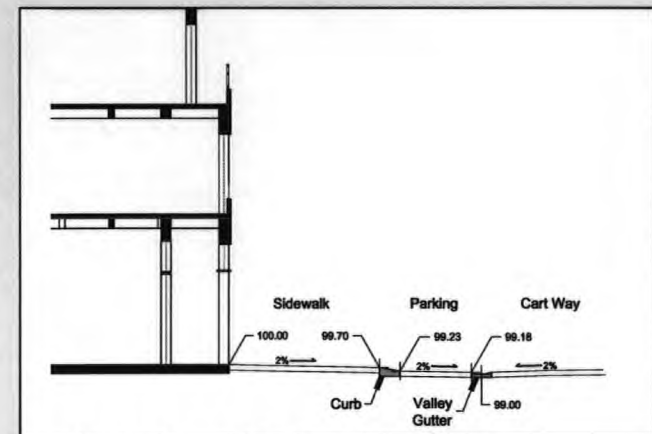
- Capture storm water runoff in any perimeter landscape areas to potentially clean the water prior to conveyance via pipe to Lake Mead.
- Prevent flash flood infiltration within buildings.
- Maintain building finished floor elevations at street level to provide strong relationships between buildings and sidewalks.
- Establish subtle visual prominence at the centerline ridge defined by the Promenade.

Most street grading will occur as a fill condition over the existing grade. As noted, the site is graded with a subtle ridge established near the arc defined by Union Park Promenade. Water moves east and west from this area, toward the park and railroad edge and toward Grand Central Parkway.

REQUIRED

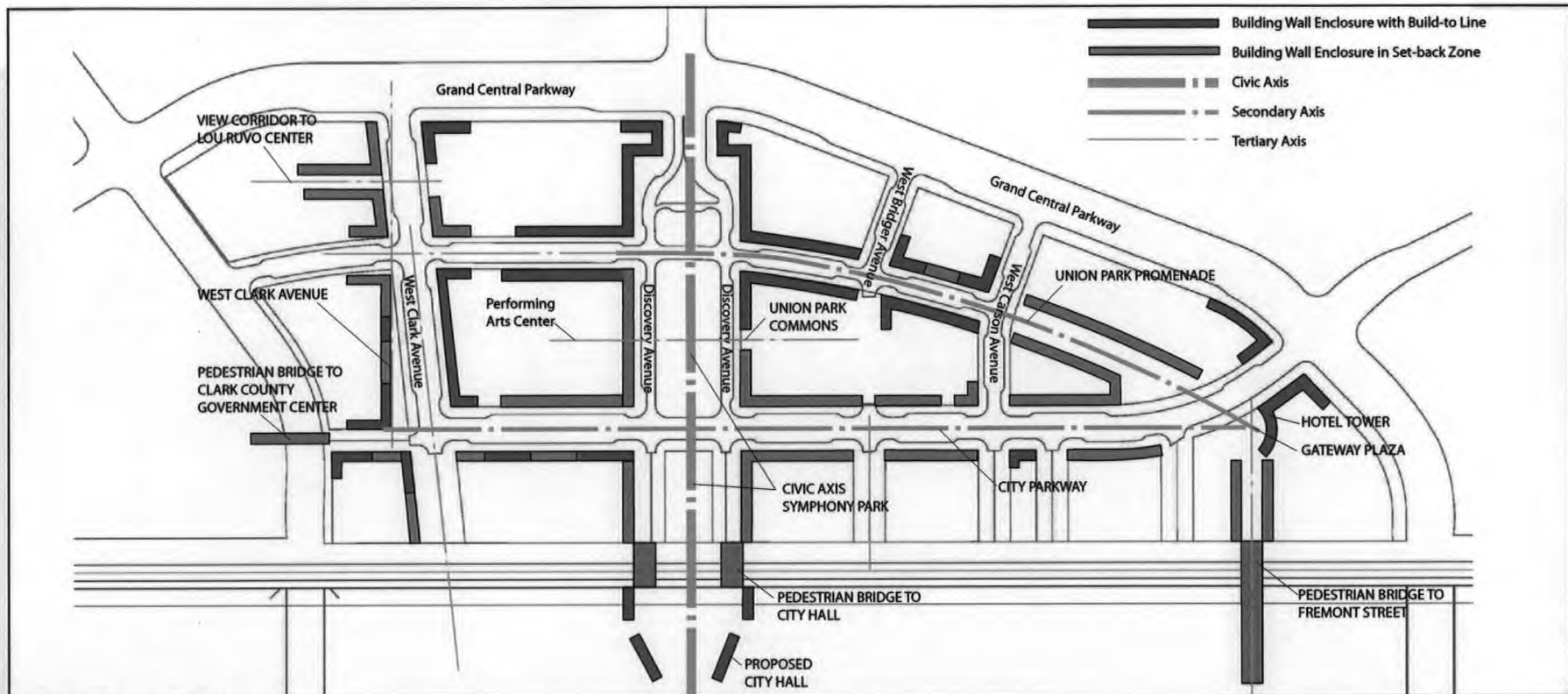
1.8.1 Building and Street Flow Line Separation

The City of Las Vegas requires that building finished floor elevations in Union Park shall be positioned 12" above the flow line of the street which it adjoins. Strategies to address this requirement vary by street, relying primarily upon careful sidewalk grading from back of curb to future building floor elevations. Sidewalks have been designed with maximum cross-slopes at 2.5%. Street drainage is currently collected by inlets located primarily along east-west streets to intercept accumulating stormwater as it moves away from the Promenade. Each street is crowned along its centerline.



Typical Union Park Promenade Cross Section Minimum Condition

1.9 Street-Level Views and Spatial Definition



Building Wall Enclosures and Site Axis

INTENT:

- To control the location of building walls to define and contain the street space, to concentrate and reinforce pedestrian activity, create a sense of the street as a place and accommodate associated activities, to emphasize views and vistas within Union Park.

Build-to lines or zones have been established to frame the major streets, creating outdoor spaces sheltered from the sun, comfortable and human-scale.

REQUIRED

1.9.1 Building Wall Enclosure

Provide setback and build-to zones for building frontages as shown in the diagrams in Section 4 where it is important to have buildings abut or setback from the street lines.

1.9.2 Union Park Promenade Building Wall Enclosure

Building frontages at street level to a height of 35-40' along the Promenade shall follow the build-to line. The Promenade building frontages shall follow the curvature of the streets precisely, with allowances being made for the tolerances of manufactured elements, building components and glazing. Above that height, setbacks within the setback zones of up to 25% of the building frontages may occur.

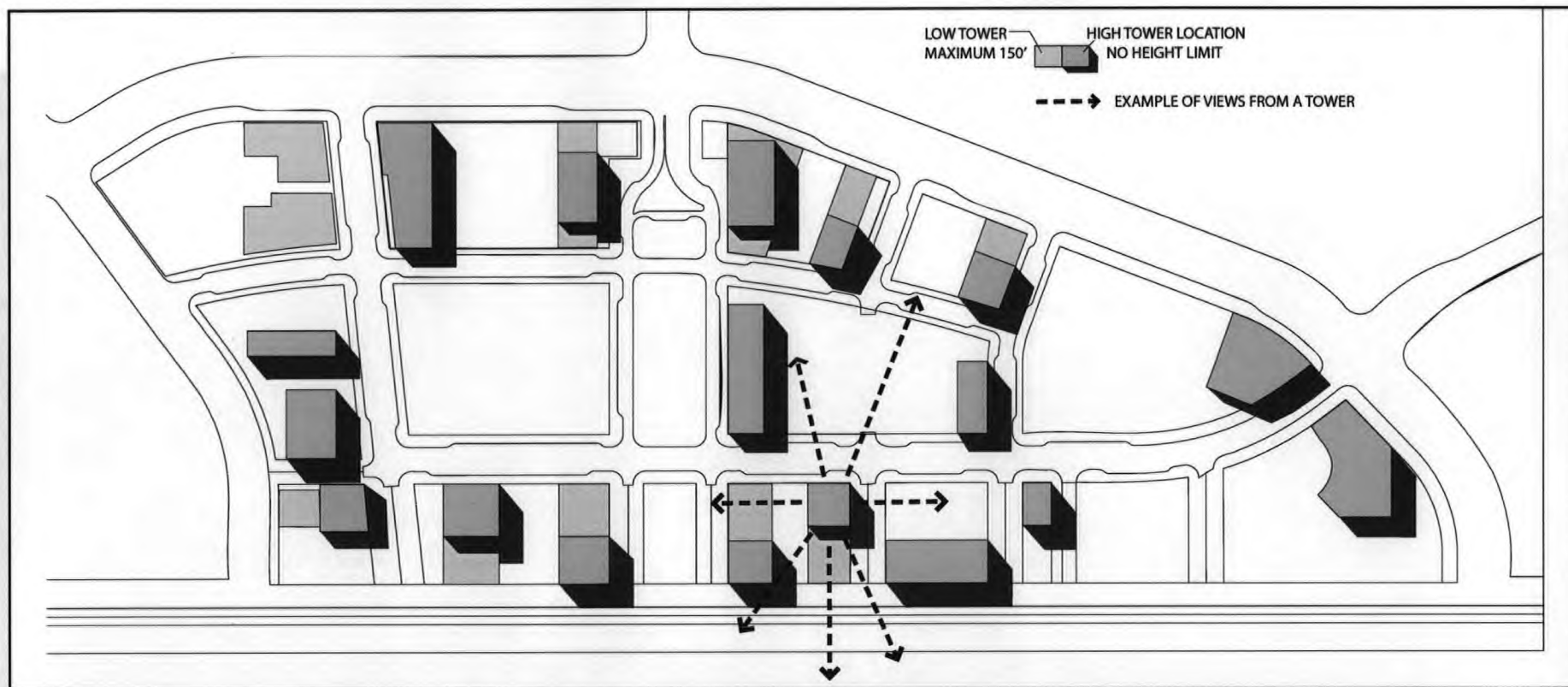
1.9.3 Percent Setback Allowed

On other streets, 75% of the building frontage must follow the build-to line. The remaining 25% may be set back for building entries, patios and pedestrian walkway entrances.

RECOMMENDED

1.9.4 View and Vista Lines

Buildings that terminate view and vista lines within the 61 acres should respond to these focal points with design features that emphasize their location.



INTENT

- To create a visible urban skyline for Union Park as a marketing and branding tool.
- To preserve views from each tower, and to avoid blocking views from adjacent development.
- To preserve views to the towers in Union Park from points of view outside the site.

The individual parcel diagrams in Section 4 illustrate where it is permissible to create tower buildings.

REQUIRED

I.10.1 Tower Location

Each tower shall be located with respect to preservation of the viewsheds of other towers in Union Park. In general,

this means staggering or offsetting the footprints of towers so that buildings do not face each other directly across narrow spaces.

I.10.2 Parcels With Multiple Towers

Some blocks will contain more than one high-rise tower. In the event that more than one tower is on one block, the towers shall be offset to preserve the viewsheds and avoid direct views into adjacent buildings.

I.10.3 Tower Form / Configuration

Towers shall not be created in long slab configurations except where shown, because of the concerns about view blockage. Instead, towers shall be developed as point towers which have a more compact floorplate and less of a visual profile.

I.10.4 Allowable Tower Locations

Towers shall only be located in the positions shown in the diagram in this section. This diagram illustrates some flexibility on each parcel, to accommodate different locations of cores, building lobbies, service and other design features.

ACCEPTABLE

I.10.5 Lower Tower Limits

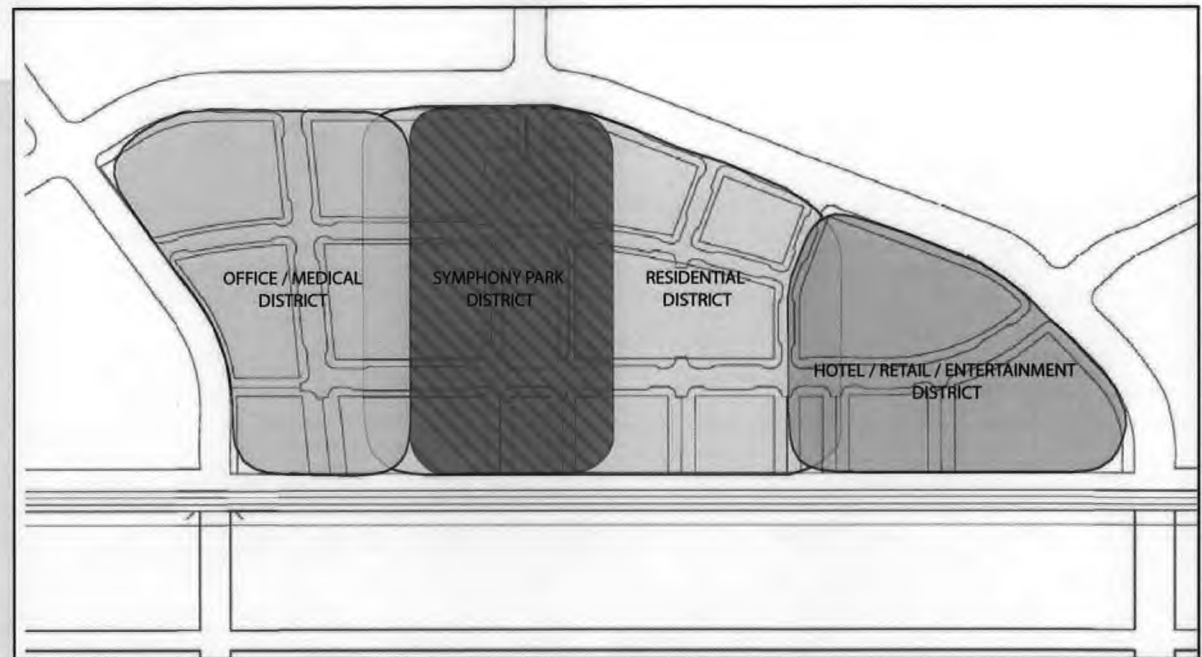
A lower tower structure may be incorporated, which may rise no more than 10 stories or 150' from the podium. The purpose of this is to preserve views over the lower tower from the higher tower. This is shown on several of the residential parcels in this Section.

OFFICE / MEDICAL DISTRICT

- Building heights lowest with respect to Union Park
- Architecture of Parcel A2 should be respectful of and respond to Lou Ruvo Alzheimers' Center
- Buildings monolithic and monumental in character, with larger scale fenestration patterns, lower degree of texture on skin and massing, expressing the nature of the use as business
- Adopt a formal landscape with respect to public space
- Towers form the street wall
- Buildings at W. Clark Avenue street level expected to respond to this street in the form of linear plazas facing Clark Avenue

SYMPHONY PARK DISTRICT

- Buildings translate the cultural, contextual and vibrant nature of Symphony Park into the vertical in massing, texture, fenestration and skin
- Parcel H/I lies on an important public axis—a public space that activates Symphony Park
- Buildings exhibit a civic/cultural scale and identity
- Buildings on the important axes should reflect that position in their character
- Buildings outline Symphony Park—responsible for defining the scale, closure and space
- Boutique hotel to directly respond to Symphony Park and the Performing Arts Center
- Hotel may create a visual connection to Parcels F/G
- Street level activates the area around the park
- Formal architectural character, yet making visual/physical connections to Symphony Park



RESIDENTIAL DISTRICT

- Intimate and humane scale
- Skin and massing have a high degree of texture compared to other districts
- Buildings closer to one another and respond to each other in form and massing
- Semi-private character in hierarchy of public space
- Green-inspired: fenestration includes operable windows, accessible balconies and decks
- Landscapes and green habitable spaces on upper floors of towers
- Comfortable and penetrable spaces with informal character
- Retail spaces meant to activate the streetscape—towers that reach ground are to activate their streets in this district.

HOTEL / RETAIL / ENTERTAINMENT DISTRICT

- These buildings will include the tallest compositions on the site
- Gateway towers exploit views into the site
- Textures, fenestration, massing is subtle and sophisticated to reveal "entertainment"
- Active retail at street level extends into entertainment district to maintain pedestrian densities of restaurants and entertainment spaces
- Strong pedestrian link between Fremont Street and Union Park
- Expressive of physical connection and respectful of adjoining residential units
- Strong sense of excitement, movement, dynamic forms

INTENT

- To enrich the resident and visitor experience by providing stimulating, interesting visual and tactile experiences in public areas of Union Park
- To develop a character and identity for Union Park that is about the enduring qualities of intellectual and emotional life, befitting a world class city.
- To celebrate the city, its history, culture and achievements through the expression of the arts community

OPPORTUNITIES

The types of opportunities for art in Union Park include:

- A. Art as an integral, permanent part of individual buildings
- B. Art as an integral part of on-site landscape design, seating, lighting, paving, plant materials and other streetscape elements
- C. Art institutions which can occupy their own sites or be part of a building complex
- D. Performing arts, keying on the thematic presence of the Performing Arts Center
- E. Performing arts spaces (external or internal) and performing arts programming throughout the year
- F. Commercial art venues, such as art galleries and exhibit spaces
- G. Spaces for temporary exhibit of public art as part of a public art program
- H. Arts organizations and space for publicly-accessible arts activities such as studios and display space
- I. Funding for art pieces, arts programming,



REQUIRED

1.12.1 Minimum Public Art Requirements

Each parcel in Union Park shall demonstrate that it contains at least four of the listed opportunities for art-related spaces, design or programmatic features, as part of the Design Review process.

1.12.2 Public Art Accessibility

Each parcel's art-related features that meet the criteria above shall be accessible to the public and accessible to public view during the daytime and evening hours. Such facilities may, because of their special nature, be protected from public access during the late evening and early morning hours.

1.12.3 Public Art Design Review

Public art which is selected or commissioned for display shall be included in the Design Review process for each development parcel, beginning at the initial Design Review presentation. Its development shall be considered in conjunction with the building and site design as part of the Design Review process.

RECOMMENDED

1.12.4 Public Art Coordination

It is recommended that each developer become familiar with the art facilities and programs being developed by others in Union Park and, to the extent possible, provide complementary arts offerings that will contribute to a rich and varied offering of the arts in Union Park.

INTENT

- *To utilize sustainable design techniques in developing each site and building in Union Park, promoting integrated practices that show that the project is responsible to the future environmentally, economically and socially.*

Definition of Sustainability

Project sustainability is an economic state where the demands placed upon the environment by people, activity and commerce associated with the project can be met without reducing the capacity of the environment to provide for future generations.

The American Institute of Architects Committee on the Environment has developed a draft definition of sustainable design practice that is applicable to the projects in Union Park. This definition is as follows:

The linked domains of sustainability are **environmental** (natural patterns and flows), **economic** (financial patterns and equity), and **social** (human, cultural and spiritual). Sustainable design is a collaborative process that involves thinking ecologically—studying systems, relationships and interactions—in order to design in ways that remove rather than contribute to stress related to systems.

I.13.1 Measuring Sustainability at Union Park

The Design Review Committee will include sustainability in its review of each project. Each applicant shall design their project to a level of sustainability that is the equivalent of LEED Certified or greater. It is not necessary for the project to actually submit for or be recognized by LEED as having achieved certification. LEED Certified or higher levels of LEED certification are both supported and encouraged.

LEED Certified status is achievable by having a conscious strategy of energy conservation and project sustainability from the outset and by exercising a professional level of care with regard to specifying materials and equipment

and in other respects using widely available knowledge to create an environmentally-responsive building.

The burden will be on each project design team to set and achieve sustainable goals, and to demonstrate that it is making progress toward these goals, as part of the design review process.

The approach will be implemented by a process that is integral to the Design Review procedure established by these Design Standards. This process includes the following steps, coordinated with the Design Review process described at the back of these Design Standards.

1. BLOCK PLANS: The developer shall submit a strategy to the Design Review Committee, which shall demonstrate that the project will be designed with the LEED Certified rating as its minimum goal. A preliminary LEED checklist is due at the Schematic Design level.

2. PLANS AND DRAWINGS: The developer shall submit to the Design Review Committee a LEED checklist with some expanded explanation of how the assumed points will be achieved to create a LEED Certified or higher project. This may consist of copies of the material required by LEED to document its results to obtain the rating if the project will actually apply for certification.

3. REVIEW OF CONSTRUCTION: Evidence of satisfactory building commissioning shall be presented to the Design Review Committee at the conclusion of the process.

To supplement the LEED program and to assist the developer in obtaining the credits needed to gain LEED Certified rating, the AIA Committee on the Environment has published its "Top Ten Measures of Sustainable Design" Each of these includes credits found in LEED, the most widely used measure of sustainable building projects in the United States.

SUSTAINABLE DESIGN INTENT – having a strategy and following it

REGIONAL THINKING – an appropriate place in the region

Site Ecology at Different Scales

BIOCLIMATIC DESIGN – natural controls working with the climate

LIGHT & AIR – daylighting and natural ventilation

WATER CYCLE – conservation

ENERGY FLOWS AND FUTURE – energy conservation

MATERIALS AND CONSTRUCTION – green materials, recycling, local materials

LONG LIFE, LOOSE FIT – adaptability to change over the life of the building

COLLECTIVE WISDOM AND FEEDBACK – soliciting help and getting responses

The major categories in the LEED system are:
SUSTAINABLE SITES

WATER EFFICIENCY

ENERGY AND ATMOSPHERE

MATERIALS AND RESOURCES

INDOOR ENVIRONMENTAL QUALITY

INNOVATION AND DESIGN PROCESS

Each of these has a series of criteria that are more fully described in the LEED literature.

SITE SUSTAINABILITY

A number of sustainable site development practices have been highlighted below to define specific opportunities for Union Park. The list is not intended to represent a complete LEED description.

1.14.1

Alternative Transportation:

Public transportation access (not in scope of individual project)

INTENT: An inter-modal transportation station which includes light rail, commuter rail, regional and local bus service and a monorail, concentration of development density around the transit station.

BENEFIT: Reduce pollution and land development impacts from automobile use, to best serve the development of this site and downtown.

1.14.2

Storm Water Management: Rate, Quantity and Treatment (not in scope of individual project)

INTENT: A Grading and Drainage (Storm water) Plan development for the entire 61 acre site. Storm water transport to Lake Mead via pipes after taking it through treatment systems.

BENEFIT: Reuse of storm water volumes.

1.14.3

Water Efficient Landscape

INTENT: Master plan gray water reuse system for the village, high efficiency irrigation products, and selection of streetscape plants with low watering needs. (Ref: Las Vegas Municipal Code Title 14 (water regulations and drought plan))

BENEFIT: Limit or eliminate the use of potable water for landscape irrigation. Overall water use reduction.

1.14.4

Resource Reuse

INTENT: Record and track all salvaged and reused components, village-wide. Determining a common building material, one that is readily available and in large supply, that can be used throughout the village.

BENEFIT: Reducing the demand for virgin materials and to reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources.

1.14.5

Regional Materials: 20% Manufactured Regionally

INTENT: Common and readily available materials should be pursued.

BENEFIT: Local character of the place. Increasing demand for building materials and products that are extracted and manufactured within the region, supporting the regional economy and reducing the environmental impacts resulting from transportation.

1.14.6

Materials: Light Colored High Albedo Materials

INTENT: Reduce impervious surfaces and thermal mass use. Light non-reflective colors for heat reflection, with glare control.

BENEFIT: Minimize heat gain and glare effect on streets to make the streets more pedestrian friendly.

1.14.7

Shading: Shade Trees, Shading Structures, Building Mass

INTENT: Create shaded streetscapes using shade trees, shade structures and building mass according to the orientation height to width ratio and use of streets.

BENEFIT: Greater use of streets by pedestrians by reducing the impact of the outdoor temperature extremes. To create a comfortable urban micro-climate with optimal street design.

1.14.8

Orientation: East/West Street Orientation, Building Mass Flanking the Streets

INTENT: Building shall be oriented according to sun path in summer and winter.

BENEFIT: Shaded and more pedestrian friendly streetscapes.

1.14.9

Heat Island Effect: Non-Roof: Low Level Landscape, Light-Colored, High Albedo Materials, No Surface Parking

INTENT: Low level landscape, Light-colored, high albedo materials shall be provided. No surface parking shall be included.

BENEFIT: Reduce heat islands -thermal differences between developed and undeveloped areas.

1.14.10

Alternative Transportation: Bicycle Storage and Changing Rooms

INTENT: Bicycle racks shall be included on public streets and open spaces. Changing rooms and shower facilities provided as part of individual building development.

BENEFIT: Reduce pollution and land development impacts from automobile use.

1.14.11

Innovation in Design: Art Work Street Furniture

INTENT: Art work shall be provided on streets as part of street furniture.

BENEFIT: Beautiful streetscapes.

BUILDING SUSTAINABILITY

The potentials for saving energy, conserving resources, making buildings more enjoyable, productive places to live and work, and reducing life-cycle cost are all consistent with one another, since these goals and means are interrelated. Building design is susceptible to the same type of strategy and analysis as the site design. The major categories of these elements in building design include these LEED topics. As discussed, the applicant is free to set goals, create a strategy from these and other elements, and track progress toward meeting the goals. If the applicant wishes to adopt LEED or one of the other systems, this is encouraged.

Potential Sustainability Techniques

INNOVATIVE WASTEWATER TECHNOLOGIES

Reduce generation of wastewater

WATER USE REDUCTION

Maximize water efficiency

BUILDING SYSTEMS COMMISSIONING

Verify that building elements and systems are installed and calibrated to operate as intended

MINIMUM/OPTIMUM ENERGY PERFORMANCE

Achieve higher levels of energy performance above required standards

OZONE PROTECTION

Reduce ozone depletion through reduction of CFC's and other contributing sources

RENEWABLE ENERGY

Onsite renewable energy self-supply

GREEN POWER

Use of grid-source renewable energy technologies

STORAGE AND COLLECTION OF RECYCLABLES

Facilitate collection and retrieval of recyclables used by building occupants

BUILDING REUSE

Increase life cycle of building, and reduce manufacturing and transport of building materials

CONSTRUCTION WASTE MANAGEMENT

Direct construction-related recovered resources appropriately

RESOURCE REUSE RECYCLED CONTENT

Use recycled materials to save on extraction and processing of virgin resources.

REGIONAL MATERIALS

Local resource use where possible

RAPIDLY RENEWABLE MATERIALS

Emphasize over long-cycle renewable materials

CERTIFIED WOOD

Environmentally responsible forest management

IAQ PERFORMANCE

Set and improve on indoor air quality performance

CARBON DIOXIDE MONITORING

Provide for indoor air monitoring for CO₂

VENTILATION EFFECTIVENESS

Provide for delivery and mixing of fresh air

CONSTRUCTION IAQ MANAGEMENT PLAN

Program for construction-related indoor air quality

INDOOR CHEMICAL AND POLLUTANT CONTROL

Reduction of indoor air contaminants and chemical exposure from materials

CONTROLLABILITY OF SYSTEMS

Provide for high level of individual and small group control of lighting, thermal and ventilation systems

DAYLIGHT AND VIEWS

Provide for outside connections for building occupants

INNOVATION IN DESIGN

Features building performance that are innovating and not addressed by existing rating systems

LEED OR OTHER SYSTEM ACCREDITED PROFESSIONAL

Set up and run environmental aspects of design program



2 STREETScape and OPEN SPACE

This section describes each Union Park street type, streetscapes and open space, with street sections, plans and illustrations of their character; streetscape and other design features. The matrix of available streetscape elements such as light fixtures, benches, waste containers, bicycle racks and other components are more fully described in the Appendix following Section 4. The developer of each block is responsible for implementing these streetscape and open space concepts on each block as they affect that block. The area between the curbs is the responsibility of the City of Las Vegas.

Section 2 is organized into four topics:

HUMAN COMFORT

MATERIAL PERFORMANCE

VILLAGE ERGONOMICS

VILLAGE IDENTITY

An **INTENT** statement is provided for each of these. Then, **REQUIRED** and **RECOMMENDED** Standards for each are enumerated on pages 18 and 19. The Standards are then applied on the following pages of Section 2 to specific Streets, Streetscapes and Open Spaces. Their application is indicated by the number that corresponds with the numbers on pages 18 and 19.

STREETSCAPE AND OPEN SPACE

Guidelines for streetscape and open space are organized to enhance human comfort in the desert, provide sustainable material performance, establish exceptional pedestrian appeal and establish a contemporary identity for this desert village. The guidelines below are organized under these four objectives.

Guidelines itemized below are keynoted on the streetscape and open space plans that follow. For example, on the Union Park Promenade plan, the guideline "2.2.8 - Tactile Paving" can be found.

In addition to these general guidelines, a detailed set of material and component recommendations have been established for streetscapes and open spaces. These recommendations are itemized on the "Streetscape and Open Space Materials and Components" list found on page 42. Keynote references from this list are also noted on the streetscape and open space plans, normally in conjunction with the general guideline reference. For example, "2.2.8/PV5 - Tactile Paving" refers to Stone Paving at Pedestrian Areas under the tactile paving guideline. An appendix further defines many of the detailed requirements.

While site sustainability intentions have been described previously within these guidelines, they are also incorporated below for completeness. LEED items are highlighted to encourage their application at Union Park. The list is not intended to represent a complete LEED description.

2.1 – Human Comfort INTENT

- Comfortable urban micro-climates attract both residents and visitors and result in extended outdoor use, providing additional community, retail and commercial benefits.

REQUIRED

2.1.1 – High-Albedo Paving (LEED)

All pedestrian areas shall be constructed of light colored, high-albedo (radiation reflectivity) paving materials in order to mitigate heat build-up. This requirement should not result in high-glare pavements. This standard is based upon a measure of Solar Reflectance Index of at least 29, as defined in LEED SS Credit 7.1: Heat Island Effect.

2.1.2 – Glare Reduction

Low streetscape plantings, such as groundcovers and perennials, shall be used at prescribed percentages to reduce solar glare and heat absorption. These plantings shall not disrupt pedestrian circulation or access to on-street parking. Additional plants such as vines may occur on vertical surfaces such as green screens and on overhead trellises.

2.1.3 – Shade Structures – Promenade

Architectural shade structures shall be constructed, to village guidelines, along the Union Park Promenade. The Promenade shade structures may incorporate lighting, ventilation fans, misting, plants and retail signage.

2.1.4 – Shade Structures – Intense Heat Zones

Architectural shade structures covering the streetscape sidewalks shall be built in all intense heat zones identified in the Solar Exposure Analysis on page 65. A minimum of 75% of the walking pedestrian surface shall occur in shade at Noon on June 21.

2.1.5 – Shaded Right-of-Way (LEED)

Street trees shall be selected, spaced and nurtured to maximize the shading of right-of-way pavement by providing a continuous canopy where designated. When trees reach approximately 50% of their mature size, a minimum of 75% of the walking pedestrian surface shall occur in shade at Noon on June 21. All trees shall be a minimum of 60" box size.

2.1.6 – Cool Site Furnishings

All site furnishings shall be light-colored and non-metallic in an effort to limit solar heat conductivity. Vinyl-covered metal is prohibited.

RECOMMENDED

2.1.7 – Cooling Water Features

Cooling water features, aerated water devices and misting systems should be placed near or adjacent to pedestrian circulation and gathering areas and building entrances. Limited amounts of water should be used in order to be environmentally responsible. Use of water features and misting systems shall not conflict with the City of Las Vegas Drought Plan, LVMC Title 14.

2.1.8 – Increased Air Circulation

Where possible, architectural shade structures and large plantings should be designed to funnel prevailing breezes to increase air circulation, evaporation and flush out heated air. Artificial air circulation devices may be utilized as part of shade structures, but without the use of Freon.

2.1.9 – Photovoltaic Elements

Photovoltaic elements should be explored to power 'cool seats', misting elements, water features, ventilation systems, irrigation and lighting. These elements may be incorporated into the street light infrastructure.

2.1.10 – Sunlit Areas

Sunlit spaces and clearings should be designed for use during cool seasons, and should be integrated into the rhythm of the streetscape. Proportioned distinctions between shade and light will typify the Union Park streetscape.

2.1.11 – Recessed Gathering Areas

Small recessed (sunken) gathering areas with 'earth seats' that benefit from the cool ground conditions should be considered. These areas may include water and shade canopies. Earth seats are built into the recessed ground.

2.2 – Material Performance

INTENT

- Use of high quality building materials will establish long-term value at Union Park and act as a precedent for future development in downtown Las Vegas.
- Durable and environmentally responsible building materials and methods may reduce resource and energy consumption, support the regional economy and inspire future sustainable development in downtown Las Vegas.

REQUIRED

2.2.1 – Efficient Landscapes (LEED)

Landscape development for all streetscapes and open spaces shall utilize water conserving plantings and high efficiency irrigation products and systems. This standard is based upon reducing water consumption for irrigation by 50% from a calculated mid-summer baseline case, as defined in LEED SS Credit 1.1: Water Efficient Landscaping.

2.2.2 – Erosion Control (LEED)

Landscape development for streetscapes and open spaces with slopes greater than 3:1 shall utilize permanent erosion and sedimentation control measures.

2.2.3 – Tree Trenches

Street trees shall be planted in continuous tree trenches beneath sidewalks. These trenches shall be designed to promote thriving long-term tree health by allowing widespread and un-compacted root growth in a well-drained structural soil medium.

2.2.4 – Pavement Loading

All streetscape pavements accessible by vehicles shall be designed to withstand vehicular loading, anticipating potential use by service and emergency vehicles.

2.2.5 – Integrated Pavement Systems

All scoring patterns shall conform to the streetscape module as defined within these guidelines in the Streetscape Network Matrix. Jointing shall integrate with all streetscape elements, material changes and surface utility components. Score lines in curbs and gutters shall align with score lines in sidewalk paving. Where curb and gutter systems are completed prior to sidewalks, sidewalk jointing should be coordinated with curb and gutter jointing.

2.2.6 – Light Pollution Control (LEED)

Light pollution shall be minimized through the use of low lighting profiles, recessed luminaires and minimal luminance levels, where street light is cast downward. This standard is based upon designing exterior lighting so that all site and building-mounted luminaires produce a maximum illuminance value no greater than 0.20 horizontal and vertical footcandles at the site boundary and no greater than 0.01 footcandles 15 feet beyond the site, as defined in LEED SS Credit 8: Light Pollution Reduction.

Note that ambient light emanating from retail storefronts may not be included in these measurements.

2.2.7 – Streetscape Grading

Streetscape grading shall follow City requirements to minimize potential flooding impact to buildings and occupants, while allowing handicap access and avoiding any sidewalk cross-slopes in excess of 2%. A twelve-inch vertical separation between building finished floor elevation and street flow-line elevation is required.

2.2.8 – Tactile Paving

A fine-grained pattern of unit pavers shall be used in large contiguous areas at prescribed percentages (see matrix for individual street requirements) to define the scale and visual interest of the pedestrian streetscape. Subtle abstractions of the desert floor may be developed in the paving patterns.

2.2.9 – Consistent Quality

Consistent quality shall be implemented between streetscape and private, building-related improvements, in order to uphold the overall quality of the development. For example, streetscape materials may be extended into private areas such as entries.

2.2.10 – Heavy Duty Quality

All site improvements and furnishings should be heavy-duty to withstand the rigors of urban impact and potential vandalism. Residential quality components shall be prohibited.

RECOMMENDED

2.2.11 – Minimize Turf Grass

Planting designs for all streetscapes should avoid the use of turf grass in order to reduce excess water consumption. In open spaces, irrigated turf should be limited to no more than 50% of the developed open space area. Grass species with lower watering needs should be utilized.

2.2.12 – Regional Materials (LEED)

Select regional materials should be pursued where practical in order to minimize transportation costs and benefit the local economy. Where non-regional materials are available more economically to reinforce good trade practices and stimulate global economies, these materials may be pursued.

2.2.13 – Recycled Materials (LEED)

To minimize energy expenditures and new resource extraction for material production, reused and recycled materials should be used for streetscape improvements.

2.2.14 – Clean Storm Water (LEED)

Surface landscape areas and tree trenches should be designed to harvest and clean storm water for reuse in grey water irrigation systems.

2.3 – Pedestrian Appeal

INTENT

- A welcoming, intimate and safe public environment establishes a sustainable basis for a residential community.
- Diverse and engaging streetscapes and open spaces encourage return visitors.

REQUIRED

2.3.1 – Seating

On all retail streetscapes (see page 6) and open space edge conditions, one bench shall be placed for every 75 linear feet of street frontage. On all non-retail streetscapes (see page 6) one bench shall be placed for every 100 linear feet of street frontage. Seating may be grouped to address Requirement 2.3.2 below.

2.3.2 – Pedestrian Rooms

Seating elements shall be assembled in groups of two or more to create inviting outdoor pedestrian rooms within the streetscape. To increase the sense of human appeal, these groups of seating elements shall be combined with special paving, lighting, shade, bike racks and elements of art and water. These places will function as small urban oases, places of enhanced comfort and interest along the street.

2.3.4 – Bus Stops

A pedestrian room (noted above - 2.3.2) shall be designed at all bus stops, providing an appealing environment for transit riders.

2.3.5 – Bike Racks (LEED)

Bike racks shall be installed adjacent to all major building entrances and where streetscapes and open spaces meet. A minimum of one four-unit bike rack shall be utilized per each major building entry.

2.3.6 – Utility Coordination

Streetscape designs shall be completed prior to utility placement so utility boxes and vaults can be integrated with the landscape module and placed within preferred utility zones. Utilities shall not interfere with the complete and uninterrupted installation of the streetscape elements.

2.3.7 – Identity Signage

District identity signage/monumentation shall be integrated within the streetscape (both sides of the street) on all streets that enter the Union Park site.



2.3.8 – Pedestrian Safety

Bollards, or other approved elements, shall be placed between noted pedestrian and vehicular zones at distances defined on plans. Tactile paving surfaces shall define pedestrian street-crossing areas.

RECOMMENDED

2.3.9 – Screening

Architectural screens should be utilized to filter and mitigate views to and across railroad tracks where Union Park streets terminate at the railroad.

2.3.10 – Moveable Furniture

A portion of the specified outdoor furniture should be moveable and adaptable to individual building-related needs, climate variations and group dynamics.

2.3.11 – People-Watching

Streetscape rooms should be designed to maximize people-watching opportunities, by organizing proximities and composing furnishings to establish synergies between the two areas.

2.3.12 – Neighborhood Gatherings

Spaces should be created that provide opportunities for neighborhood gatherings and outdoor public life. While these areas may range in size, they should be organized to allow residents the opportunity to temporarily customize them to accommodate neighborhood events and activities.

2.4 – Village Identity

INTENT

- *Regionally appropriate spaces that reflect the Mojave Desert context will define the sense of place at Union Park.*
- *Local materials and patterns will create an authentically distinctive atmosphere, unique to the Las Vegas area.*
- *Simple and abstract patterns and forms, rather than historic recreations, establish a timeless and iconic environment.*
- *Widespread and diverse integration of two- and three-dimensional art elements will reflect the community's value in culture and the aesthetics.*

REQUIRED

2.4.1 – Supplemental Furnishings

When an individual project has more than 5 seating elements, every fifth component shall be picked from the unconventional furnishing list (See appendix 1). Alternatively, these benches can also be custom built by a local artist.

2.4.2 – Suspended Lights

Lights and cables overhanging street rights-of-way shall be used to create a distinctive and scaled street space, with these elements occurring no lower than 16'-8" above roadway surfaces. Note that suspended lights will likely be completed by the master developer or City of Las Vegas, and will require coordination with developers.

2.4.3 – Potted Plants

Sculptural potted plants shall be placed at prescribed percentages to animate and informalize the pedestrian streetscape.

RECOMMENDED

2.4.4 – Integrated Art

Art should be integrated throughout the village as a defining element of the urban community. Art includes two- and three-dimensional representations, sound and performance, furniture and infrastructure pieces.



2.4.5 – Sculptural Plants

Plants should be sought for their diverse tactile and visual qualities to establish natural sculpture gardens.

2.4.6 – Desert Bloom

Multi-season concentrations of desert floral color should be integrated into planting designs, providing a staged year-round presentation.

2.4.7 – Story Telling

Educational and cultural artifacts and devices that tell a story about the region and place should be integrated into the streetscapes and open spaces.

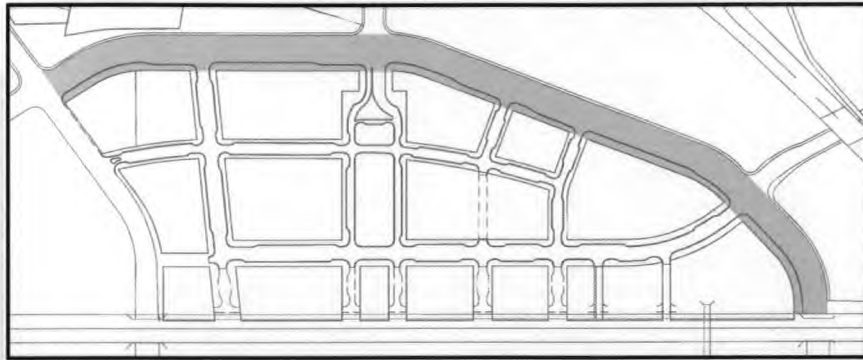
2.4.8 – Kiosks

Retail and information kiosks should be integrated into the village, in select locations to be noted on future schematic master plan. Kiosks will be positioned on private property.

2.4.9 – Shade Structures: Artist

Arbor and pergola shade structures should be commissioned by artists, in select locations to be noted on future schematic master plan.

2.5 Grand Central Parkway



22

As with the world's great urban parkways, Grand Central Parkway maintains a strong, continuous building presence and a unified landscape treatment. People, transportation and building uses are sensitively integrated along the parkway.

Rebuilt from its current condition to accommodate Las Vegas' Bus Rapid Transit, Grand Central Parkway provides designated bus lanes and transit stops in the median.

INTENT

LINEAR PARK A desert garden theme distinguishes the parkway, symbolically connecting the city to its Mohave Desert context, culminating at the Ruvo Center and Clark County landscapes. The pedestrian area functions as an oasis of sorts, a comfortable, safe and interesting corridor for residents to both stroll and linger. Layers of trees shade the Union Park walkway from afternoon sun, and separate auto from pedestrian zones.

DISTRICT EDGE Sense of place drives the parkway plan. The parkway defines the edge of this new downtown district and presents it to passersby as a diverse and

animated village. Modulated landscape patterns incorporate diverse and tactile plant forms, celebrating regional qualities that make Las Vegas exotic. Street-front buildings overlook the parkway and showcase it as a high quality mixed-use community.

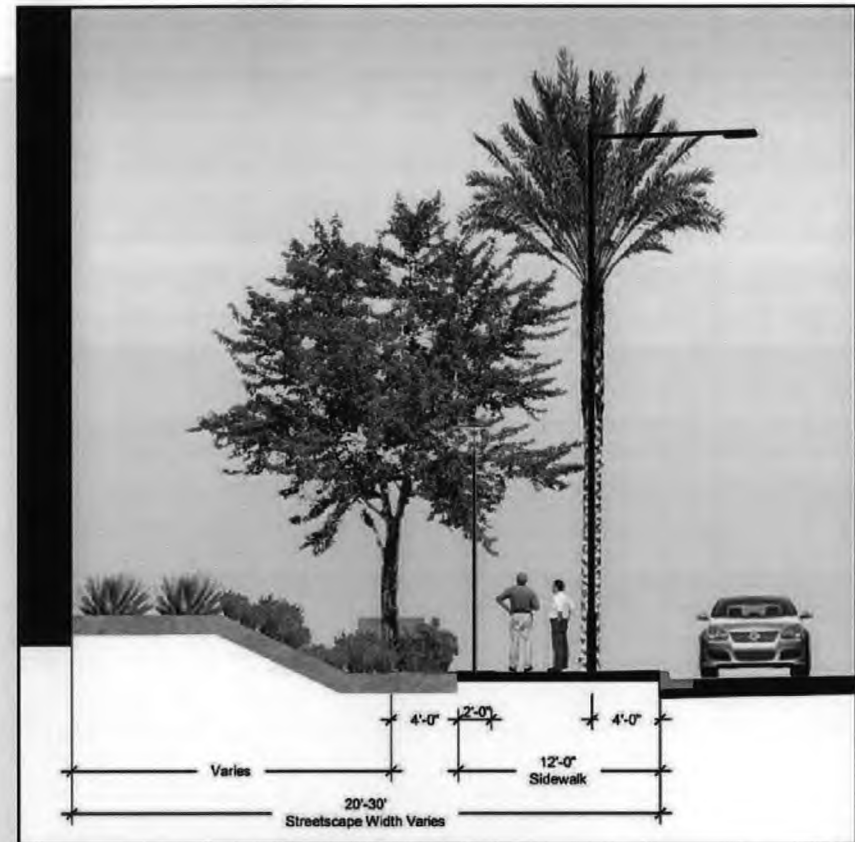
SUSTAINABLE LANDSCAPE A number of environmentally beneficial practices may occur within the parkway landscape. Prior to entering pipe conveyance, plant and microbial filters could collect and clean storm water runoff. With the use of tree cover and other plants, urban heat island temperatures could be moderated. Sustainable landscape practices may include drought-tolerant plants and efficient irrigation systems.

REQUIRED

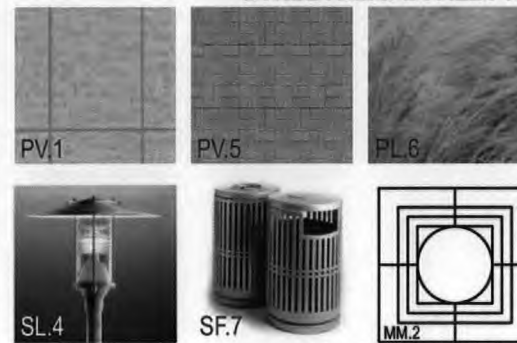
See Site Plan diagrams, streetscape and open space guidelines (page 18), Site Materials and Components Matrix (pp. 42, 43), and Appendix with draft components, materials and plants.

RECOMMENDED

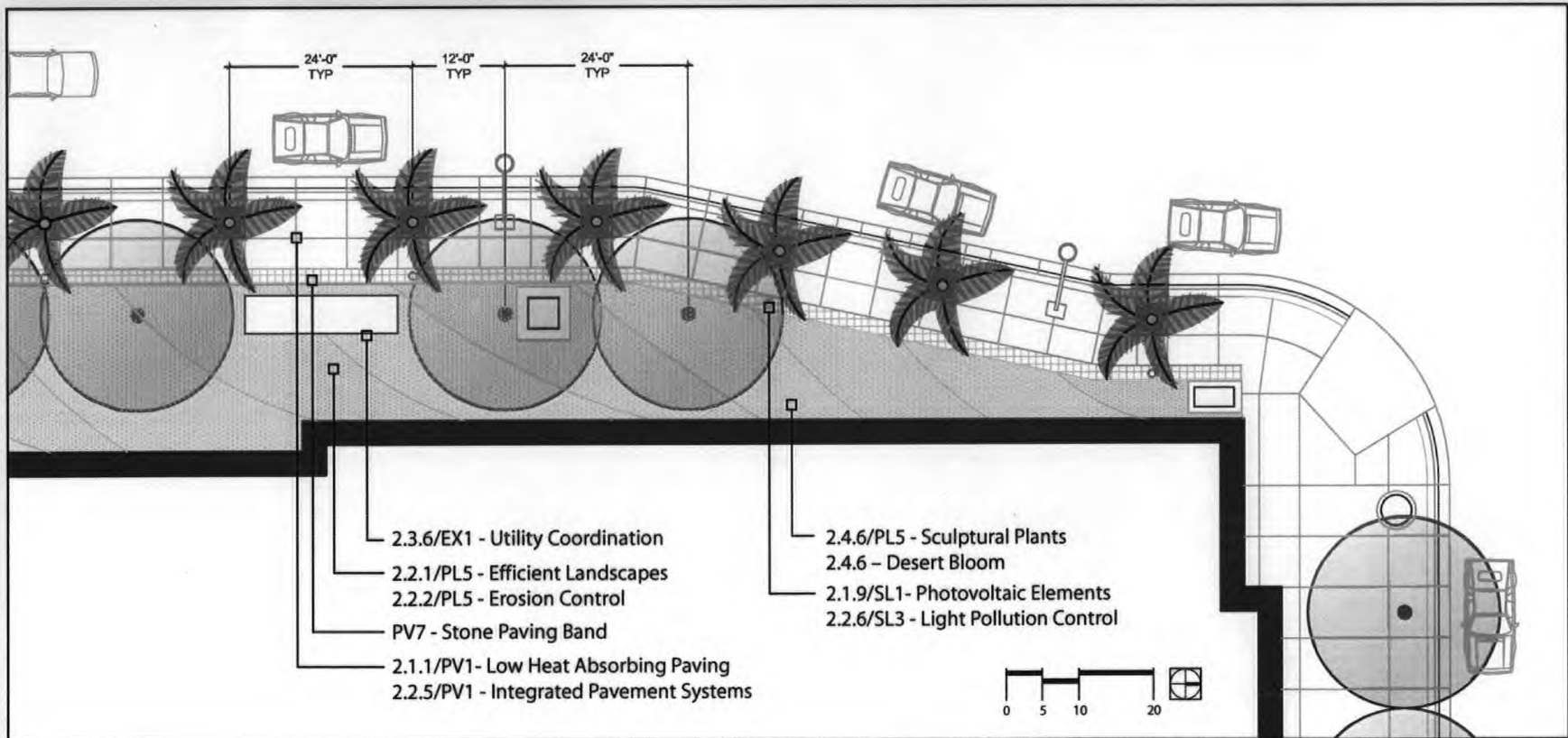
See Site Plan diagrams, streetscape and open space guidelines (page 18).



STREETSCAPE PALETTE

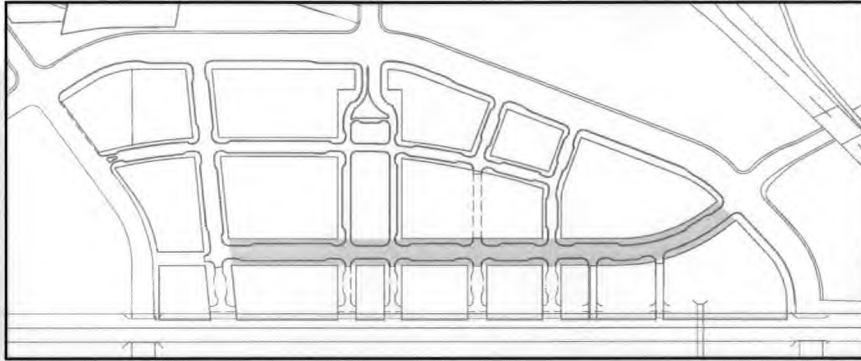


Refer to Appendix for Products Outline



2.6 City Parkway

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City Parkway, together with Clark Avenue, functions as the primary internal vehicle route through Union Park. Major parking garages can be accessed along the length of this street. Continuous on street parking serves retail uses which define much of this street.

INTENT

FORMAL AND STATELY City Parkway is intended to be elegant and stately, defined by a sophisticated and well-integrated relationship between streetscape and retail uses. Large deciduous trees and tall palm trees reinforce the stately quality of the street.

LAYERED Multiple rows of trees, landscape and building-related shade structures create richness and comfort on this retail street. These elements also help

to mitigate the scale of the street.

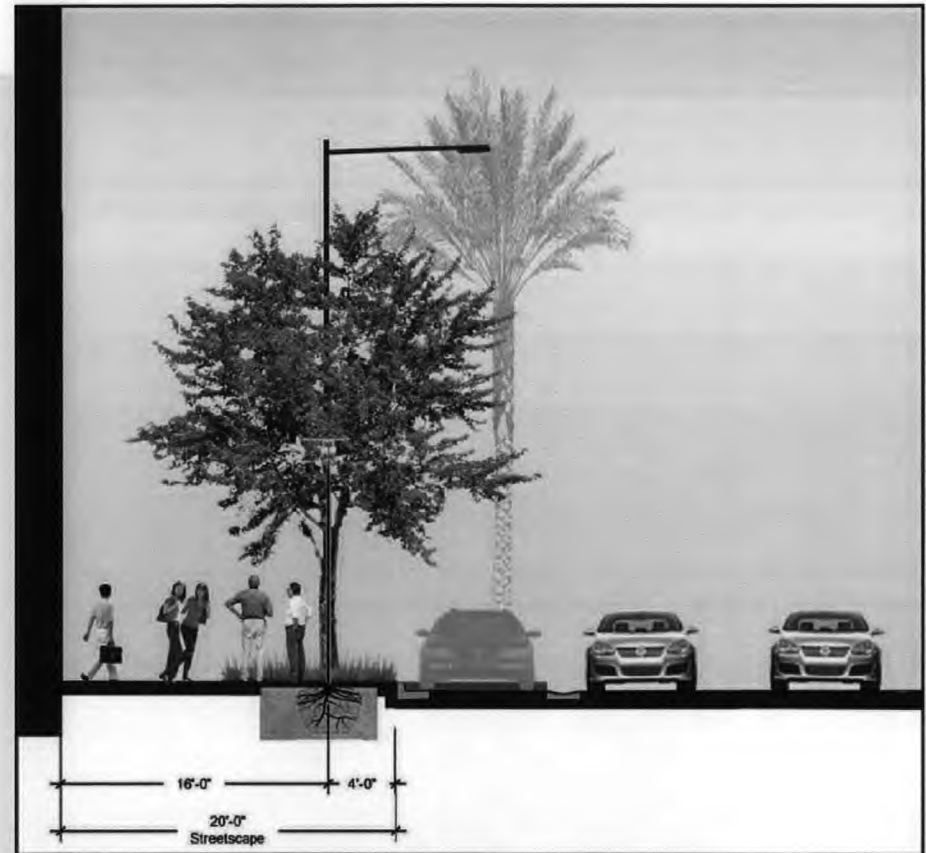
ANIMATED Intermittent opportunities for sun pockets, water and art are used to establish small venues for gathering and animating the street.

REQUIRED

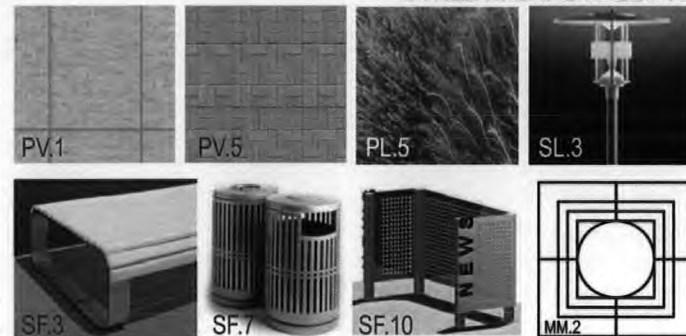
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RECOMMENDED

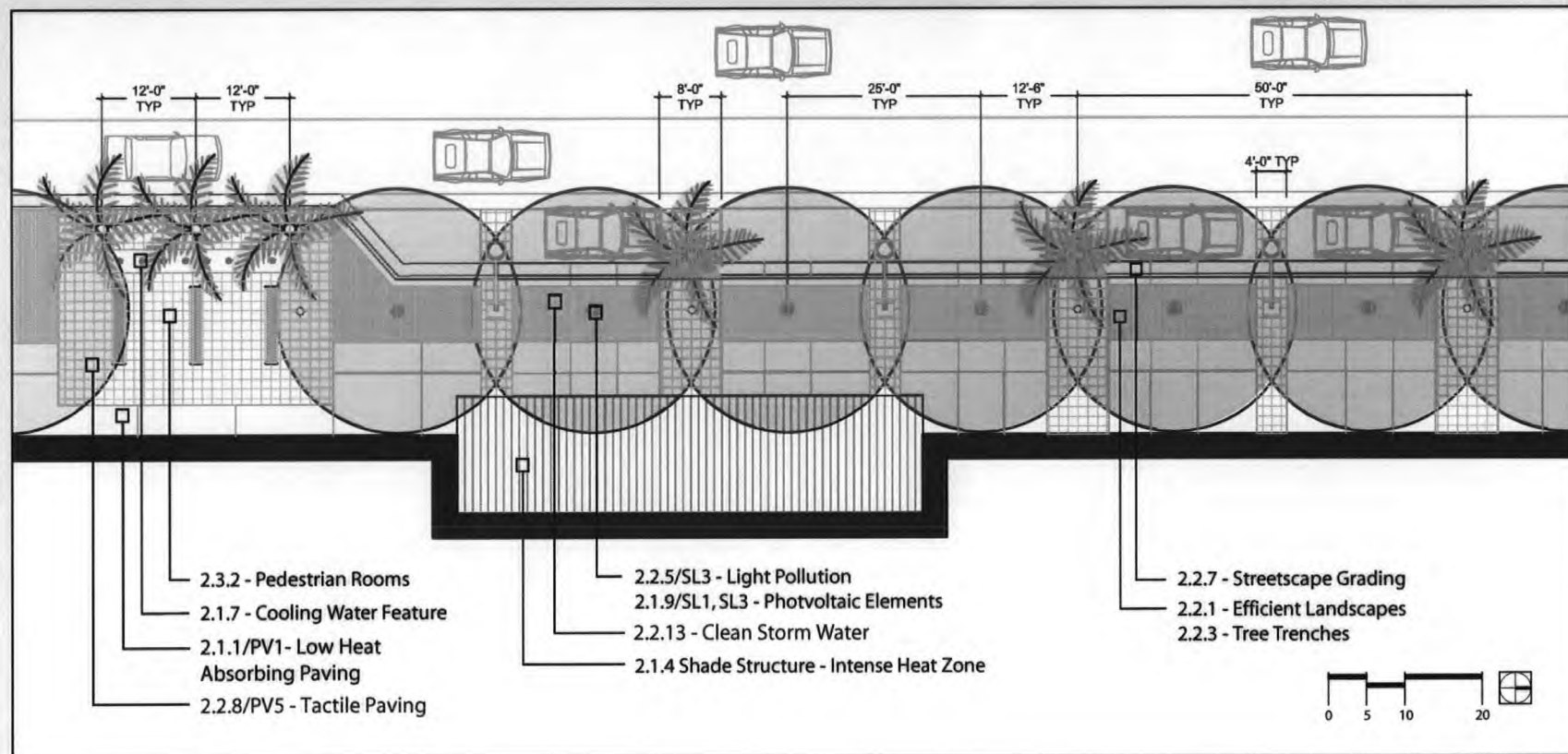
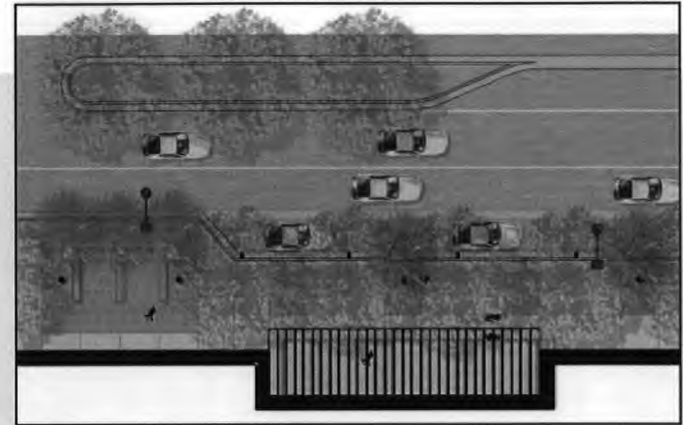
See Site Plan diagrams, streetscape and open space guidelines (page 18).

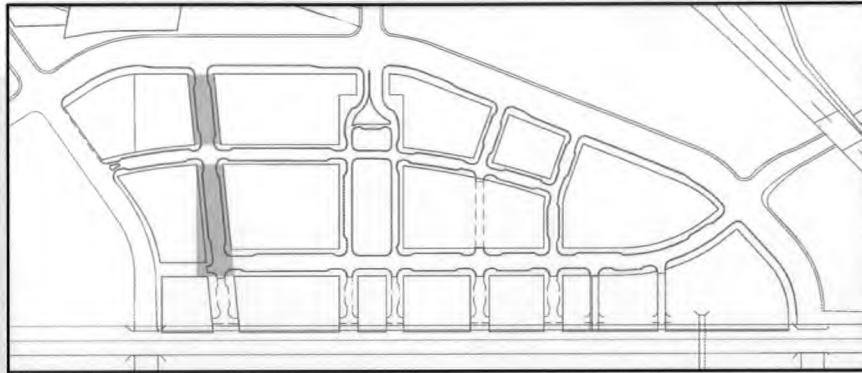


STREETSCAPE PALETTE



Refer to Appendix for Products Outline





West Clark Avenue defines Union Park's southern medical office district as an addressable, signature street. The generous pedestrian zone on the south side of this street forms a pedestrian esplanade. A series of small venues within this zone enhances West Clark Avenue as a canopied destination space, with places to gather in the shade around water or art.

INTENT

ANIMATED IDENTITY The streetscape reflects its proximity to Performing Arts and World Market, both arts-oriented facilities, with the use of sculptural furnishings, chic lighting techniques and a contemporary floor pattern. Sculptural tree forms, massed in groves along the length of the street, define the signature quality of the street. Clearings between tree groves provide opportunities for art and water.

REGIONAL FIT Desert context establishes a source for plant, paving and furniture selection. Paving systems are organized in blended desert hues. Regional tree species display ornamental characteristics but also benefit from low watering needs. Oversized pre-cast concrete seating elements expose light-colored desert sands and maintain a cool temperature.

COMFORT AND DESTINATION IN AN URBAN GARDEN The urban garden notion for this street suggests an elegant, stately,

and green environment. A continuous canopy of thriving urban trees establishes the leading garden component of the space, offering a cool place to gather in the shade.

ESPLANADE The street will function as a comfortable passage for those pedestrians moving to and from the city and destinations within and west of the Union Park development. These destinations include the Clark County Government Center, the World Market Center, the Las Vegas Outlet Mall and downtown uses.

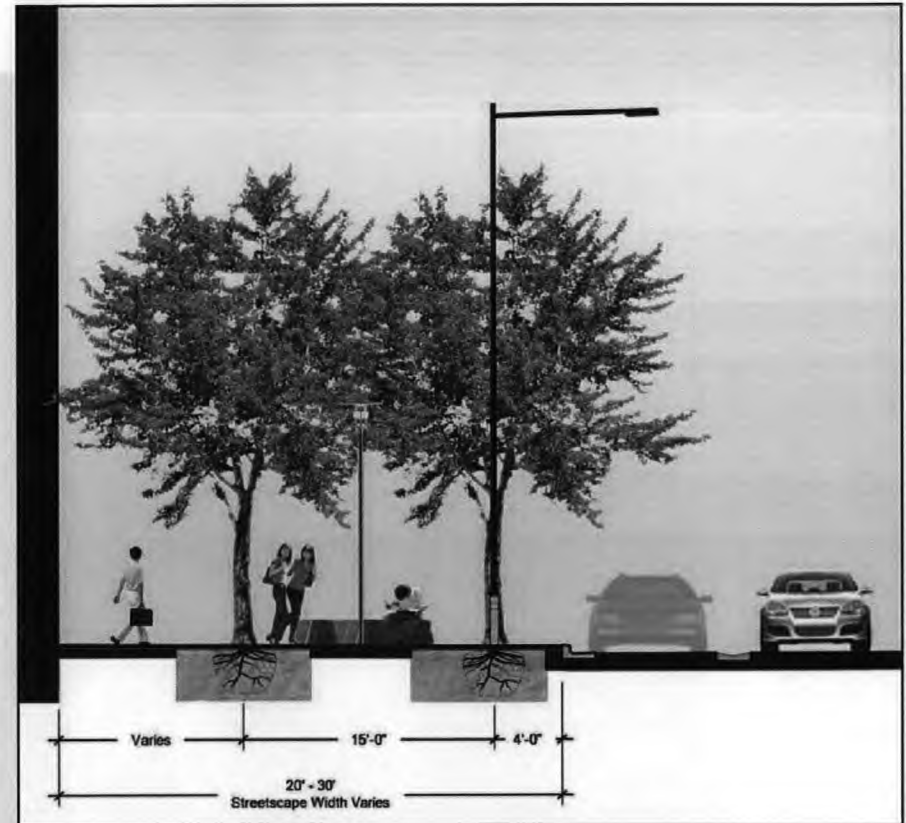
CENTERS Two key places will be developed along the length of the street: Serenity Square at the intersection area of West Clark Avenue and City Parkway, and Rejuvenation Place at the intersection of the West Clark Avenue and Union Park Promenade. These places will be defined by concentrating a mix of uses to establish centers within the office district. A rich sense of place may be developed here, with building emphasis, paving and other site amenities used to distinguish these areas.

REQUIRED

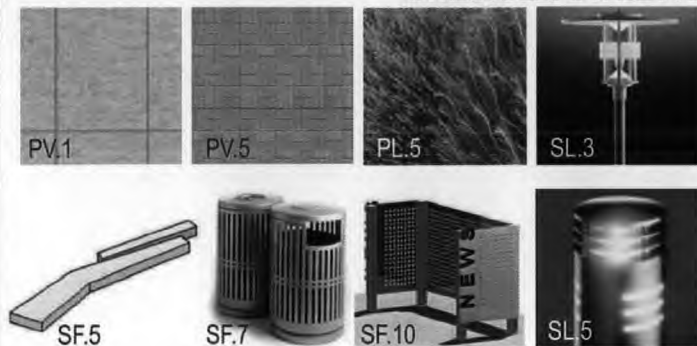
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RECOMMENDED

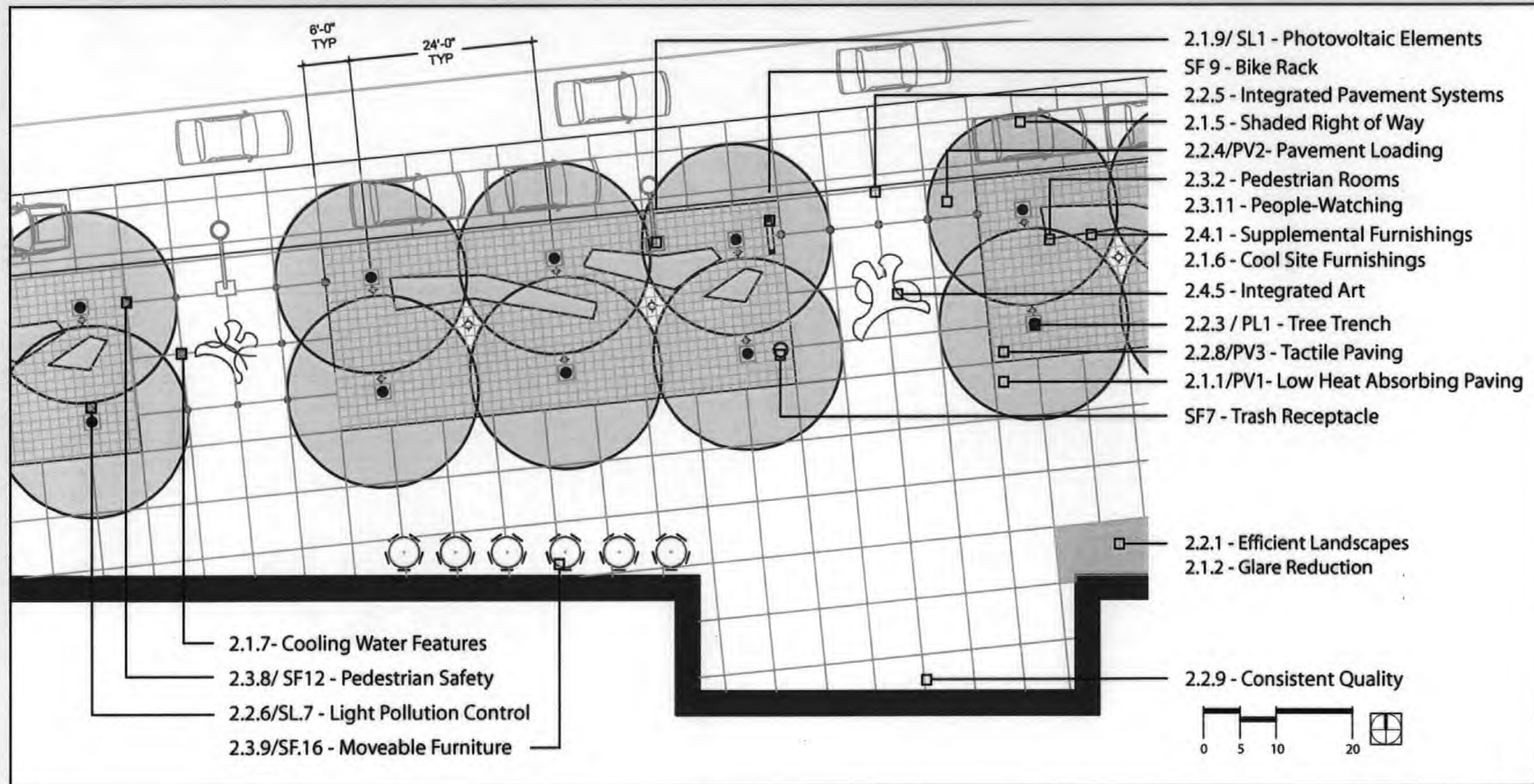
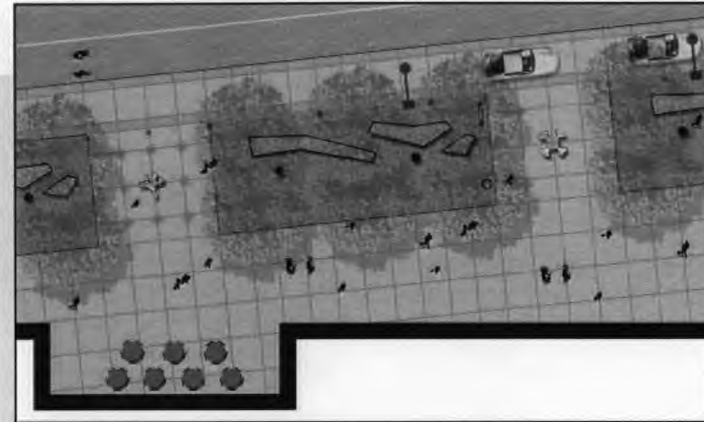
See Site Plan diagrams, streetscape and open space guidelines (page 18).



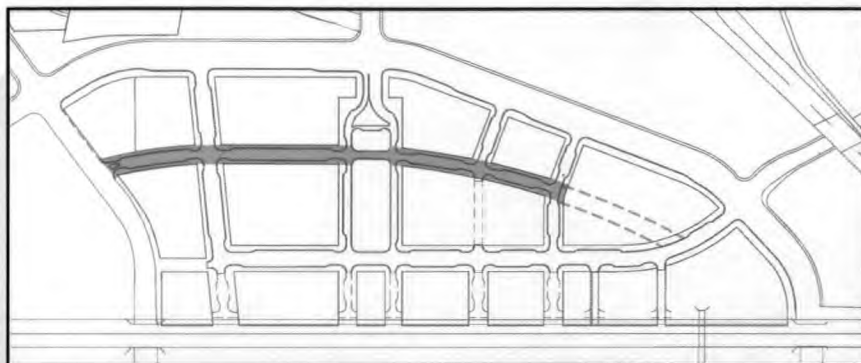
STREETSCAPE PALETTE



Refer to Appendix for Products Outline



2.8 Union Park Promenade



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Comfort, distinction and destination quality define this signature village space. Union Park Promenade exemplifies street life at Union Park. In celebration of a traditional event, the street may occasionally resemble a middle-eastern bazaar, thick with people, food and other goods, festooned with banners and fabric. On other days, Union Park Promenade will resemble a busy commercial street, bustling with everyday activities associated with a thriving urban neighborhood. On most days, the street will be enjoyed as a pleasant destination; the storefronts are always changing, the air is cooler and there are people to watch.

INTENT

PEDESTRIAN SPACE Union Park Promenade welcomes both automobiles and pedestrians, but feels more pedestrian than most streets, with subtle distinctions between the two realms.

SHADE AND COMFORT Street orientation, building massing, trellises, tree canopies and even a light-colored floor play a role in reducing heat absorption and temperature build-up.

REGIONAL CHARACTER Materials, colors and patterns may be used to create a stylized desert expression. Bursts of color celebrate the spectacular desert blooms.

ENDURING QUALITY The Union Park village will establish a new and consistent level of quality for downtown Las Vegas. Union Park Promenade will demonstrate that quality in the most concentrated fashion, where buildings and public spaces occur in a cohesive fashion.

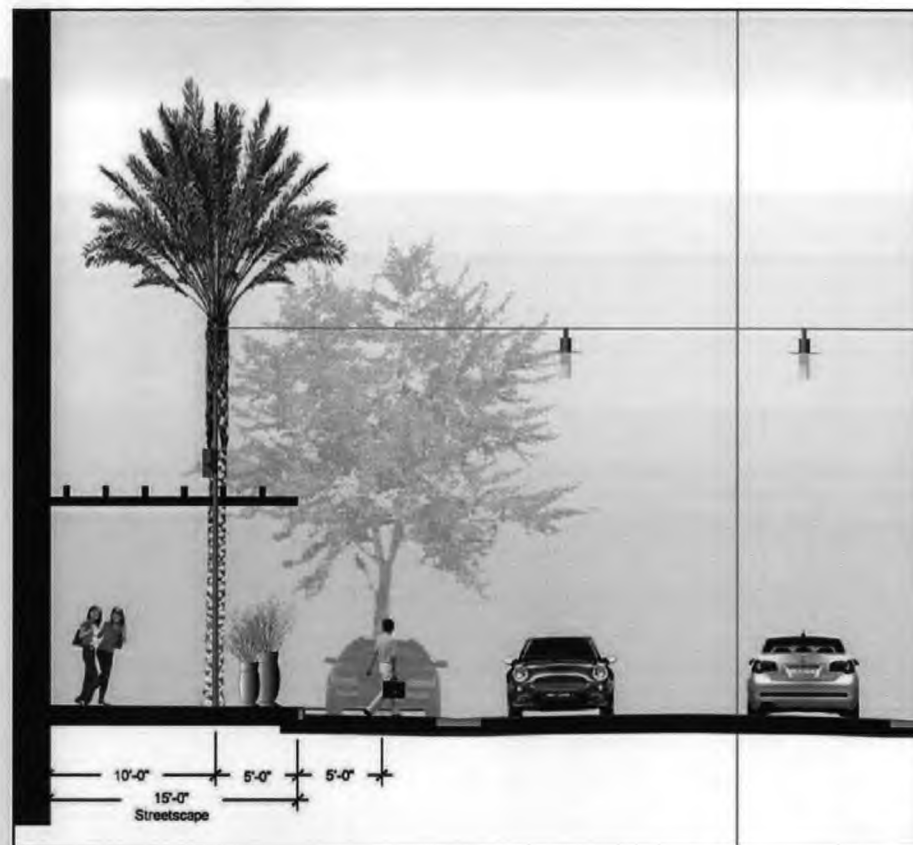
VARIETY While a fairly consistent set of streetscape improvements are intended for the Promenade, a variety of retail expressions are desirable. Storefront design, signage, shade structures and movable furniture will reflect the individual interests and themes of retailers, within the parameters established by these guidelines.

REQUIRED

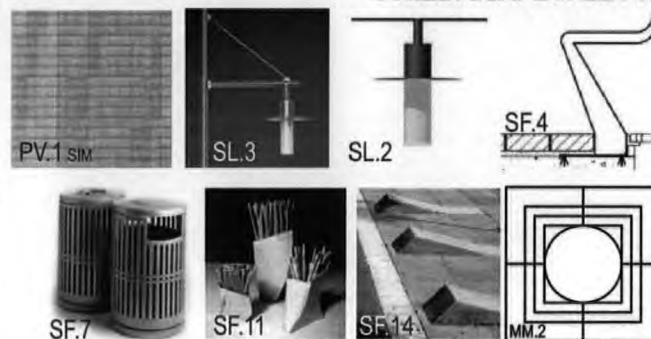
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RECOMMENDED

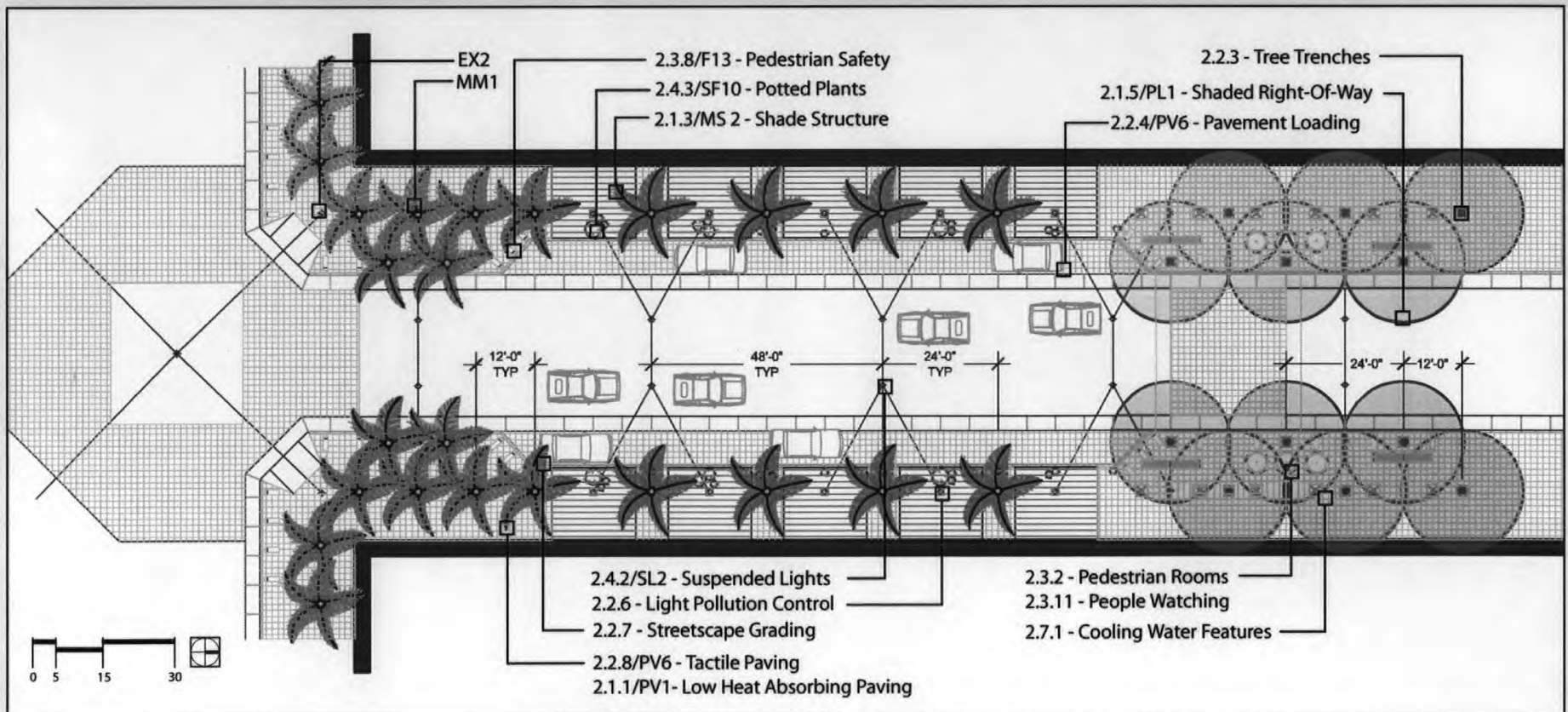
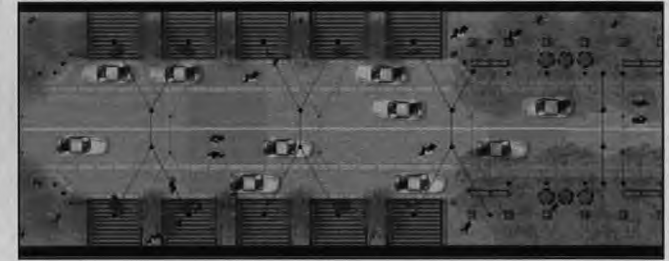
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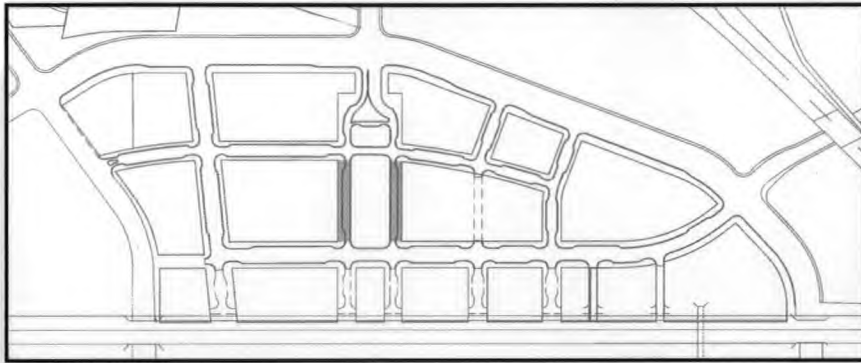
STREETSCAPE PALETTE



Refer to Appendix for Products Outline



2.9 Discovery Avenue – Flanking Park



Positioned as a grand forecourt for the Performing Arts Center, Symphony Park anchors the facility to the Lewis Street corridor and establishes the primary public space for Union Park. Serving both Union Park residents and city visitors, Symphony Park provides a variety of spaces scaled to accommodate a range of events and uses. While the primary spaces will be monumentally scaled to achieve a civic quality, other spaces within the park will be organized to provide intimacy and solar comfort. Tree and architectural canopy, water and landscape will be used for cooling effects.

INTENT

A PEDESTRIAN SPACE One way vehicle circulation loops the north and south faces of Symphony Park, establishing a counter-clockwise circulation that serves drop-off functions at the performing arts facility and minimizes the width of vehicular surfaces. By dividing traffic in this area, the park district is distinguished and made

more pedestrian-friendly. The floor to the space may be treated consistently across pedestrian and vehicular surfaces in order to further accentuate the special nature of this civic space.

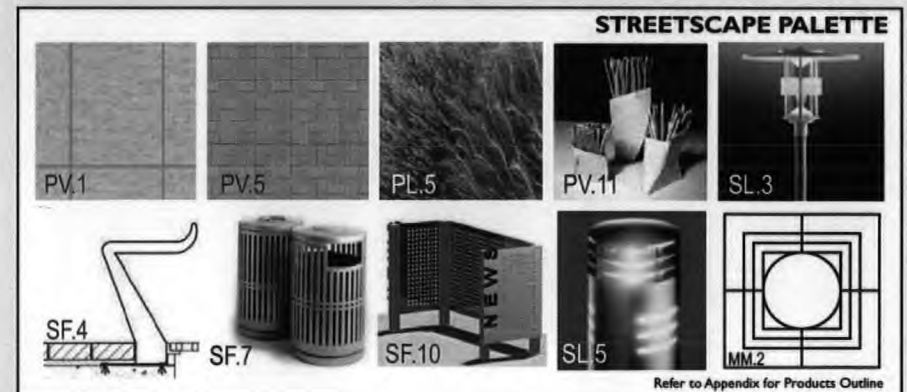
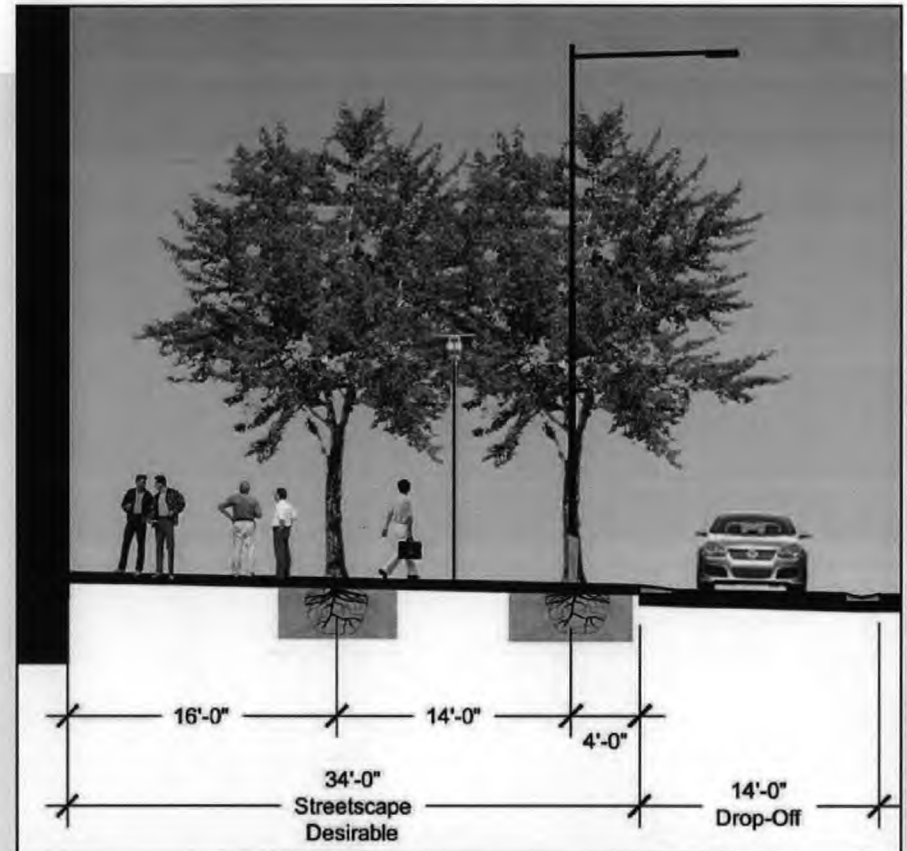
ACTIVE EDGES The park combines a set of large flexible open spaces with cool and intimate garden spaces that define its perimeter and allow people to gather and overlook the primary open spaces. The perimeter spaces also establish a promenade setting, allowing residents and guests the opportunity to stroll through a cool set of varied gardens, some of which may function as sculpture gardens.

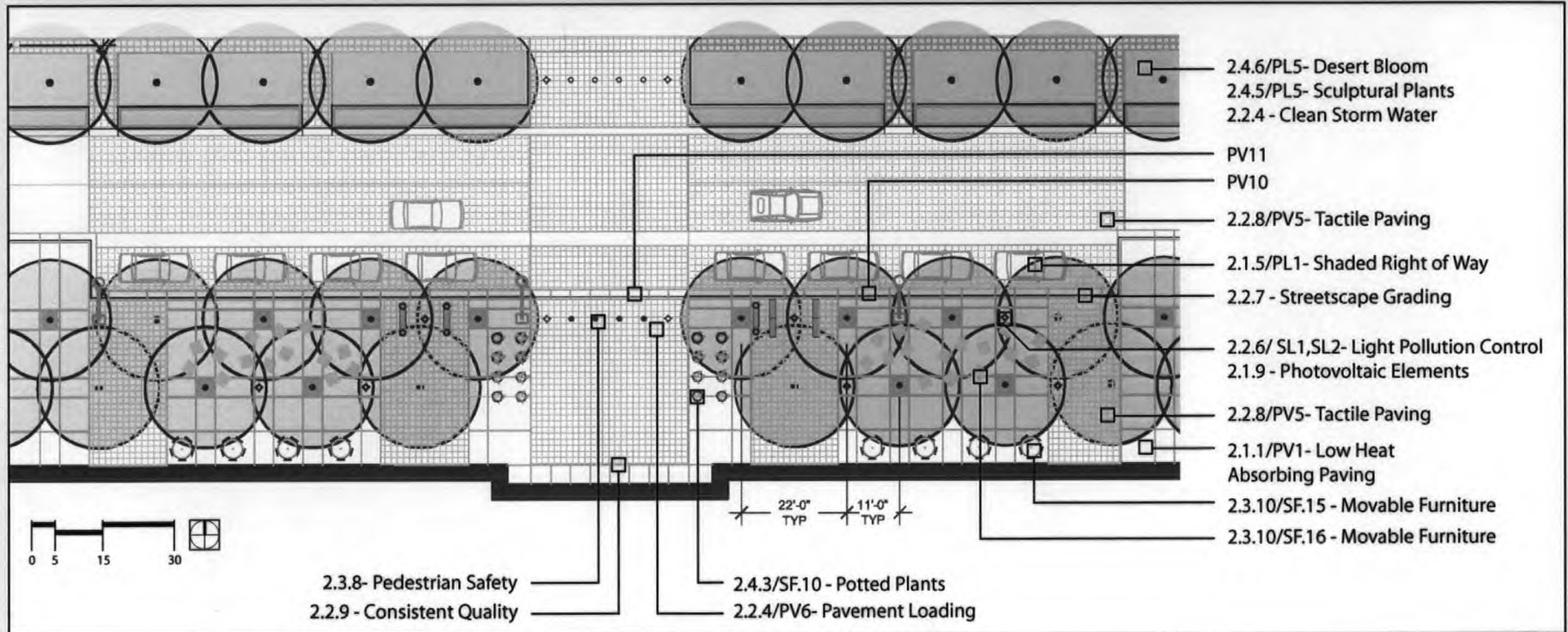
REQUIRED

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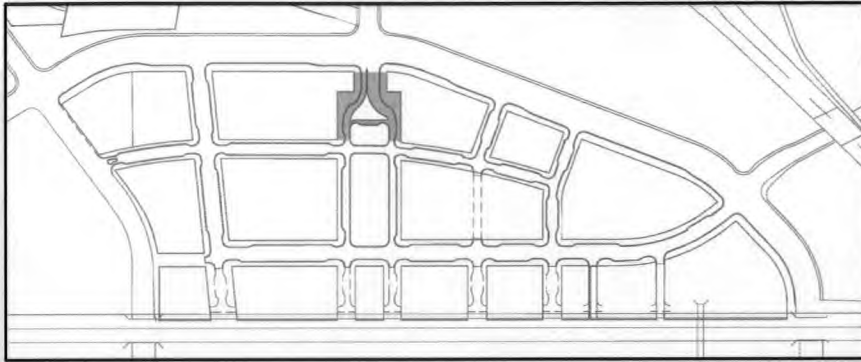
RECOMMENDED

See Site Plan diagrams, streetscape and open space guidelines (page 18).





2.10 Discovery Avenue (Entrance)



A distinctive and urbane identity will be important to the arrival experience at Union Park, offering a first impression that is grand but welcoming. Landscape and building definition combine to announce the village as a dense and exciting place, but one that offers the appeal of comfortable park and garden spaces that define the public realm of the urban community.

INTENT

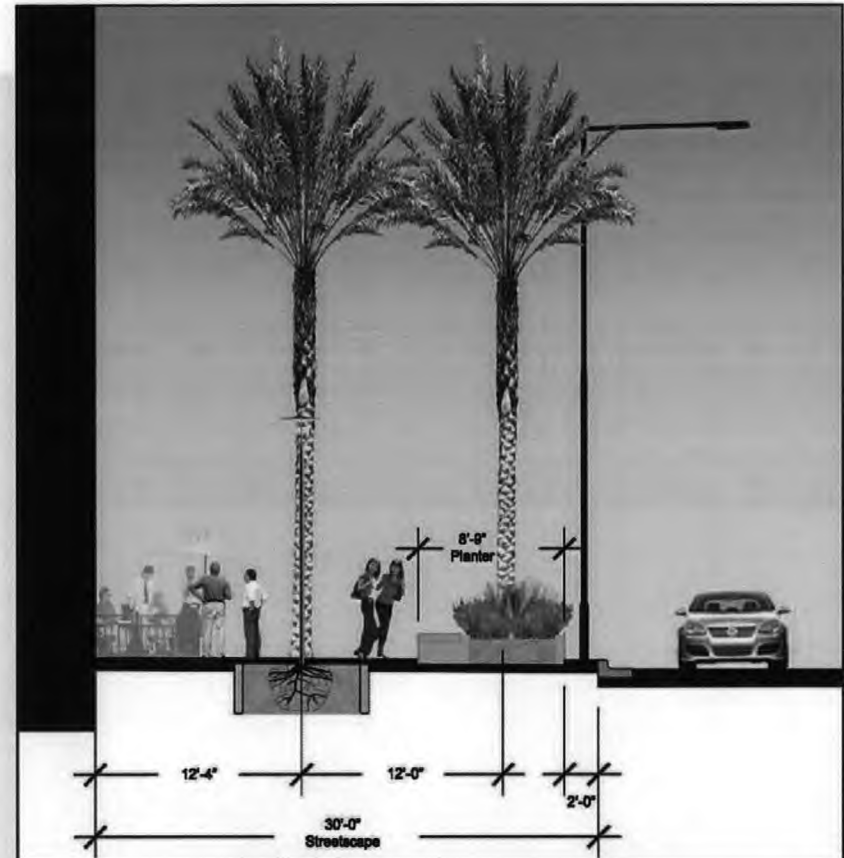
FIRST IMPRESSION The generous dimension of this street provides for functional vehicle movement, commits healthy pedestrian zones and allows views deep into the site. Both the Performing Arts Center and City Hall will be visible to drivers and pedestrians passing through this formal entrance to Union Park.

REQUIRED

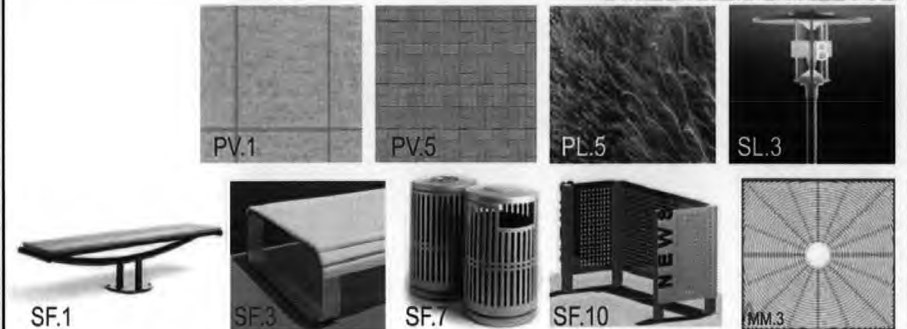
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RECOMMENDED

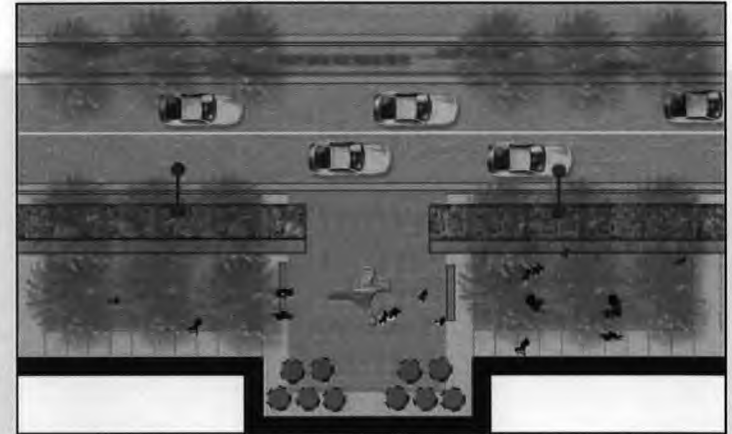
See Site Plan diagrams, streetscape and open space guidelines (page 18).



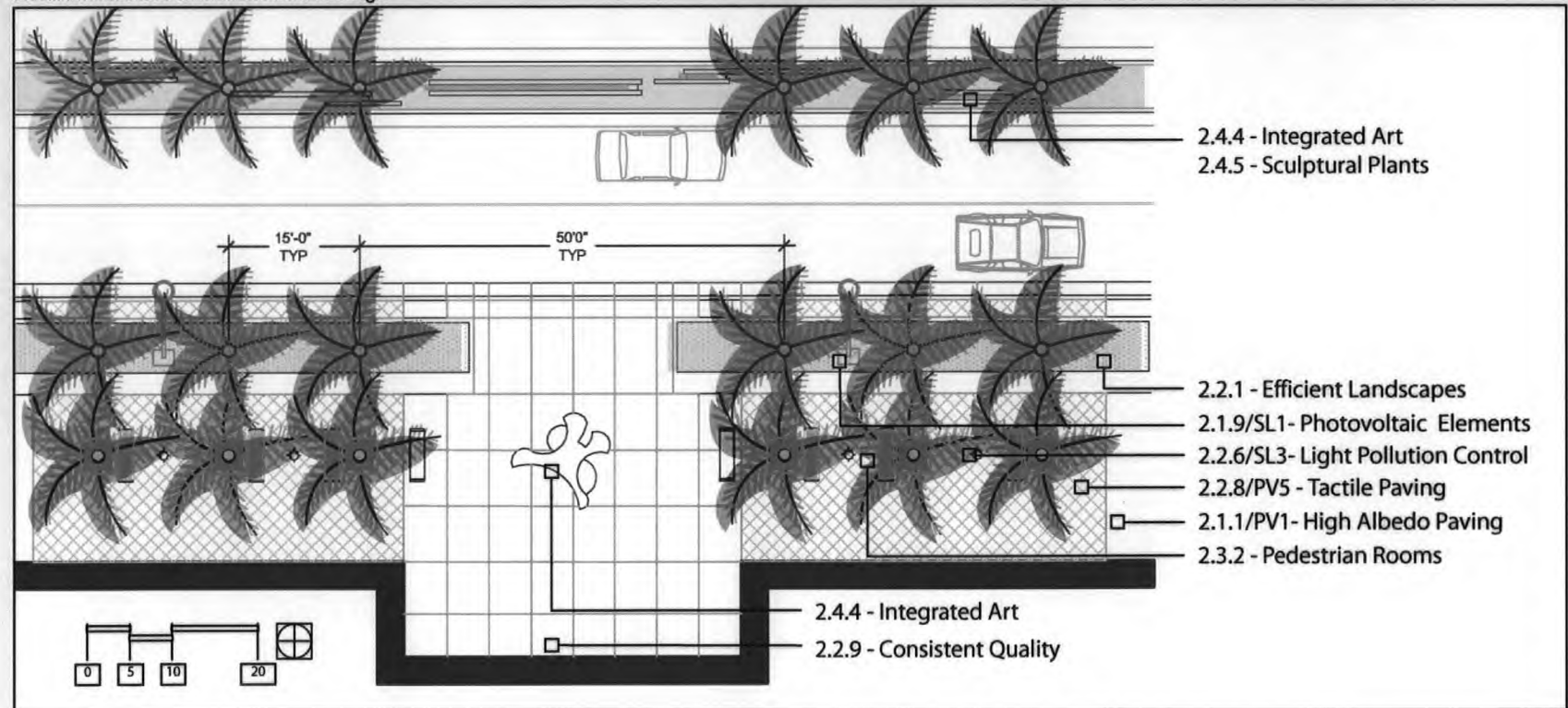
STREETSCAPE PALETTE



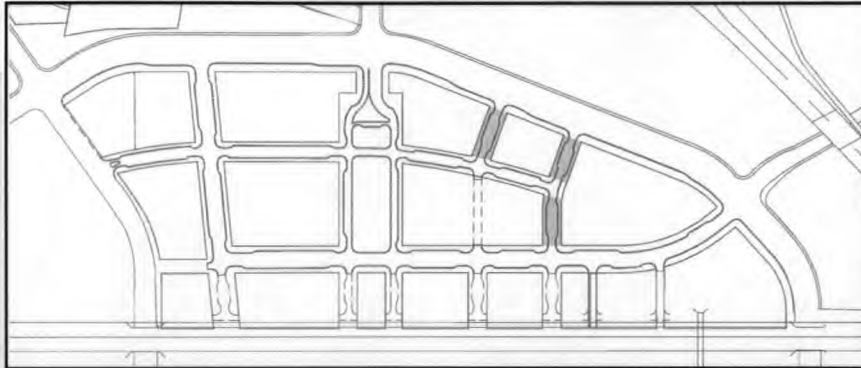
Refer to Appendix for Products Outline



Median width based on future schematic design.



2.11 West Bridger and West Carson Avenue



34

Great urban neighborhoods are defined by great streets. West Bridger and Carson Avenues rely upon an engaging relationship between ground-floor residential uses and the public streetscape. Here, the semi-public territory of the residence, defined by lobbies, building entries, stoops, patios and gardens are revealed to passersby as a means of activating the street and engaging residents in public life.

INTENT

NEIGHBORHOOD SCALE The sense of neighborhood is enhanced with a streetscape that is intimate, but comfortable to walk. Small gathering opportunities may be developed, e.g. where these streets meet Union Park Promenade. Solar influences result in an asymmetrical street section, apportioned to address objectives for summer shade and winter sun access.

CONTIGUITY As the extensions of Las Vegas' Bridger and Carson Streets, these

streets provide local access and connections through this site. While service and parking garage access may be provided from these streets, curb cuts will be minimized, limited to selected locations.

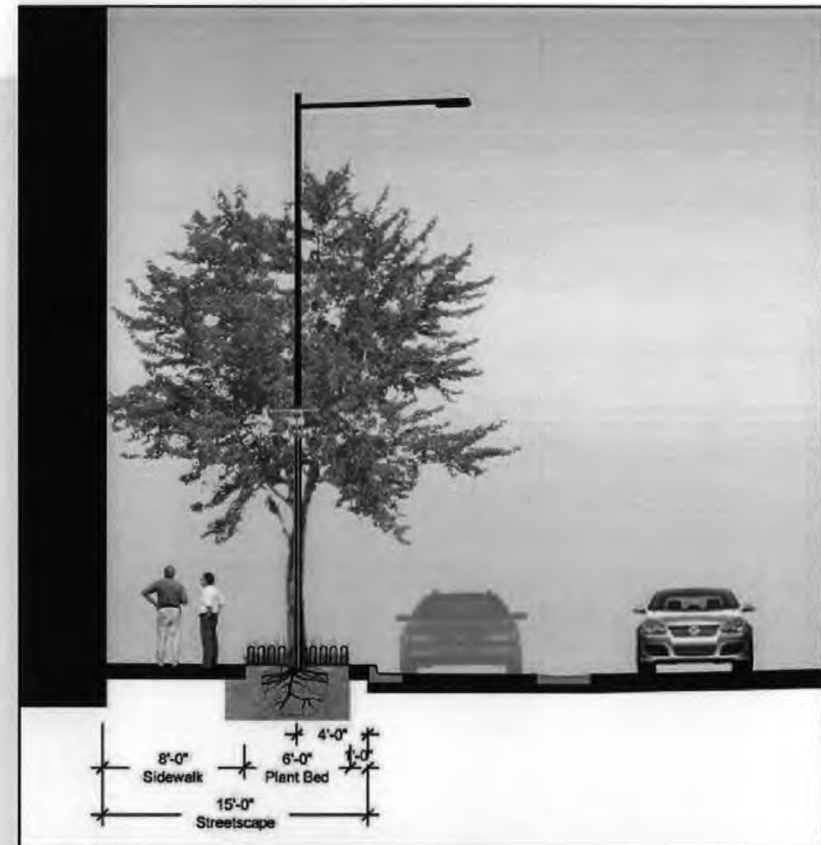
ORNAMENT Decorative details that such as low garden rails and perennial plantings are appreciated by residents. The role of art in customizing these components may be explored.

REQUIRED

See Site Plan diagrams, streetscape and open space guidelines (page 18), Site Materials and Components Matrix (pp. 42, 43), and Appendix with draft components, materials and plants.

RECOMMENDED

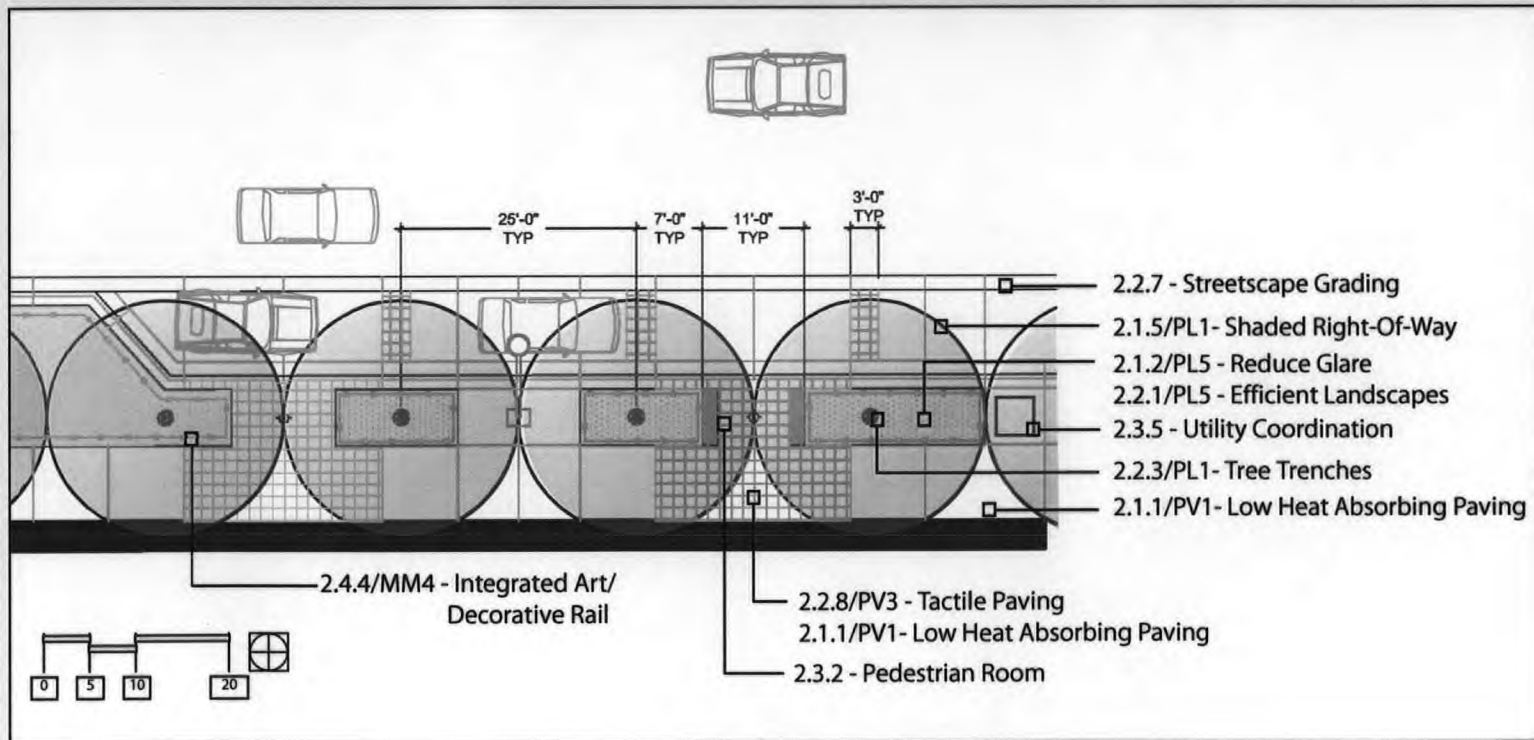
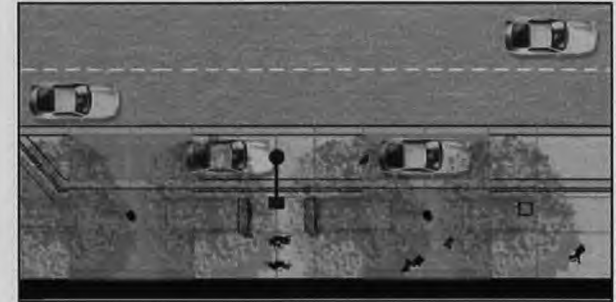
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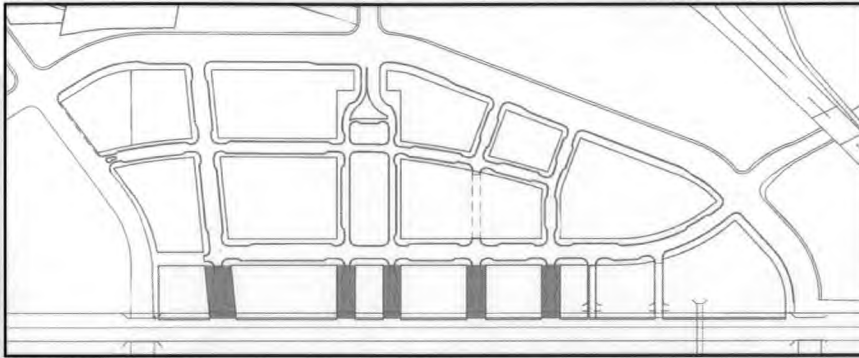
STREETSCAPE PALETTE



Refer to Appendix for Products Outline



2.12 Street Extensions (Private)



These streets are organized as “T” intersections at the railroad interface, providing access to a service and fire access road which parallels the rail corridor. This service road will be integrated with parking garages which abut the rail.

36

INTENT

NEIGHBORHOOD PLACES As local streets, these streets may play a role as neighborhood places. Minimal through-traffic may allow residents the opportunity to establish block party or other gatherings. As such, the streets are kept simple, but planned with a number of elements that humanize and give pedestrian scale to the street. Columnar trees are spaced to distinguish the space, and lights are suspended over the streets to further define the pedestrian scale.

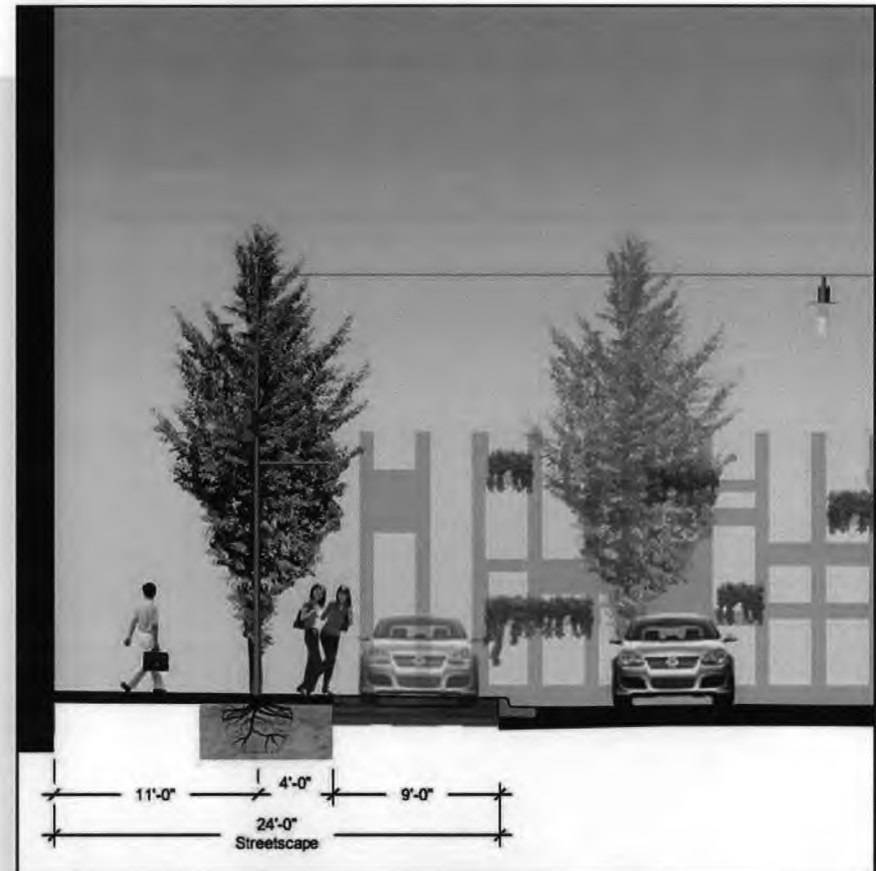
ELEGANT TERMINUS A concrete court at the end of the street allows auto and fire truck turning radii, but also calls subtle attention to the area as a pedestrian space. Bollards, columnar trees and an architectural screen define and mitigate the rail edge of the space, providing an appealing terminus, and an opportunity for art.

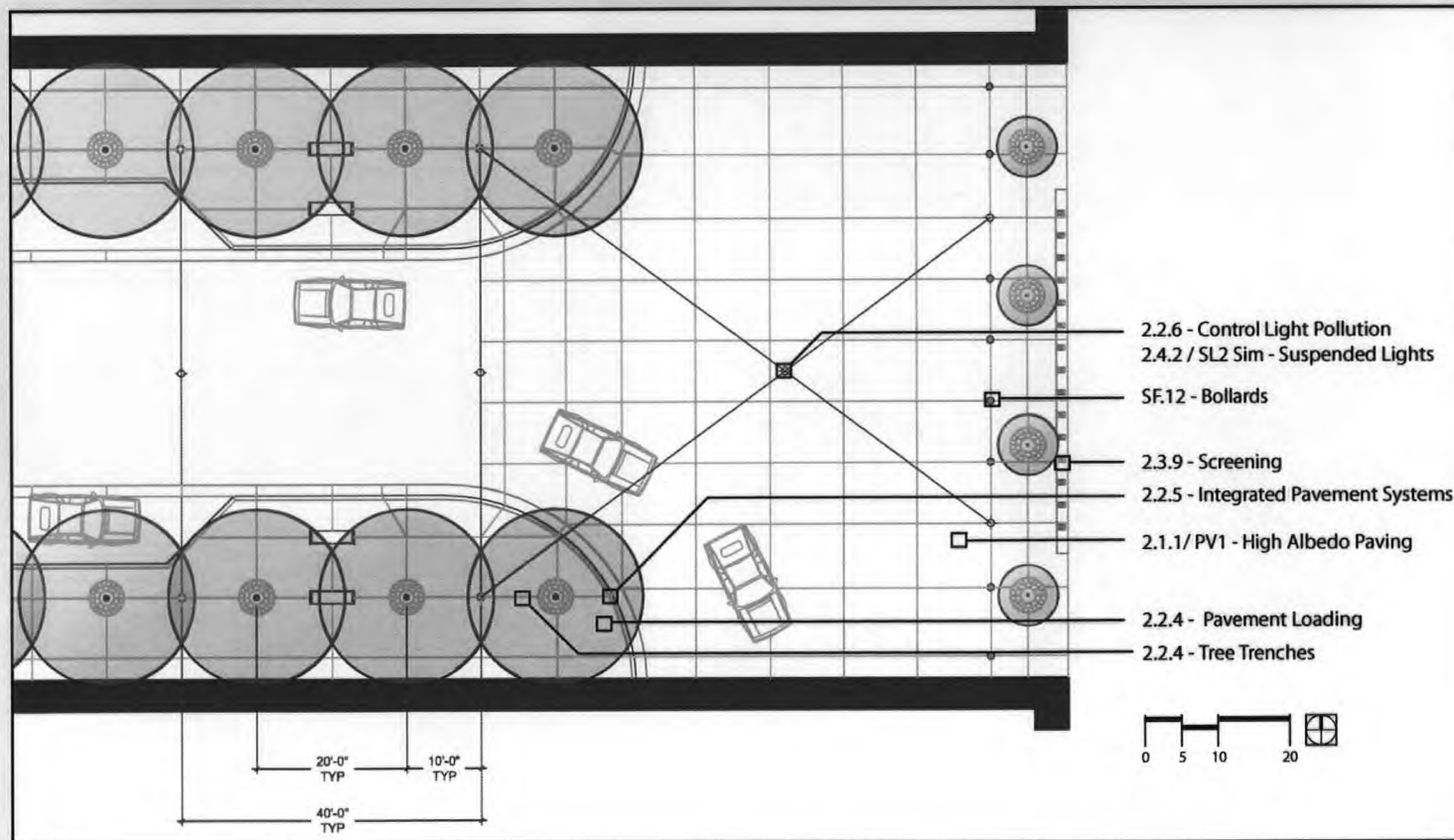
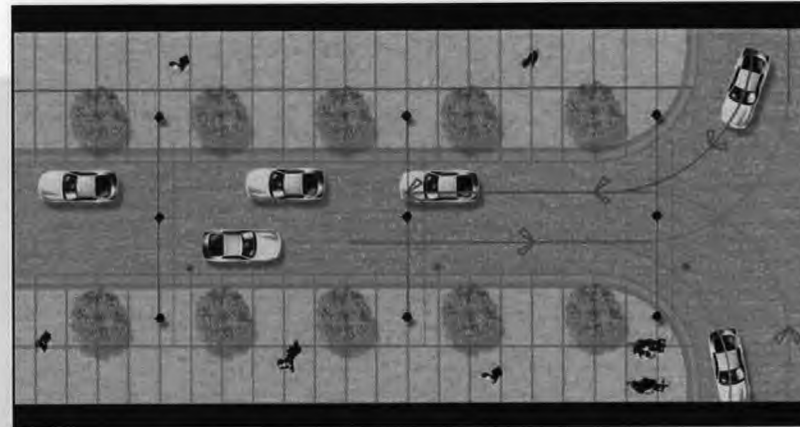
REQUIRED

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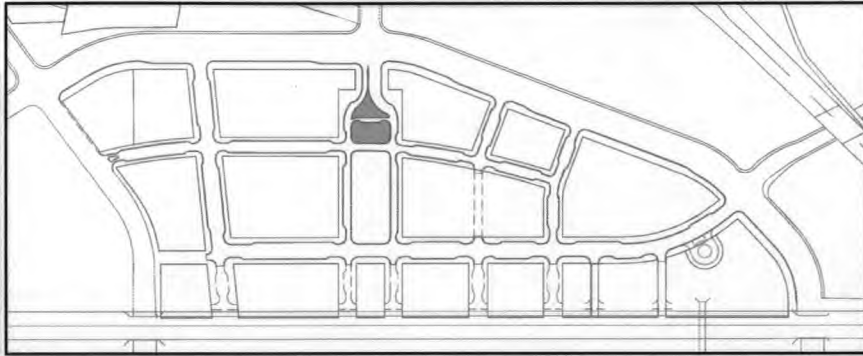
RECOMMENDED

See Site Plan diagrams, streetscape and open space guidelines (page 18).





2.13 Symphony Park Forecourt



INTENT

WOW FACTOR An impressive palm grove envelopes an intimate fountain centerpiece, beckoning attention from passersby and offering a filtered view to the development beyond. While visually dramatic, this area is intended to be less active than Symphony Park, potentially offering a more contemplative experience for residents and visitors.

Retail kiosks may be positioned along the Promenade edge, reinforcing the importance and continuity of that important pedestrian street.

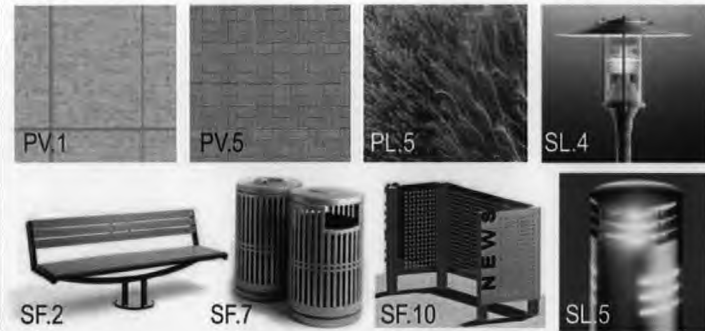
REQUIRED

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RECOMMENDED

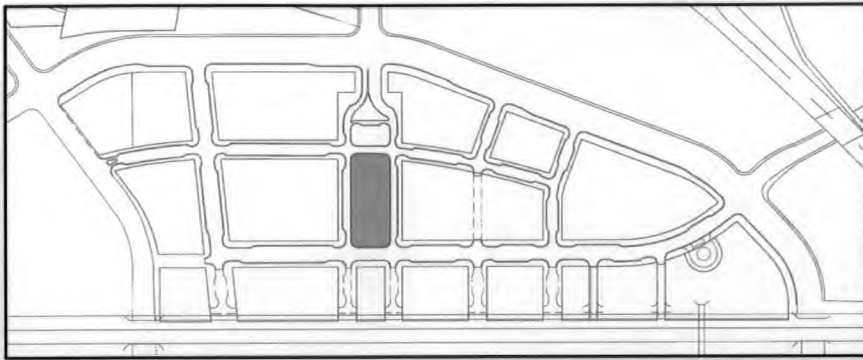
See Site Plan diagrams, streetscape and open space guidelines (page 18).

OPEN SPACE PALETTE



Refer to Appendix for Products Outline





INTENT

CELEBRATE THE ARTS The park will be infused with the energy and attributes of both performance and figurative arts. An informal outdoor performance zone can host scheduled or impromptu events that are linked with the performing arts facility. Sculpture gardens, sound and literary gardens and lyrical use of water may be considered. Night lighting will play an important role in complementing the drama of theatrical settings.

COMMUNITY GATHERING Green space will be important to urban residents in the heat of the desert. Opportunities for strolling, dog walking and informal play and recreation enhance the livability of the village. A promenade defines and frames the outer edge of the park. The promenade is punctuated by gardens and small gathering areas which overlook the primary open space.

SUSTAINABILITY Sustainable landscape practices will be developed both as a responsible practice and as an educational tool. These practices may include storm water control and cleaning, material reuse, photovoltaic power, drought-resistant landscape, and urban heat island reduction.

RETAIL DESTINATION Union Park has been developed as a street-fronting,

outdoor-oriented retail destination. Retail uses at Symphony Park are planned to complement the street retail experience with a set of restaurant or other specialty kiosks, designed as a set of transparent, gem-like buildings in the park. These components may occur at each end of the park, overlooking the primary open space.

REQUIRED

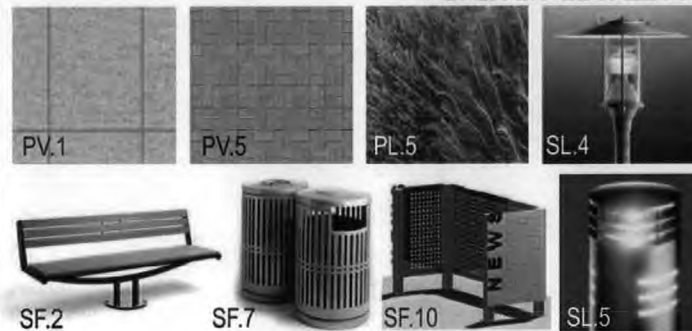
See Site Plan diagrams, streetscape and open space guidelines (page 18), Site Materials and Components Matrix (pp. 42, 43), and Appendix with draft components, materials and plants.

RECOMMENDED

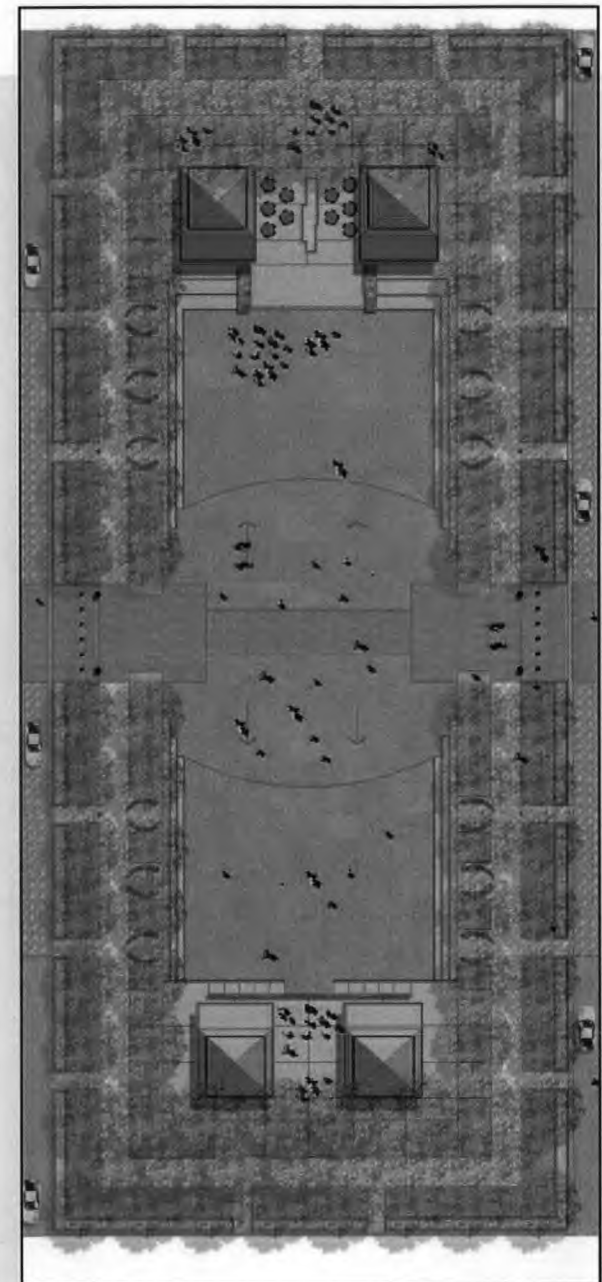
See Site Plan diagrams, streetscape and open space guidelines (page 18).



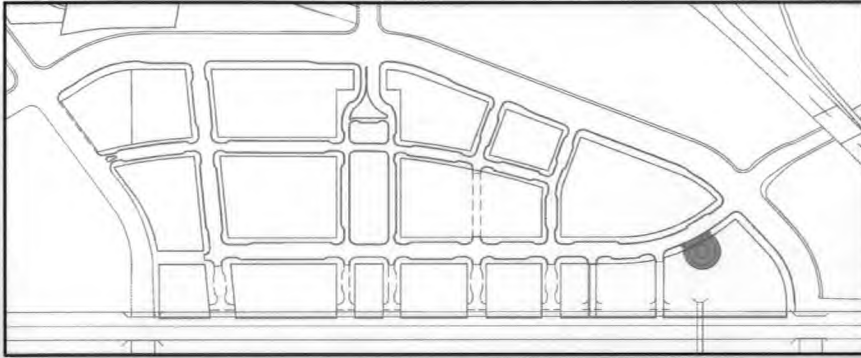
OPEN SPACE PALETTE



Refer to Appendix for Products Outline



2.15 Gateway Plaza



Gateway Plaza establishes an important pedestrian connection between Union Park and downtown Las Vegas, linking the energy and activity of the Fremont Street Experience and Union Park Promenade. The plaza will also organize entertainment-related development in this area by acting as a forecourt and automobile drop-off.

INTENT

SCALE AND FUNCTION While the plaza may need to accommodate a significant number of automobiles, taxis and limousines, it should also be designed for pedestrian comfort and scale. Several opportunities exist in pursuing this objective. The streetscape at Grand Central Parkway should occur along the western side of the plaza as continuously as possible, interrupted only by one-way auto access and egress.

The perimeter of the plaza should be developed as a continuous pedestrian environment, with active ground-floor building uses, architectural shade structures, trees and other landscape, special paving and seating elements. And finally, a significant centerpiece focal point should mark the plaza as a special place

in the city, scaled for visibility from both Fremont Street and Union Park Promenade. This component should be accessible to pedestrians, and may include art, water and landscape.

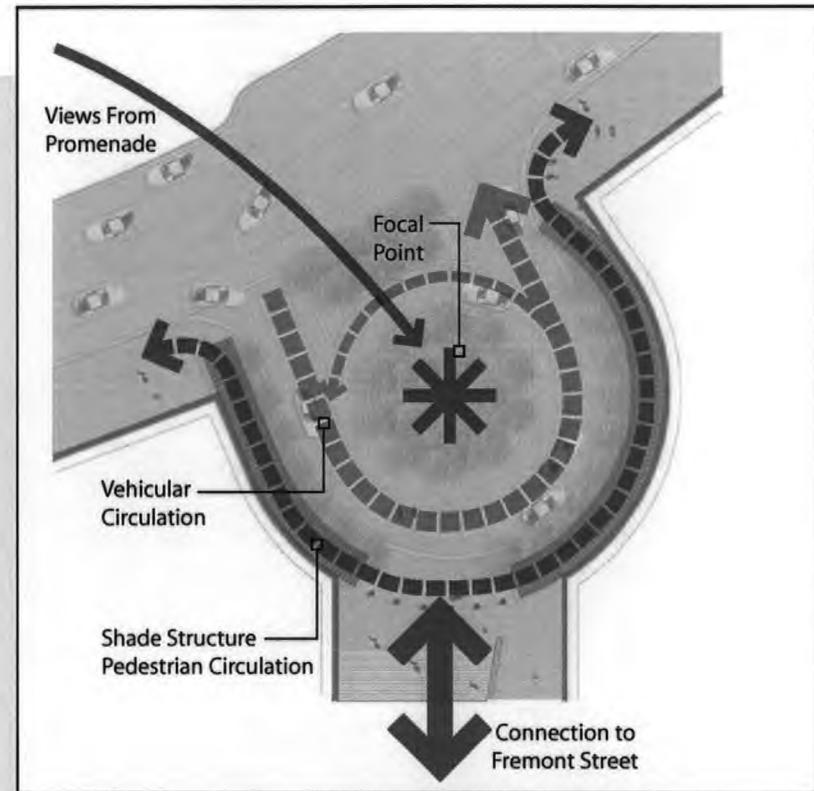
CONNECTIONS Pedestrian connections to Fremont Street will require a pedestrian bridge. The bridge presents an iconic opportunity to celebrate the crossing, establish a destination space, and offer upper-level building connections. A monumental stair, potentially accompanied by escalator and elevator service to accommodate handicapped and other users, should be designed integrally with the plaza. A shade structure is desirable in this area, and may be designed to complement the Fremont Street canopy. Cross-street connections to Union Park Promenade are equally important.

REQUIRED

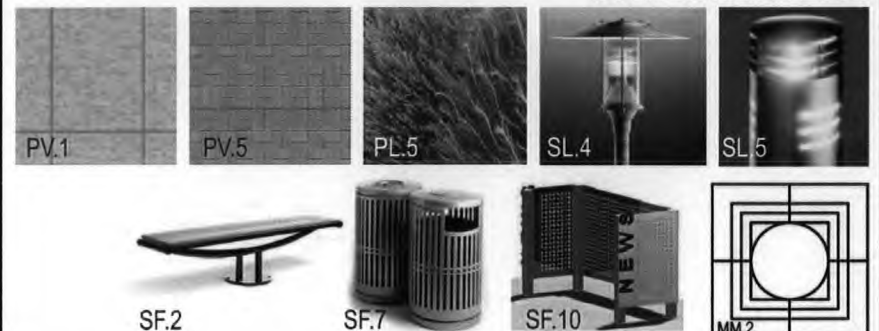
See Site Plan diagrams, streetscape and open space guidelines (page 18), Site Materials and Components Matrix (pp. 42, 43), and Appendix with draft components, materials and plants.

RECOMMENDED

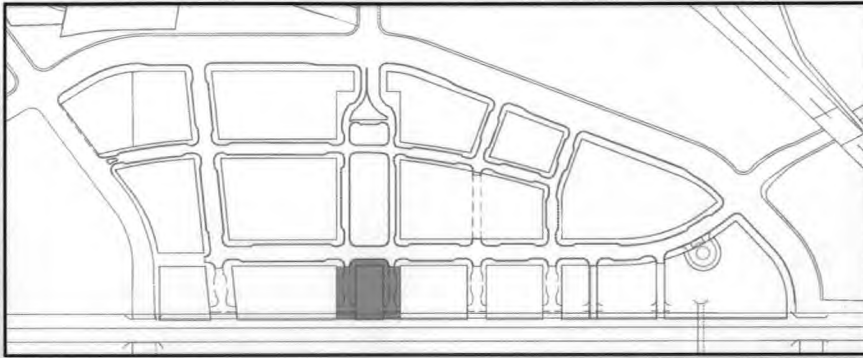
See Site Plan diagrams, streetscape and open space guidelines (page 18).



OPEN SPACE PALETTE



Refer to Appendix for Products Outline



A series of steps, plazas and terraces establish a destination-oriented railroad crossing for pedestrians. Water, landscape, shade structures and active building edges create a distinctive and comfortable set of public spaces.

INTENT

FRIENDLY GRADE TRANSITION On two levels, these plazas gain twenty-nine vertical feet to accommodate pedestrian circulation over the Union Pacific tracks, allowing connections to second- and third-floor building uses. A fifteen-foot intermediate level is positioned centrally to allow views across the tracks between Union Park and downtown.

Two pedestrian bridges link the City Hall Plazas to The Crossing, framing an opening down to the railroad tracks below. Opportunities to view trains from a set of

projecting perches may be developed. The train is an important component of the settlement of the west and should be celebrated.

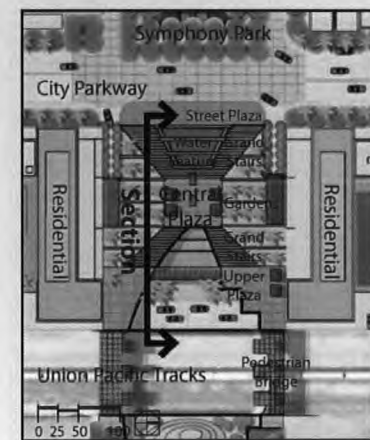
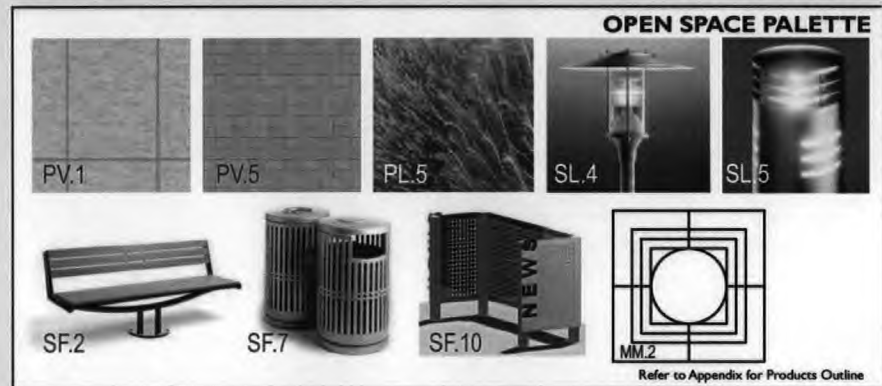
CELEBRATED SPACE Water is used both as a linking device and to celebrate and accentuate the vertical dimensions of the crossing. Kiosks may be used for shade and as an extension of the retail environment organized within Symphony Park. Soft green spaces may be developed with rolling topography as relief from the pervasive hardscape nature of the city.

REQUIRED

See Site Plan diagrams, streetscape and open space guidelines (page 18), Site Materials and Components Matrix (pp. 42, 43), and Appendix with draft components, materials and plants.

RECOMMENDED

See Site Plan diagrams, streetscape and open space guidelines (page 18).



	Street Role	Layout Module	Street Trees	Ground Plane (Paving & Plantings)	Lighting Street	Lighting Pedestrian	Lighting Accessory	Furnishing Seating	Furnishing Trash	Furnishing Newspaper	Furnishings Bollards	Furnishings Tree Grates	Opportunities for Art and Water
Grand Central Parkway Page 22	- Move Traffic - Western Face of Village - Seamless Interface with Existing Public Streetscapes	12' Module	Palms 24' OC Deciduous Trees 24' OC	Scored Concrete - 30% Special Paving - 5% Plantings - 65%	A 72' Spacing	A 24' Spacing		A				A	
City Parkway Page 24	- Move Traffic - Retail Oriented	12' Module	Palms 12' OC & 52' OC Deciduous Trees 24' OC	Scored Concrete - 60% Special Paving - 20% Plantings - 20%	A 72' Spacing	B 24' Spacing		C	A	A		A	Pots Planters
West Clark Avenue Page 26	- Move Traffic - Major Office Address	12' Module	Deciduous Trees 24' OC	Scored Concrete - 60% Special Paving - 40%	A 72' Spacing	B 24' Spacing	A	A	A	A	A 12' Spacing		Pots Planters
'Union Park' Promenade Page 28	- Identity of Village - Pedestrian and Retail Oriented - Entrances to Building Lobbies	12' Module	Palms 12' OC & 24' OC Deciduous Trees 15.5' Triangulated	Special Paving - 100%	B 24' Spacing	C 24' Spacing	B	A	A	A	A & B 12' Spacing	A	
Discovery Avenue - Entrance Page 32	- Main Entry to Village - Retail and Cafe/Dining Oriented	15' Module	Palms 15' OC	Scored Concrete - 20% Special Paving - 80% Plantings - 20%	A 75' Spacing	A 30' Spacing	A	A	A	A	A 15' Spacing	A	Pots Planters
Discovery Avenue - Park Page 30	- One-way Circulation Around Park - Preferring Arts Center, Residential and Hotel Oriented	24' Module	Deciduous Trees 24' OC	Scored Concrete - 50% Special Paving - 25% Plantings - 25%	A 72' Spacing	A 24' Spacing		A	A	A	A 12' Spacing	A	Pots Planters
Neighborhood Streets Page x	- Move Traffic - Access to Parking/Services - Entrance to Building Lobbies	25' Module	Deciduous Trees 25' OC	Scored Concrete - 35% Special Paving - 35% Plantings - 30%	A 78' Spacing	B 25' Spacing		A	A	A			Pots Planters
East End Streets Page 36	- Access to Parking/Services - Entrance to Building Lobbies	25' Module	Deciduous Trees 25' OC	Scored Concrete - 80% Special Paving - 20%	A 78' Spacing	B 25' Spacing	B	C	A	A			Pots Planters

	Open Space Role	Layout Module	Street Trees	Ground Plane (Paving & Plantings)	Lighting Street	Lighting Pedestrian	Lighting Accessory	Furnishing Seating	Furnishing Trash	Furnishing Newspaper	Furnishings Bollards	Furnishings Tree Grates	Opportunities for Art and Water
Symphony Park Page 38-39	- Built off of Discovery Avenue (Park) Streetscape - Grand Civic Space for Union Park	15' & 24' Module	Palms 24' OC Deciduous Trees 24' OC	Scored Concrete Special Paving Plantings	A 72' & 75' Spacing	A 24' Spacing		B Bench	A Trash	A Newspaper	A 12' Spacing		Pots Planters
The Crossing Page 42	- Built off of City Parkway Streetscape - Provides Elevation Gain for Rail Crossing - Link Between Union Park and Existing Lewis Street Civic Corridor	24' Module	Palms 12' OC & 52' OC Deciduous Trees 24' OC	Scored Concrete Special Paving Plantings	A 72' Spacing	A 24' Spacing		B Bench	A Trash	A Newspaper	A 12' Spacing	A Tree Grate	Pots Planters
Gateway Plaza Page 43	- Built off of City Parkway Streetscape - Link Between Union Park and Fremont Street - Formal Entrance to Casino/Entertainment Center	12' Module	Deciduous Trees 24' OC	Scored Concrete Special Paving Plantings	A 72' Spacing	A 24' Spacing		A Bench	A Trash	A Newspaper	A 12' Spacing	A Tree Grate	Pots Planters

2.18 Site Maintenance

INTENT

- *To ensure that all landscape and hardscape areas remain healthy, attractive and safe.*

REQUIRED

2.17.1

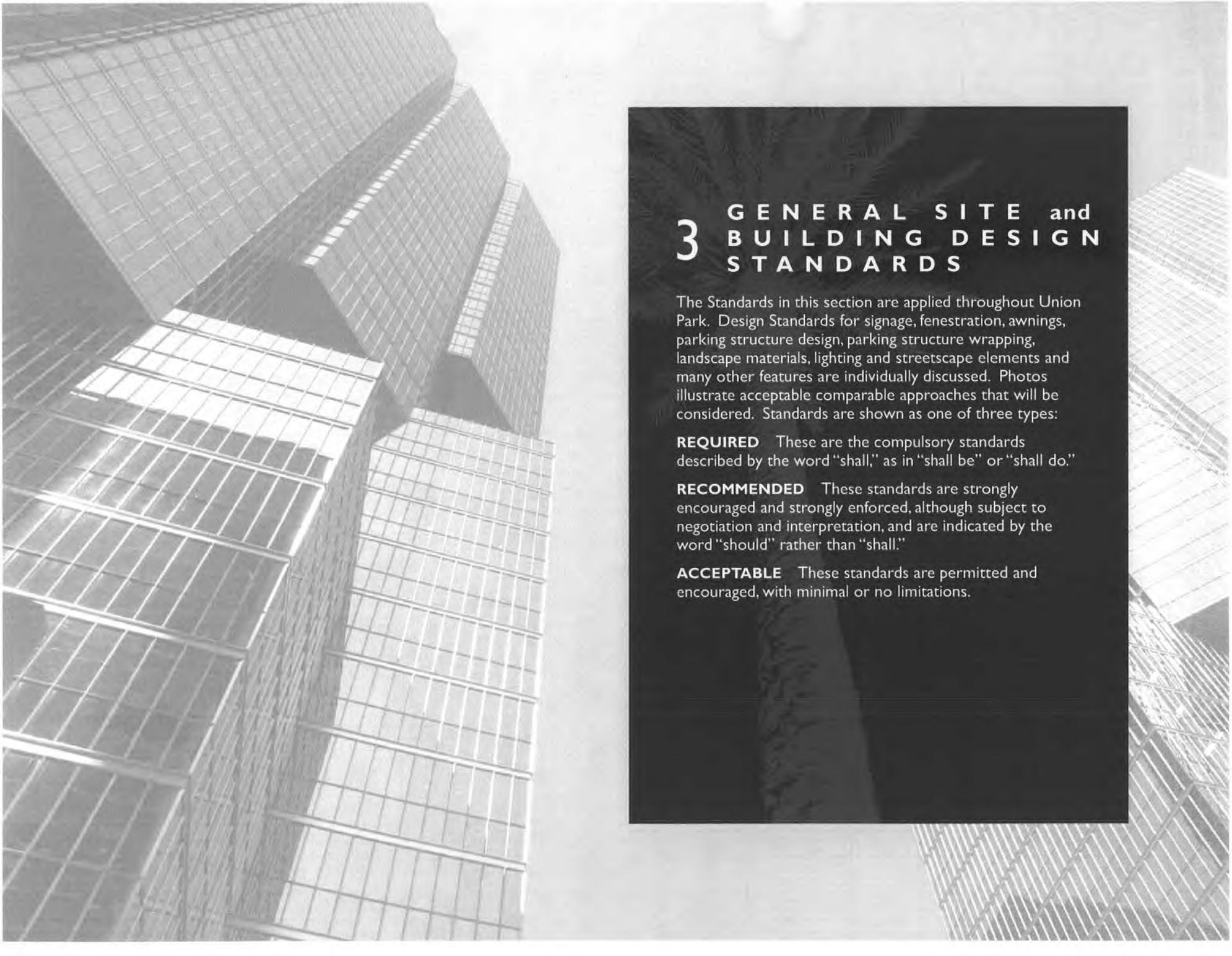
A maintenance plan, including ongoing tasks and replacement schedules shall be prepared for all landscape and hardscape areas. This plan shall include:

Litter pickup
Cleaning of surfaces
Mowing of turf
Weeding planting beds
Sweeping
Replacement of dead or dying plant material
Irrigation repair and adjustments
Repair and/or replacement of damaged or severely weathered paving, benches, and other streetscape elements, signage and light fixtures.

2.17.2

The owner/manager of each project shall engage the services of qualified maintenance personnel to perform the described maintenance, upkeep and repair of all the items described above, in accordance with the maintenance plan.





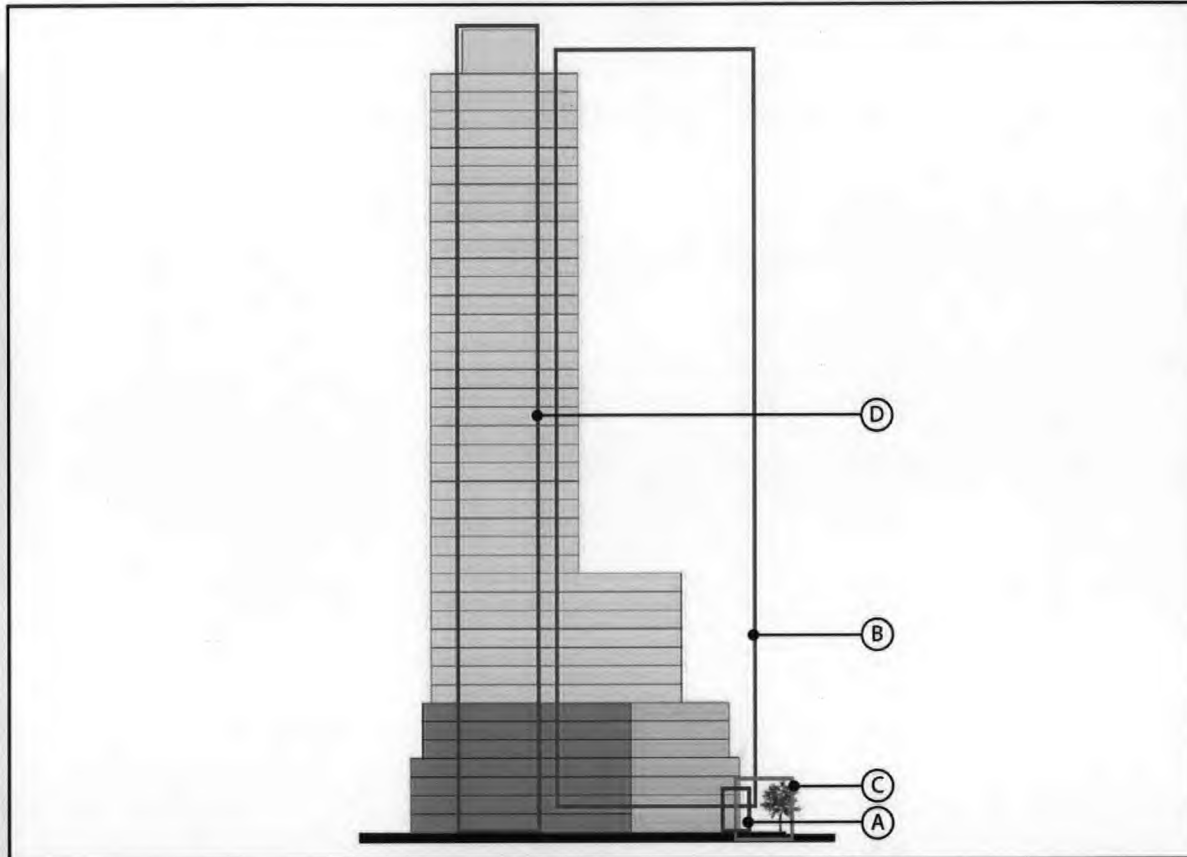
3 GENERAL SITE and BUILDING DESIGN STANDARDS

The Standards in this section are applied throughout Union Park. Design Standards for signage, fenestration, awnings, parking structure design, parking structure wrapping, landscape materials, lighting and streetscape elements and many other features are individually discussed. Photos illustrate acceptable comparable approaches that will be considered. Standards are shown as one of three types:

REQUIRED These are the compulsory standards described by the word "shall," as in "shall be" or "shall do."

RECOMMENDED These standards are strongly encouraged and strongly enforced, although subject to negotiation and interpretation, and are indicated by the word "should" rather than "shall."

ACCEPTABLE These standards are permitted and encouraged, with minimal or no limitations.



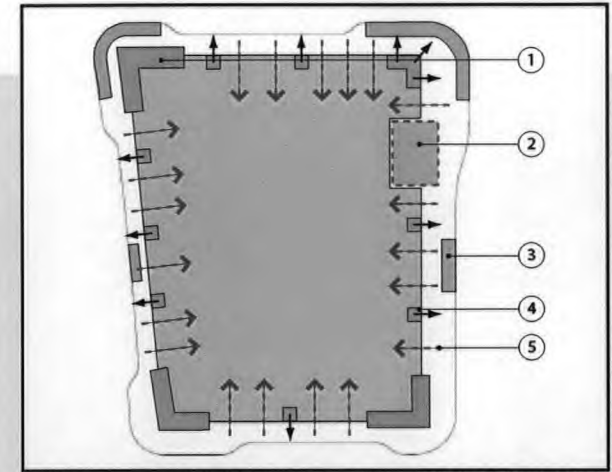
There are a set of basic urban design principles that provide the foundation for all architectural design and site planning in Union Park. The detailed Design Standards that are illustrated in the later pages of this section are summarized here to illustrate how they work together to create lively mixed use districts. They consist of building and site concepts that illustrate:

A. BUILDING/STREET/PEDESTRIAN INTERACTION

B. BUILDING SETBACKS AND STREET WALLS

C. PEDESTRIAN SIDEWALK ZONES

D. ARCHITECTURAL EXPRESSION



A. BUILDING/STREET/PEDESTRIAN INTERACTION

The success of Union Park in its architectural design begins with the positive relationship of the building to the sidewalk. Definition of building corners, entries and storefront to the sidewalk are highlighted here.

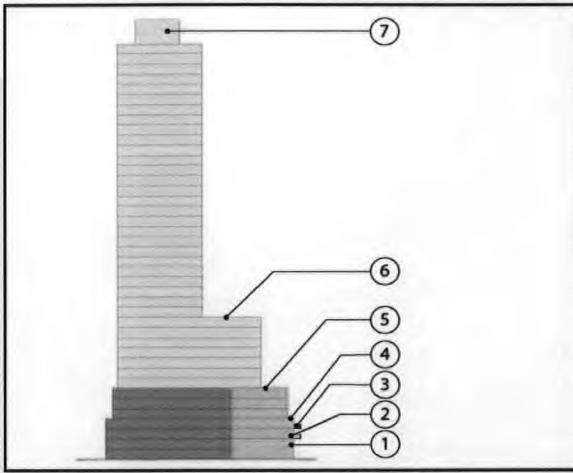
1 – Emphasize Corners: The corners of the blocks should have special prominence in the form of towers, street walls along build-to lines at the back of the sidewalk. (see section 3.13 Building Articulation)

2 – Building Articulation/Setbacks: to create outdoor active use areas to enhance the pedestrian environment.

3 – Pedestrian Rooms: On the sidewalk, as zones where walkers can find a refuge, sit and rest or wait for someone. (see Chapter 2.0 Streetscape and Open Space)

4 – Building Entrances: Oriented to the street and pedestrian environment, often recessed

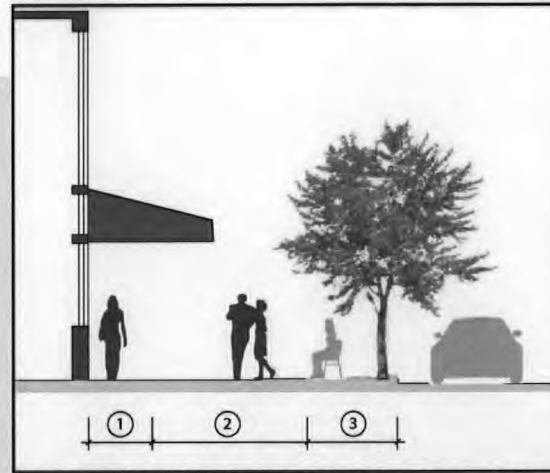
5 – Storefronts: Transparent, attractive fronts at pedestrian level. (see section 3.8 Storefront Design)



B. BUILDING SETBACKS AND STREET WALLS

Going vertically, the building composition frames a street room with human scale at the podium base of the building, combined with a strong vertical architectural statement above.

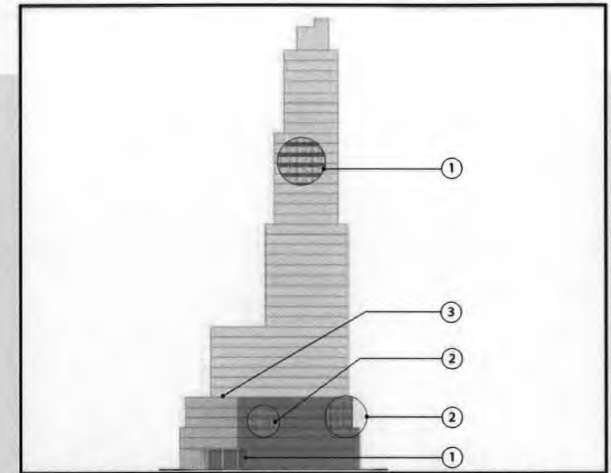
- 1 – First Floor Active Uses:** Active engagement with the sidewalk and continuing first floor height (16–20') above. (see section 3.7 First Floor Heights)
- 2 – Street Wall Enclosure:** Up to 35–40' above the sidewalk, to shape the urban space at a pedestrian scale.
- 3 – Eyes on the Street:** Opportunities for balconies and visual connections to the sidewalk-level activities
- 4 – Podium Setback:** To distinguish the first floor and floors immediately above, a recognizable setback will be established at the 80' level.
- 5 – Lower Tower Setback/Amenity Deck:** The top of the podium will be articulated by the top of the residential townhouse units and the amenity deck.
- 6 – Tower Setback:** The lower tower on blocks so designated should occur at the 150' level so that views from the taller towers are not blocked.
- 7 – Tower and Roof Articulation:** The tower should have articulated facades approximately every 10 floors, topped with an articulated roof as a terminating element.



C. PEDESTRIAN SIDEWALK ZONES

The sidewalks have several roles to play in the creation of a lively, diverse street-level pedestrian environment. By creating zones for the building, pedestrian movement and relaxing, a positive sidewalk-building relationship can be set up.

- 1 – Building-Related Zone:** Transparent storefronts with visually-exciting displays, shade for pedestrians at store entries and outdoor merchandise display space. (see section 3.8 Storefront Design)
- 2 – Pedestrian Movement Zone:** Enough space for pedestrians to move freely along sidewalks, on visually pleasing and environmentally-friendly paving materials.
- 3 – Pedestrian Room/Amenity Zone:** Space for pedestrians to stop, sit and relax, trees for shade, pedestrian lighting, pedestrian amenities, news stands and bike racks the pedestrian room/amenity zone provides a buffer between traffic and pedestrian movement zone. (See streetscape section for specifics)



D. ARCHITECTURAL EXPRESSION

Architectural creativity can produce many different specific architectural expressions for buildings in Union Park. Some of the design techniques that will have the most impact on the buildings are illustrated in the diagram.

- 1 – Transparency:** Greatest area of transparent glass should be at street level at storefronts—less transparency at the tower level. (see section 3.5 Building Fenestration)
- 2 – Materials and Column Alignment:** These elements integrate tower and podium.
- 3 – Landscape to Building Relationship:** Shade the top parking deck, creating better views from surrounding towers.

3.2 Arcades

INTENT

- To provide shaded space on the north sides of streets in Union Park. These spaces may take the form of arcades, which are linear spaces, open to the sidewalk, defined by the building soffit, the storefront and the structural column line of the building.

REQUIRED

3.2.1 Arcade Design

Depth and height of arcades shall follow the proportions shown in the diagram. The width shall comfortably facilitate pedestrian movement, access and visibility of ground floor businesses, and complement building architecture. The depth of the arcade measured from storefront to the exterior face of the structure shall be no greater than $\frac{2}{3}$ of the height from sidewalk to arcade ceiling. The minimum depth of an arcade shall be 8'-0", from storefront to the back face of the columns. The height of an arcade shall be 16'-0"-20'-0". (photo 1)

3.2.2 Rear of Arcades

The rear enclosing walls of arcades shall consist of storefronts which are transparent to people on the sidewalk. Arcade columns and opening proportions shall allow maximum unobstructed visibility into ground floor uses. (photo 1)

3.2.3 Arcade Depth

The arcade shall not unduly visually separate the retail frontage from the pedestrian traffic.

REQUIRED

3.2.4 Arcade / Building Coordination

The exterior face of the columns should continue the plane of the building above. (photo 2,4)

3.2.5 Arcade Coordination with Adjacent Sidewalk

Sidewalk paving in the arcade should be compatible in materials and design with the adjacent sidewalk. (photo 4)



1



2

16'-20' Height

Maximum Arcade Depth = $\frac{2}{3}$ Height

Arcade Design Standards

3

RECOMMENDED

3.2.6 Location of Arcades

Arcades are allowed where they will enhance the pedestrian environment by providing protection from the Las Vegas afternoon summer sun. They are allowable on the north side of West Clark, Carson, Bridger and Discovery Avenues (east-west streets).

3.2.7 Arcade Uses

Use of the arcade may include outdoor dining and outdoor displays of merchandise, if these do not block access to the building.



4

INTENT

- To enrich the urban village in its visual and tactile qualities with materials, finishes, detailing and techniques that are timeless, durable, satisfying and sustainable. To brand Union Park as a sophisticated urban environment which reflects its desert environment and climate with a high quality exterior expression.

REQUIRED

3.3.1 Material Compatibility

Regionally-appropriate and compatible materials shall be used. Materials and colors shall be compatible with the desert environment, with the intent of reducing reflected heat and glare into exterior public areas. (photo 2,3)

3.3.2 Material Visual Amenity

The materials shall convey a high level of visual amenity that is commensurate with the urban character of the urban village. (photo 6,7)

3.3.3 Material Quality

Establish a consistent and high level of quality that is durable and appropriate to pedestrian contact at the street level. (photo 3)

RECOMMENDED

3.3.4 Material Combinations and Scaling

Consistent, carefully detailed combinations of material that contribute to the architectural scaling of the buildings should be used. (photo 5)

ACCEPTABLE

3.3.5 Material Evolution

Allow the evolution of the development to include new technologies and materials that contribute to the neighborhood character and environmental sustainability; architectural methods and materials that are energy and resource-responsible.

UNACCEPTABLE MATERIALS

E.I.F.S. (Exterior Insulated Finish System) or stucco at the retail level or street level. (EIFS or stucco are acceptable above the



1



2



3



4



5



6



7

retail level of the base or higher, as approved by the Design Review Committee.)

Untreated wood siding

Concrete masonry units

Ornate wrought iron

The Design Review Committee will review all materials and may find other materials inappropriate.

3.4 Awnings, Canopies and Shading

INTENT

- To enhance the pedestrian environment aesthetically and create shade and comfort on the sidewalks
- To enhance the pedestrian experience and attractiveness of the area
- To create a pedestrian environment with visual interest.

REQUIRED

3.4.1 Awning and Canopy Compatibility

Awnings or canopies shall be an integral part of the architectural design of the buildings to which they are attached and should be compatible with the building. (photo 3,8)

3.4.2 Awning and Canopy Positioning

Awnings or canopies shall be positioned so that signage and views to businesses are not obstructed and so that substantial shade is cast onto the sidewalk at critical times of daytime sun exposure. Fire Department access to upper stories of buildings must be considered in size and placement of awnings, canopies and shading devices. (photo 1,10)

3.4.3 Awning and Canopy Projection

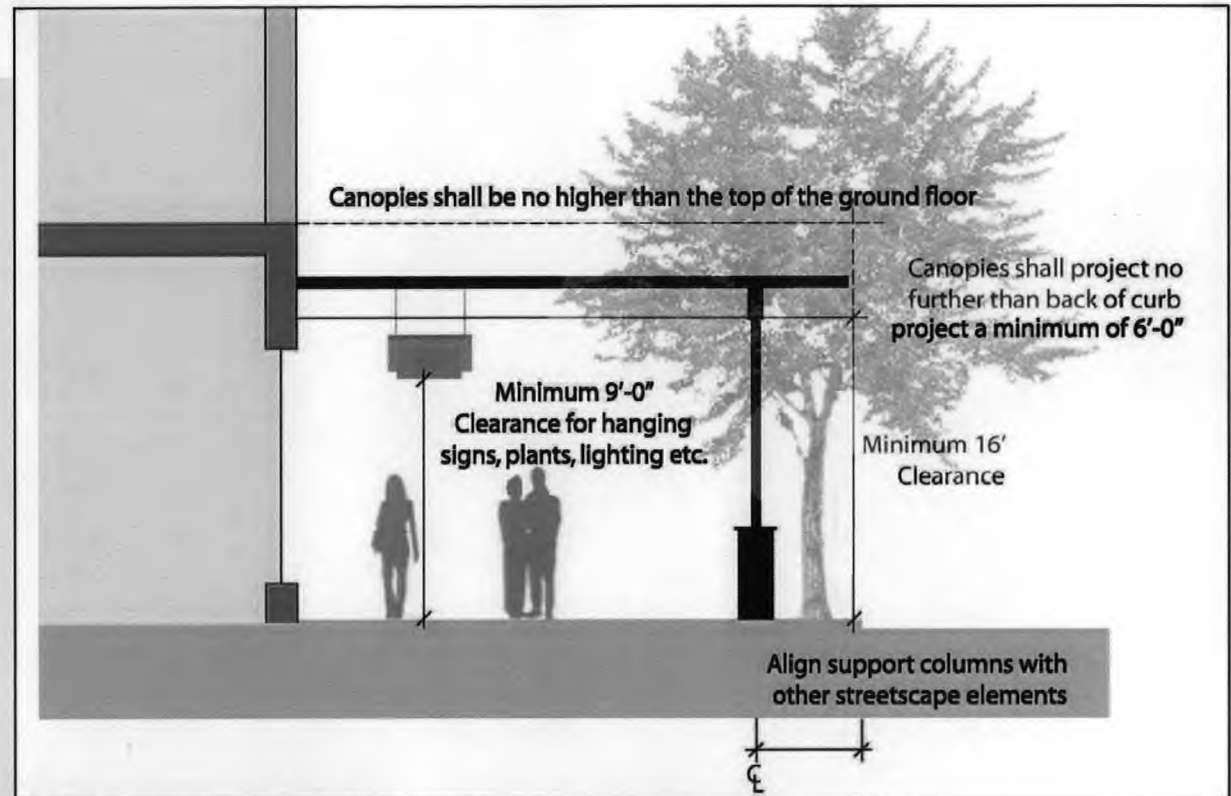
Awning or canopy projections shall be a minimum of 6 feet and not project beyond the back of curb. They shall not project into the tree or street light zones of the sidewalk. (photo 1)

3.4.4 Awning Materials

Awnings or canopies shall be permanent fixed structures on street faces of buildings. Awnings may be movable (adjustable) on patio or mid-block pedestrian way-facing building frontages. In the case of fixed awnings, durable, high quality permanent materials shall be used. In the case of movable awnings, durable and flexible materials shall be used. (photo 2,3)

3.4.5 Signage on Awnings

Signage, lettering, logos or other graphics shall not be placed on awnings. (photo 7,9)



Overhead Canopy and Shading Design Standards



2



3

RECOMMENDED

3.4.6 Awning Color

Awnings should be solid color. If not solid color, awning colors and patterns must be approved by the Design Review Committee. (photo 7,9)

3.4.7 Placement of Awning and Canopy Supports

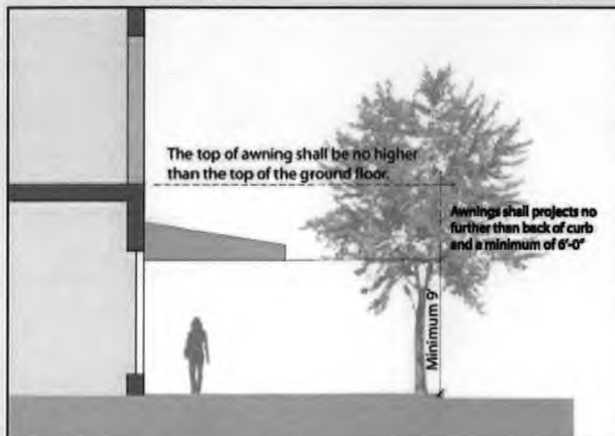
Awnings or canopies may be supported on the sidewalk in a design that is compatible with the main building. If supported on the sidewalk, the column shall be placed in the amenity zone of the sidewalk, located to allow pedestrian movement and to avoid conflicts with streetscape elements. (photo 5,8,11)

3.4.8 Awning and Canopy Coordination

Awning and canopy placement should be coordinated with adjacent development along the Promenade so that a consistent line of awnings or canopies is projected along the street. (photo 6)

3.4.9 Awning Diversity

Diversity in design of the awnings or canopies from building and block to the next is encouraged to reinforce a rich urban environment, but shall be within limits of compatibility with the architecture and the streetscape concept of the street. Designs shall be approved only after review by the Design Review Committee. (photo 11)



Overhead Awning Design Standards



4



5



6



7



8



9



10



11

INTENT

- To give buildings human scale and relationship to the public environment
- To provide some ability to see the activity in the buildings by day and night
- To reinforce the differences between residential and commercial structures and uses.

REQUIRED

3.5.1 Street-Level Fenestration

Transparent glass storefronts shall be used on open street-level facades in order to insure the visibility of active uses, and to provide a lighter, more detailed and human-scale architectural expression along the sidewalk. (photo 3)

3.5.2 Minimum Street-Level Fenestration

Commercial building facades fronting on public streets at storefront level shall be not less than 70% vision glazing. A greater proportion of glass is appropriate at the street level. (photo 1,3)

3.5.3 Glass Reflectivity

Transparency and reflectivity of glass shall insure visibility from the sidewalk and minimize the glare that would be produced by highly reflective glass. Clear, low E or slightly tinted glazing should be used. Clear glass shall have a reflectance rating not to exceed .18. No first surface reflective glass coatings shall be permitted. (photo 3)

3.5.4 All-Glass Buildings

All-glass buildings (on all sides) shall not be presented, except as part of a sustainable design strategy which results in improved building environmental performance.



1



3



2



4



5

RECOMMENDED

3.5.5 Solar Performance

Upper Level facades on different exposures should be designed to reflect their solar exposure and performance. (photo 2)

ACCEPTABLE

3.5.6 Opaque Glass

Minimal use of opaque glass is acceptable to continue glazing patterns in areas where screening of structure, utilities or uses is required.

INTENT

- To provide residential blocks with private, accessible and usable outdoor open space on the top levels of parking structures.
- To create short range views of open space and designed landscapes on tops of lower buildings from surrounding towers in Union Park.

REQUIRED

3.6.1 Amenity Deck Facilities

Amenity decks shall be developed with at least one of several spaces and facilities useful to the residents of the block: tennis or other sports courts, swimming pools, changing rooms and ancillary facilities, landscaped areas, seating with shade and other similar facilities.

RECOMMENDED

3.6.2 Amenity Deck Microclimates

Amenity decks should be developed to provide at least partial shade at least part of every day during the hot portion of the year.

3.6.3 Views From Decks

Amenity decks should be designed with views of surrounding buildings in mind, as a branding and identity feature.

3.6.4 Size and Location

The developer should provide landscaped decks and/or other shade solutions on parking structures over at least half of the area of a parking structure. This deck shall hide parking to the extent possible, while creating shade for parked vehicles. The location of amenity decks will depend to some extent on the locations of towers and other structures.



3.7 First Floor Heights

INTENT

- To provide ground level building spaces that can house retail and restaurant uses with consistent building heights.
- To create a lively pedestrian ambiance on the commercial streets.
- To be flexible in housing alternative short-term ground floor uses.

REQUIRED

3.7.1 First Floor Heights

Consistent street level storefront heights of a minimum of 16'-20' shall be developed around each block. This height shall accommodate retail and restaurant uses. (photo 3,4,6)

RECOMMENDED

3.7.2 First Floor Architectural Elements and Scaling

Building facades should provide elements of architectural scale and proportion that relate to the storefront height, the overall building scale and the human scale of the pedestrian environment. (photo 1,2,5,7)



INTENT

- *To create individualized, attention-getting, well-designed showcases for shops and restaurants as a draw and amenity to Union Park.*
- *To stimulate a high level of retail activity on the Promenade and other retail streets.*

REQUIRED

3.8.1 Storefront Design

Storefronts and entrances shall support and enhance the pedestrian-oriented environment while giving identity to buildings and uses therein. (photo 1,2,3)

3.8.2 Storefront Entries

Storefront entry thresholds shall be at the adjacent sidewalk pavement level to facilitate shopper and visitor access. Entries should be closely spaced, and storefronts continuous to encourage continuous shopper and pedestrian movement. (photo 3)

3.8.3 Storefront Special Doors

Folding storefront doors, security devices and overhead rolling grilles shall be fully integrated into the storefront architecture and shall be hidden behind glazing and wall surfaces.

3.8.4 Building Entries

Building entries shall be recessed into storefronts where the storefronts face the street (typical condition).

RECOMMENDED

3.8.5 Storefront Scaling

Storefronts should be comfortably scaled and well-detailed to help break down the large façade of the building into smaller units. Large, unbroken surfaces are not recommended unless that is a design feature. Surfaces should be divided by mullions, awnings, signage, decorative elements and other devices. (photo 3)

3.8.6 Storefront Alignment

Storefronts should be aligned with the building build-to line, with exceptions for setback zones for outdoor seating. In no case shall the storefront extend into the sidewalk right-of way, except for overhead signage and awnings. (photo 1)

3.8.7 Storefront Facades

Facades should present a pattern of architectural variety through modulation of the wall plane, detailing, color, texture and materials. (photo 2)

3.8.8 Storefront Variety

A variety of storefront designs should predominate over a uniform series of storefronts. The objective is to create visually interesting and compelling environment that is expressive of the individual businesses along the street. Many small storefront units are preferable to a few long storefront units. (photo 2)

3.8.9 Opening to sidewalk

Accommodating the Las Vegas climate, storefronts and restaurant fronts should incorporate systems such as folding doors, folding glazing units, overhead doors and other devices to open the interiors more completely to the sidewalk. This is especially important on the Promenade.



1



2



3

3.9 360 Degree Architecture

INTENT

- To create an urban environment that is pleasing visually from all points of view, creating value for adjacent properties and for Union Park as a whole.

REQUIRED

3.9.1 360 Degree Design

All sides of a structure shall exhibit design continuity. There shall be no unimproved side to a structure. (Ref: Las Vegas Commercial Development Standards Title 19.08.050). (photo 1)

3.9.2 Primary Facade Design

Buildings shall relate to all orientations with high quality materials and details as described elsewhere in this section. All sides of a building shall have a design approach that makes them worthy to be a primary façade. (photo 3,4)

RECOMMENDED

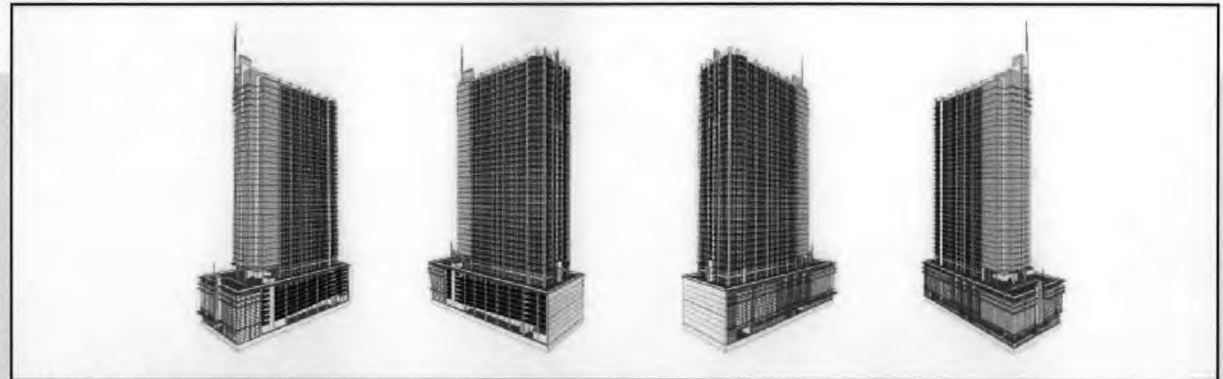
3.9.4 Solar Consideration

Differing architectural design strategies should be incorporated for different solar and climatic orientation, and views. See Section 3.1.6 on Solar Orientation. (photo 2)

ACCEPTABLE

3.9.5 360 Degree Exceptions

Early phase buildings which will have later phase buildings abutting them may have building faces that are without fenestration or other primary façade design features. However, these building faces should incorporate some design features which will provide visual interest until such abutting building is built.



A 360 Degree Building



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3.9.6 Parking / Building Relationships

Sides of a structure that directly abut a parking structure are exempt from this standard, at the places where the building and parking structure abut each other. Above the parking structure, the standards above apply.



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INTENT

- To make a positive contribution to the downtown skyline by visually terminating tower buildings with articulation which will help in reinforcing the spirit of Union Park.
- To create opportunities for rooftop open space, minimizing the heat island effect.

REQUIRED

3.10.1 Rooftop / Building Systems

All rooftop building systems shall be incorporated into the building form in a manner integral to the building architectural form and material. (photo 1,4,5)

3.10.2 Mechanical / Communication Systems

All mechanical, electrical and communications systems shall be completely screened from view from surrounding streets, highways and other buildings with elements equal to or greater than the height of the equipment. (photo 1,4,5)

RECOMMENDED

3.10.3 Flat Roofs

Flat roofs and unarticulated building tops should be avoided, except for required heli pad or other code-required flat surfaces and rooftop open space on the upper base buildings. Roofs should be expressive of the spirit of Union Park, celebrative and honest expressions of the building's architecture.

3.10.4 Roof Form

Building roof forms should respect the context in which they are viewed, in terms of height, proportions, and views of the building from other buildings, especially the views from higher buildings. (photo 3)



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3.10.5 Tower Roof Form

Building tops for Towers with architectural silhouettes which add definition to the skyline, with consideration given for views from buildings around the building in question, not only in elevation are encouraged. (photo 6,7)



7

3.1.1 Parking Structure Design and Concealment

INTENT

- To enhance the image and identity of Union Park through design of high quality parking facilities
- To make parking a positive experience for all Union Park visitors, employees and residents
- To minimize the visual and noise impact of parking structures
- To enhance the quality and pedestrian experience of the Union Park streets.
- To continue the active street front uses and minimize the visual and functional impact of parking, through wrapping active uses around parking structures

REQUIRED

3.1.1.1 Sloping Floors

Sloping floors of parking structure ramps shall not be exposed to public view from outside the structure.

3.1.1.2 Parking Impacts

Minimize the impact of vehicle noise, headlights, lighting and mechanical systems associated with parking facilities. These impacts shall be reduced by:

Keeping parking structures to the interior of the blocks wherever possible, hidden from view of the public right-of-way.

Using cutoff light fixtures to avoid direct light source views from public right-of-way and adjacent buildings. Exteriors of parking structures shall not be lit.

Screening mechanical systems from sight lines from public rights-of-way and adjacent buildings.

Screening headlights of cars from public rights-of-way and adjacent buildings.



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3.1.1.3 Parking Structure Facades

Where parking structure facades are exposed, an architectural treatment shall be applied either expressing individual building fenestration, or a very contemporary architectural expression. Facades may also be screened by a variety of translucent architectural screen materials. Where parking structures separate towers and street level development the facade of the parking garage shall be treated as and occupied building space extending the architectural treatments from the tower or podium down to street level (see alternative 4 on page 60). (photo 1,2,3,4,5,9)

3.1.1.4 Wrapping Parking

Space and interest to the street shall be created by wrapping parking with retail, office and residential uses, and avoiding large blank walls or parking next to the street level sidewalk. (6,7)

3.11.5 Garage Mass

Articulation in the wrapping facades shall occur both vertically and horizontally to break up mass and conceal parked cars from view from adjoining public space. (photo 10)

3.11.6 Visual Impacts

Use architecturally compatible finish materials and details with surrounding buildings and uses to minimize the negative visual impacts of parking lots and parking structures. (photo 3,5)

RECOMMENDED

3.11.7 Sight Lines

Parking must be screened or disguised with walls that emulate fenestration, or other architectural treatment to minimize the visual impact of the parking spaces or where parking spaces may be visible from the street from some angles. (photo 3.6)

3.11.8 Ground Floors

Create a walkable pedestrian-scaled neighborhood. Provide active pedestrian-oriented public uses on street-facing ground floors of parking structures where required by these criteria.



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INTENT

- To create positive relationships between parking structures and the spaces or buildings they abut.
- To enhance the value of adjacent buildings and to create a more efficient site, maximizing parking and other uses.

REQUIRED

3.12.1 Parking Noise and Vibration Mitigation

Structures Abutting Other Buildings: When structures directly abut inhabited buildings, in addition to the building code requirements for separation of uses, due care shall be taken to minimize transmission of noise and vibration from the parking structure to the other buildings, by acoustically isolating the structures from each other.

3.12.2 Parking Exposure to Open Space

Structures Adjacent to Open Spaces: Where structures are adjacent to interior open spaces, visibility of the structures must be a factor in design of the structures. The finishes and materials must meet the quality of the streetscape and landscape in the open spaces, walkways or courtyards.

3.12.3 Ventilation

Ventilation exhaust of parking structures shall not be directly into these open spaces, and the noise from fans and blowers shall be insulated from these spaces.

3.12.4 Lighting

Parking structure lighting sources must be shielded from visibility from the ground floor level of these structures, and from buildings directly across from the parking structures.

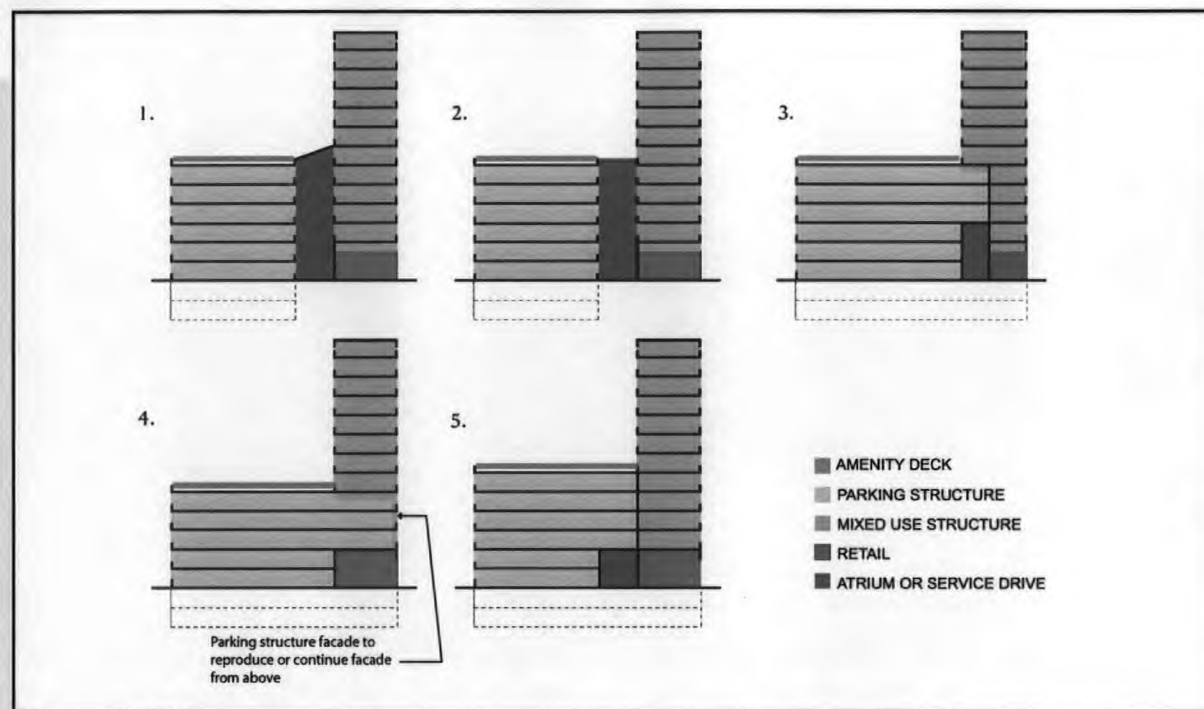
3.12.5 Amenity Decks

Amenity decks and other shading devices shall be developed on the top levels of all parking structures adjacent to residential uses.

ACCEPTABLE

3.12.6 Roof Design

Portions of decks may be developed as usable outdoor areas and portions may be developed as open roofs. Some top level



Alternative Building / Parking Relationships

parking may be visible from adjacent buildings.

Alternative Relationships of Parking Structures and Buildings

Typical blocks in Union Park have parking structures surrounded by office and residential buildings, usually with retail space on the ground floor. There are several different ways to approach the relationships of these use types.

Each of them achieves the goal of having active ground floor uses, a multi-level parking structure and an office or retail building above. These alternatives are shown here:

1. Building separated from parking structure by 30-40'-wide (variable) covered or enclosed atrium. Lower level building windows face into the atrium between the building and the parking structure. Retail uses can open to the atrium as well as the street.
2. Building separated from parking structure by 30-40'-wide (variable) open space. Lower level building windows face onto the open space between the building and the parking structure. Retail uses can open both ways.
3. Building built partially over the parking structure, with the lower building levels as half-floors, facing the street. An atrium or pedestrian passage separates the retail space from the parking structure.
4. Building built over the parking structure, with an elevator/service core connected to the ground level. Retail space is tucked into the parking structure at the ground floor. Facade of parking structure shall be treated as and occupied building space above ground level retail space.
5. Building built immediately adjacent to the parking structure, with a pedestrian passage right behind the ground floor retail space. The lower floors of the building have fire separation from the parking structure, and no windows on that side until the building rises above the parking structure.

INTENT

- To provide interesting and comfortable scale relationships of buildings through modulation of building massing—both surfaces and forms—contrasts in form, color and materials.

REQUIRED

3.13.1 Street Wall Requirements

Street walls shall include at least two variations in wall placement per 100 linear feet of street frontage. On the Promenade, this variation is only applicable at upper levels of the buildings facing the Promenade. Variations shall not be less than three feet in depth or projection and not less than four stories in height. These shall include variations in wall plane and building height. (photo 1)

3.13.2 Building Scale

The scale of taller buildings should be broken down by mixing materials, colors, textures and details in addition to the above variations. Variation in building scale shall relate to the scale and function of pedestrian-oriented uses along the street, and shall be integral with the building form and construction. (photo 4)

RECOMMENDED

3.13.3 Facade Variation

Facade variations should relate to the dimensions of room sizes, residential units and/or structural modules. Variations should emphasize primary building entries, important corners or significant architectural features. Building projections may extend beyond the build-to line up to 3'-0" but not impact the build-to line at ground level. (photo 3)

3.13.4 Balconies and Terraces

Balconies and terraces should be incorporated into vertical and horizontal shifts in building massing where possible. Balconies above the first retail floor may extend beyond the build-to line up to 6'-0". (photo 1)



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3.13.5 Structural Elements

Building structural elements such as floors and columns, and fenestration should be articulated through changes in plane, use of decorative and functional elements such as sills, lintels, muntins, pilasters, piers, and other elements. (photo 3)

3.13.6 Building Corners

Building corners at street intersections should be enhanced through special corner treatments such as towers, special roof shapes and taller building sections. (photo 5)

3.14.7 Setbacks by Height

Setbacks and horizontal tower articulation should be introduced beginning at the 150' height and every 10 floors to the top of the building.

3.14 Solar Access and Shading

INTENT

- *To provide a comfortable and safe indoor and outdoor environment by managing solar access and shading through architectural design of buildings and the urban design framework of streets.*

REQUIRED

3.14.1 Providing Microclimates

Building heights shall take advantage of solar orientation, and shall create comfortable micro climates at the street level that protect from prevailing winds, afford summer shade and winter sunshine.

3.14.2 Shading Pedestrians

Buildings and pedestrian ways on the north sides of streets shall be protected by awnings and/or arcades along 75 % of the length of the sidewalk to provide options for walking in the shade. (photo 3)

3.14.3 Shading Submittal Requirements

Solar shading diagrams indicating solar shading and access through architectural design shall be submitted for review by the Design Review Committee.

RECOMMENDED

3.14.4 Building Orientation

Building orientation, height and bulk should provide for sun to reach the ground, neighboring buildings and other pedestrian levels in cold weather. (photo 1)

3.14.5 Minimizing Heat Gain

Building orientation should respect the climatic conditions by minimizing heat gain and considering the impact of shade on adjacent land uses and areas.



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3.14.6 Facade Treatment

The façade treatment should be unique to the solar orientation; the south and west facades should be more opaque with a punched window expression (or louvered and screened), and the east and north facades should have more lightness and greater expanses of glass. See the section on Fenestration.

3.14.7 Protection Building Entries

Building entries should be sun-protected.

3.14.8 Facade / Building Articulation

A high degree of building articulation will provide more opportunities for shading external building spaces (such as rooftop courtyards) with external building features such as overhangs, balconies, shading devices, etc. (photo 1,4,5)

INTENT

- To create environmentally responsive and responsible buildings with respect to solar orientation
- To create comfortable site conditions for everyone using outdoor spaces.

In this section, standards for solar orientation and shading relate to the external performance of the building with respect to its site, the public right-of-way, and neighboring buildings.

REQUIRED

3.15.1 Year-round Solar Orientation

Buildings shall create comfortable micro-climates for all four seasons, minimizing or blocking uncomfortable winter winds and maximizing beneficial summer shading and air circulation. Building designs should include protected spaces and pathways to enable comfortable year-round use by visitors and residents. (photo 1,2)

3.15.2 Material Reflectivity

Buildings shall not contain gold glass or other highly reflective or mirrored glass which reflects excessive solar heat and light onto the site, other buildings or onto the public right-of-way.

3.15.3 Shading Cross Streets and The Union Park Promenade

Buildings on the south side of the cross streets shall shade the sidewalks and landscaped areas on the south sides of those streets. They shall do this with their height and setbacks. Buildings on the west side of the Promenade shall shade the Promenade from noon through the afternoon during the hottest part of the year. (photo 1)

3.15.4 Winter Shade

Buildings should minimize the impact of winter shade on adjacent buildings, to the extent possible.

RECOMMENDED

3.15.6 South / West Sun Protection

East, south and west faces of buildings which face the sidewalk should have sun protection in the form of awnings and/or canopies. See the section on Awnings, Canopies and Shading. (photo 3)



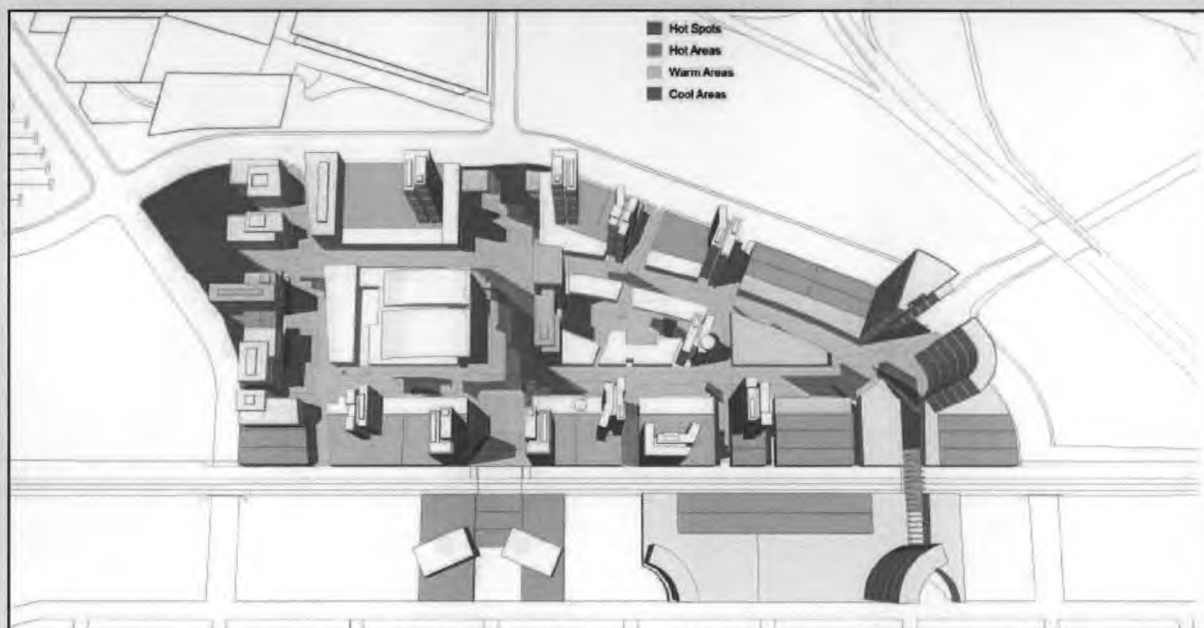
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Solar Exposure Analysis- This diagram highlights the hottest areas at 3 pm on Jun 21, as indicated by the red shaded areas. These are the areas that need the most protection from the sun that buildings cannot provide.

ACCEPTABLE

3.15.7 Arcades

Arcades are permitted on the north sides of the cross streets, to provide shade on the north sides of these streets. See the section on Arcades.

3.16 Building and Site Signage

INTENT

- To provide clear identification of businesses and buildings
- To add visual interest and delight to Union Park
- To maintain a pleasing visual relationship between the function of identification and the architecture of Union Park

REQUIRED

3.16.1 All signs, regardless of section, will need to have the approval of the Design Review Committee.

3.16.2 Relationship to Las Vegas Zoning Code

The design, installation and maintenance of all signs shall be in conformance with Las Vegas Zoning Code Chapter 19.14 SIGN STANDARDS, as revised and amended, except as noted in this section of the Union Park Design Standards.

3.16.3 Reviewing and Approving Body

The approving body shall be the Union Park Design Review Committee, described on page 104. The Design Review Committee shall be referred to instead of "the City" or "the Department" or "the Director" (of Planning).

Each section of the Sign Standards is noted herein, with a notation of the adoption of the section in the Design Standards (meaning it is required), the deletion of certain sections (meaning this section is not required), or the revision of each section (by text in this Standards document).

3.16.4 Required Zoning Code Sections

- 19.14.010** Conformance and Purpose
- 19.14.020** General Requirements
- 19.14.030** Exempt and Prohibited Signs
- 19.14.050** Signs Allowed in All Districts Except as Limited
- 19.14.090** Only paragraphs B, F, G and H are acceptable
- 19.14.110** Signs in Public Rights-of-Way



19.14.120 Certificates and Permits

19.14.130 Master Sign Plan

There shall be a master sign plan for each block identifying signage for each building and business

19.14.140 Certain Illegal and Abandoned Signs

19.14.150 Appeal

19.14.160 Nonconforming Signs

19.14.170 Violations, Remedies, Penalties

19.14.180 Illustrations

3.16.5 Deleted Zoning Code Sections (items not permitted unless by reference in Design Standards).

- 19.14.040** Signs Permitted Without a Certificate
- 19.14.070** Residential Protection Standards
- 19.14.080** Historic Signs
- 19.14.100** Off-Premise Signs
- 19.14.110** Signs in Public Right-of-Way



3.16.6 Dimensional and Other Standards for Union Park

Section 19.14.060 of the Las Vegas Zoning Code is replaced by this section of the Design Standards for Union Park, as described herein. Signs not mentioned in this section are not permitted.

5. R DESIG S

One business per entrance, 8 SF, min. ht. 8', external illumination

5.B W I G SIG S

No awning signs shall be permitted

5. Y SIG S

One sign per canopy, 25% of area of face of canopy, internal or external illumination

5.D FREEST DI G SIG S

No freestanding signs shall be permitted

5.E M UME T SIG S

One per street frontage, 75 SF per sign, 10' high, on or behind build-to line, internal or external illumination

5.F R JE TI G SIG S

One per entrance, 32 SF, height of first floor, 8' minimum ht., maximum 8' projection from building face

5.G W SIG S

One per building face, 2% of building wall area for building, 1% maximum for building tenant, one tenant per building, may project to no closer than 2' below top of parapet, 4' projection, internal or external illumination

5.H WI D W SIG S

No window signs shall be permitted

5.I M RQUEE SIG S

One per building elevation, 20% of building elevation, may extend to 2' below top of parapet and over sidewalk to 5' back of curb, min. ht. 8'

5.J R F SIG S

No roof signs are permitted

3.17 Building Lighting

INTENT

- To provide illumination that complements the urban nature of Union Park
- To provide aesthetic appeal and safety, promoting comfortable, safe pedestrian activity at night
- To distinguish Union Park from the largely externally illuminated and bright night-time environment of The Strip

REQUIRED

3.17.1 Adjacent Property

Building lighting shall be shielded such that the light source is not directly visible from adjacent properties or the public rights-of-way. (photo 1,2)

3.17.2 Light Color

Light sources shall be color-correct types such as high-pressure sodium and metal halide. Light types of limited spectral emission, such as low pressure sodium or mercury vapor lights are prohibited.

3.17.3 Lighting Levels

Minimum external building lighting levels at main building entries and stairs are 5.0 footcandles, and at loading docks, 15.0 footcandles.

3.17.4 Pole Mounted Fixtures

Site pole-mounted light fixtures shall not be used to illuminate buildings.

RECOMMENDED

3.17.5 Internal Building Lighting

Internal building lighting should be emphasized. External building lighting should provide definition of building massing and features such as entries. Light will be seen through windows, indicative of an urban, mixed use downtown. (photo 5,6)

3.17.6 Night Sky Preservation

Impact of building lighting on the night sky should be minimized where possible with cutoff and downward facing fixtures. (photo 2)



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3.17.7 Lighting Fixtures

The emphasis on building lighting should be on the lighting effect, rather than on the fixtures as visible elements. (photo 4)

3.17.8 Lighting Power Consumption

All external lighting should be designed and located to reduce power consumption to its lowest practical level. Among the techniques to achieve this include: automatic shutoff after certain times of the early morning and daylight hours, switching localized for individual control, and avoidance of over-illumination on buildings.

ACCEPTABLE

3.17.9 Accent Lighting

Accent lighting of building entries or features is permitted.

3.17.10 Neon Lighting

Neon lighting is subject to review and approval by the Design Review Committee.

3.17.11 Prohibited Lighting Types:

Blinking, flashing or changing intensity lighting, except for temporary holiday displays

Any fixed light that produces incident or reflected light that is disturbing to the operator of a motor vehicle.

Any light that may be confused with a traffic control device.

Beacon or search light, except as a one-time event feature.

INTENT

- To protect the occupants of buildings from death and injury and to limit damage to buildings and their contents from hostile acts, while maintaining a desirable aesthetic for both buildings and sites (transparent design).

Three types of measures are listed; all are acceptable and recommended, none are required. The sole requirement is that all measures designed into buildings or the site not be primarily identifiable as security measures.

3.18.1 Site Security

Provide emergency communication required by the City of Las Vegas ordinance and CCTV surveillance of key areas, with communication link to metro.

Protect vulnerable areas with security measures such as alarms, card readers and cameras (photo 3,5)

Introduce appropriate levels of lighting to create a safe, comfortable environment without over lighting

Maintain lines of sight to parking lots, public areas and structures from adjacent buildings

Limit entrances into publicly-accessible buildings, especially after hours

Provide emergency call stations

Provide redundant utility systems to support life safety and rescue functions

3.18.2 Airborne Contaminants

Locate outside air intakes above ground level to prevent public access

Prevent public access to building roofs and to mechanical equipment on roofs

Secure return air grilles to prevent public access

Install HVAC control options with energy management and control to regulate airflow and pressures within the buildings



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Isolate lobbies, mail rooms, loading docks and storage areas where quantities of contaminants may enter

Install air quality monitors to detect chemical, biological or radioactive substances and control air distribution

Install high efficiency building filtration systems to reduce consequences of release of toxic airborne material

3.18.3 Blast Mitigation

Utilize pavement, planter, bench, bollard and other street furniture designs that are structural barriers to unauthorized vehicles while providing visually appealing streetscape elements (photo 1,4,6)

Provide helicopter landing pads and rooftop emergency exits to allow alternative evacuation routes as required by the Building Code. (photo 2)

Building design should incorporate flexible frames, blast-resistant materials, including interior materials and assemblies that protect building occupants from blast effects

Provide wall assemblies sufficient to protect utility and communications systems

3.19 Storage, Equipment, Loading and Screening

INTENT

- To minimize the negative visual and noise impacts of service and loading areas, trash storage and mechanical equipment on adjoining streets, public spaces and property.

3.19.1 Storage, Equipment and Loading Visibility

Loading docks, trash storage, service courts and mechanical equipment shall not be visible from public rights-of-way. (photo 5)

3.19.2 Screening and Buffering

Loading docks, trash storage, service courts and mechanical equipment shall be screened and/or buffered by a combination of walls, screens, louvers and/or other features which are integrated with the architecture of the buildings. (photo 1,4)

3.19.3 Parapet Profiles

Parapet profiles shall, at a minimum, equal the height of adjacent rooftop equipment and all mechanical and utility equipment (e.g., ducts, vents, fans, condensers, etc.) The inside of the parapet should be painted in colors compatible with the color of the roof. (photo 4)

3.19.4 Ground Mounted Utilities

Meters, electrical cabinets, transformers and switchgear shall be located within the building they serve. Ground-mounted utility vaults and detector check valves should be screened with landscape or incorporated into trash enclosures or street furniture elements.

RECOMMENDED

3.19.5 Enclosure / Screening

All permitted uses and their resulting products which are not required to be contained entirely within a fully-enclosed structure should be screened from view from streets and neighboring properties. (photo 5)

3.19.6 Area Drainage

Courtyard and areaways should be graded to catch and retain runoff and spills from vehicles, trash or other storage and



operations in order to minimize runoff onto sidewalks, gutters and streets and paved surfaces.

3.19.7 Loading Area Circulation

Circulation and parking for service areas shall not disrupt the normal flow of on-street traffic. Off-street loading areas should be designed to include adequate space for ingress, egress and maneuvering.

ACCEPTABLE

3.19.8 Roof Utility Screening

Antennas, including but not limited to earth satellite stations, are permitted with specific approval of the Design Review Committee. Locations of antennas shall minimize their impact

on the appearance of the immediate area. Antennas should be properly screened from public view and nearby taller buildings. (photo 4)

3.19.9 Ground Level Screening

Ground level screening may be provided by landscaping or landscaping in combination with walls, if it results in complete visual screening.



4 CHARACTER of the BLOCKS

Each parcel and block is a unique opportunity to make a contribution toward the character of the high density, mixed use Union Park urban neighborhood. To succeed, each of the blocks must apply the design standards and intents of the standards described in Sections 1 through 3.

The specific applications of each design standard to each block from A through Q are described in three ways on facing pages for each block:

DESIGN STANDARD DESCRIPTION Text description of each block, including the expected program, open space, vehicle access, view corridors, open space, and many other factors are briefly described.

PARCEL PLAN A parcel plan diagram for each block shows the plan view annotated with several graphic icons that represent various design directions that are generated by the Master Plan. Items such as lobby location options, permitted exposure of parking structures, active street frontages, tower location, open space and other desired features of each block are shown at their points of application.

THREE DIMENSIONAL MODEL A perspective exploded view illustrates the relationships of the layers of the block to each other, and represents a building height and massing that corresponds to the program expected for each block. This view begins with subterranean parking, proceeds upward through street-level retail, town homes and podium parking, and topped in many cases by towers with view corridors and height recommendations. The Sketchup drawings that are the basis of these models are available to the applicant.

A2 – West Clark Avenue Entry

OBJECTIVE:

- *This parcel has the important function of providing the first view of Union Park for people arriving from the south and a backdrop to the Lou Ruvo Alzheimer's Center. The buildings form part of the gateway into the site on West Clark Avenue and they also form an access courtyard between the Ruvo Center and the office buildings on West Clark Avenue. These buildings may have parking below the new buildings. This site may also be built out as a single building with parking above grade but fully screened.*

Program Shown

Office	505,600 SF
Parking	806 spaces below grade and levels 3-8

NOTE:

A1 is the adjacent site, accommodating the Lou Ruvo Alzheimer's Center with no parking on the site, this site is to accommodate some of the parking for A1.

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

A2.1 Pedestrian Circulation

Walkways are required from West Clark Avenue to the Lou Ruvo Center and from the Union Park Promenade to the Center. If the building is built as a single building, a pedestrian entrance shall still be provided through the building to visually connect West Clark Avenue to the Lou Ruvo Alzheimer's' Center.

A2.2 Active Frontages

Active street frontages are required on this site at the intersection of West Clark Avenue and Union Park Promenade and Grand Central Parkway. Commercial uses should front on West Clark Avenue or the walkway leading south from it or Union Park Promenade.

A2.3 Parking Access

Entries to parking may only be located on Grand Central Parkway and the Union Park Promenade. Both of these drives must meet in front of the Lou Ruvo Alzheimer's' Center in a courtyard which will serve all the buildings on this block.

A2.4 Open Space and Amenities

The space around the Lou Ruvo Center is to be kept open for optimum views of the building. An auto access courtyard in the center of the parcel will focus all three buildings on a central plaza area.

A2.5 Tower Locations

Two towers can be located on either side of the north-south walkway, symmetrically framing the entrance to the Lou Ruvo Alzheimer's' Center. A single tower may be located at the Grand Central Parkway corner or Union Park Promenade Corner.

A2.6 Build-To Lines and Setbacks

Setback zones are allowed facing Union Park Promenade and on Grand Central Parkway. An open space is required at the intersection of West Clark Avenue and Union Park Promenade. At the base of the building the allowable setback shall not exceed 10'-0" and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

A2.7 View Corridor

A wide view dual access corridor shall be kept open from West Clark Avenue to the Lou Ruvo Alzheimer's Center. In the case of one building, clear views must be maintained through the lobby at ground level.

A2.8 Concealed and Exposed Parking

Parking structures above grade to all center shall not be exposed to any views except along Grand Central Parkway. If above grade, structures shall appear to be office uses.

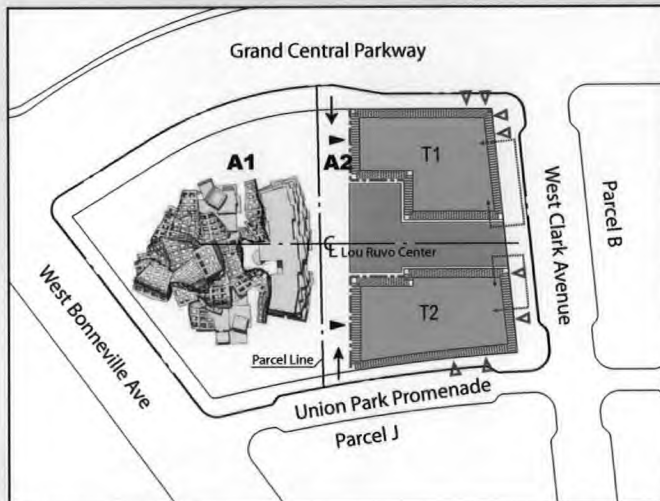
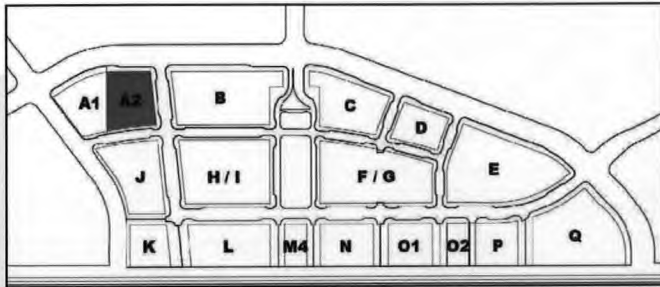
A2.9 Tower Height

Building heights for two towers should be equal. Buildings are expected to be approximately 13 stories.

NOTE: One tower may be built on the site rather than the pair shown. Final building heights will be subject to review and approval by the Design Review Committee.

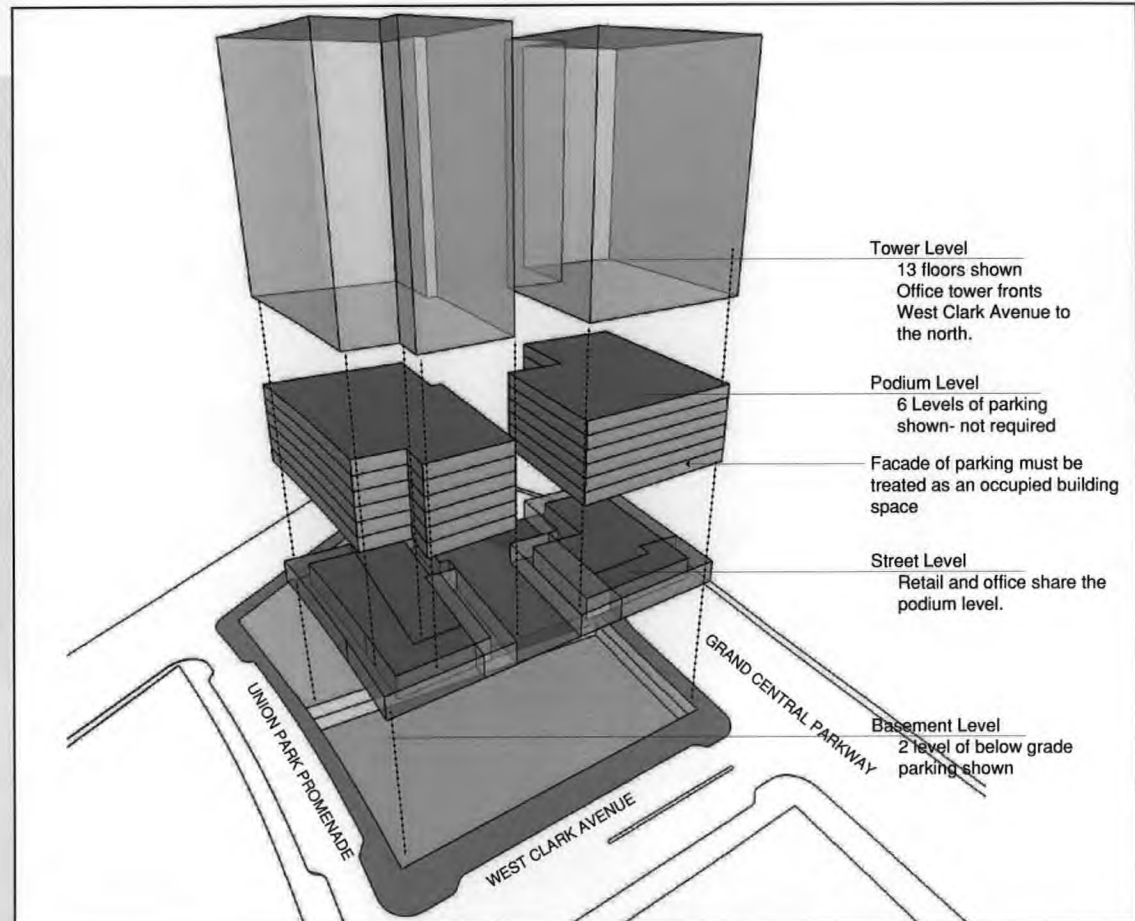
A2.10 Courtyard

- Through access from Grand Central Parkway to the Promenade shall be limited to emergency vehicles only, controlled by a physical means to be determined.
- The courtyard is to be approximately 100' x 100', and is to be a combined auto drop-off and pedestrian courtyard.
- Parking in the courtyard shall not be permitted except for drop-off.
- Parking and service access shall be as close as practical to Grand Central Parkway and Union Park Promenade.
- Grading in plaza shall be established to eliminate curbs in this area.
- The courtyard shall be landscaped to characterize the space as primarily a pedestrian and drop-off space.
- Limitations on delivery times for the buildings on A1 and A2 should be explored to minimize conflicts between the drives and the courtyard/drop-off.



PARCELA

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- - - BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- - - ALLOWABLE PARKING STRUCTURE EXPOSURE
- ↑ ↑ ALLOWABLE PARKING OR SERVICE ACCESS
- ↑ ↑ SERVICE ACCESS
- ↑ ↑ BUILDING LOBBY ENTRANCE
- - - TOWER VISUALLY EXPRESSED TO THE GROUND



This block may be developed with one building along West Clark Avenue. If this is the choice, then a pedestrian walkway must still be developed leading to the Lou Ruvo Center, as shown in the site plan diagram.

NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

B – West Clark Avenue/Discovery Avenue

OBJECTIVE:

- *This parcel forms the northern half of the gateway from Grand Central Parkway onto West Clark Avenue, and at its north end, it is also half of the gateway into Symphony Park from Discovery Avenue. It fronts along The Union Park Promenade, and has active retail on its east street front. Its uses are primarily office space and retail. It forms the entry to the Symphony Park Civic Axis along Discovery Avenue.*

Program Shown

Residential	282 units
Office	331,500 SF
Retail	49,670 SF
Parking	2350 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

B.1 Pedestrian Circulation

The major pedestrian movement is along The Union Park Promenade and the Civic Axis adjacent to Symphony Park. No pedestrian walkways are required within the site.

B.2 Active Frontages

Active uses shall be located on the north end of the Grand Central Parkway frontage, extending along the Civic Axis, wrapping around the corner to Union Park Promenade.

B.3 Tower Locations

Two towers shall be located on the block at the north and south ends of the parcel.

B.4 Build-To Lines and Setbacks

Setback zones are allowed facing Grand Central Parkway and along West Clark Avenue. Build-to lines shall be maintained on Discovery Avenue, wrapping around to Grand Central Parkway and Union Park Promenade. At the base of the building the allowable setback shall not exceed 10'-0" and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

B.5 Parking Access

Parking access may be brought in from Grand Central Parkway, Union Park Promenade, West Clark Avenue and one point only on Symphony Park to structured parking between the office buildings.

B.6 Concealed and Exposed Parking

Parking shall not be exposed except along portions of Grand Central Parkway. Along other frontages of the parcel, parking shall be wrapped with active uses, office uses or residential units.

B.7 Open Space and Amenities

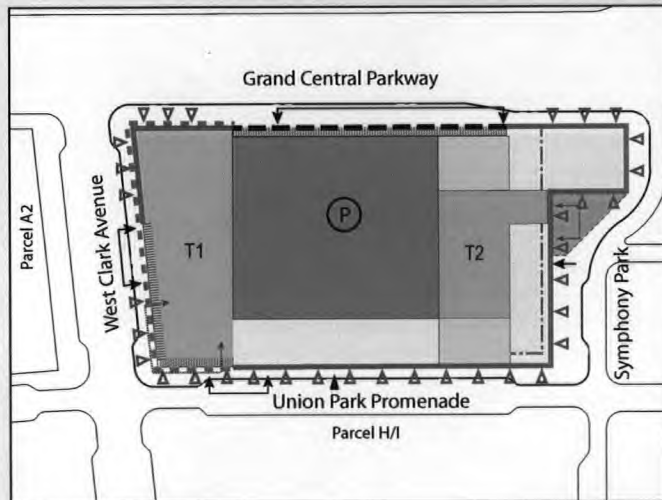
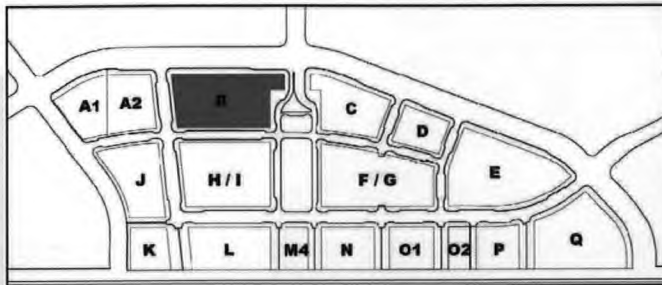
An open space shall be developed in front of the lobby entrance on the north side of T2.

B.8 Base of Towers

The two towers will appear to begin at ground level on the corners of the walkway at West Clark Avenue, and on Union Park Promenade.

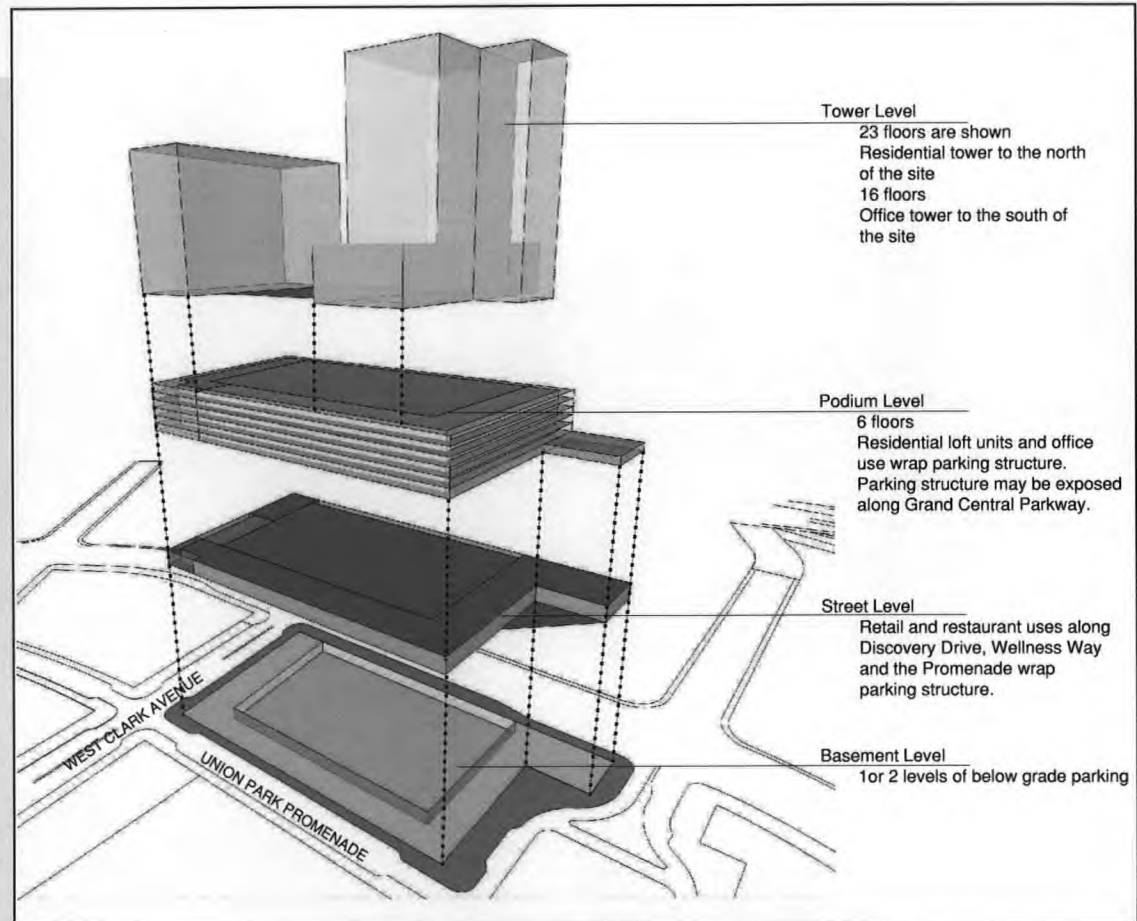
B.9 Tower Height

There is no maximum height of towers T1 and T2. The lower tower is to be no more than 150'.



PARCEL B

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ↑ ↑ ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ ▲ SERVICE ACCESS
- ↑ ↑ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

C – West Discovery Avenue North Side Entry

OBJECTIVE:

- *Parcel C is the northern half of the gateway into the site from Grand Central Parkway. The parcel's uses are primarily residential and retail, and it forms a part of the street wall definition of Symphony Park at the entry into the public space.*

Program Shown

Residential	593 units
Retail	27,790 SF
Parking	1082 spaces

74

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

C.1 Pedestrian Circulation

The major pedestrian movement is along The Union Park Promenade and the Civic Axis adjacent to Symphony Park. No pedestrian walkways are required within the site.

C.2 Active Frontages

Active street frontages shall be developed along Discovery Avenue and Union Park Promenade, potentially wrapping around the corner on West Bridger Avenue.

C.3 Tower Locations

Two towers shall be located on the north and south sides of the site. The southern tower (T1) shall be set back an equivalent distance from Discovery Drive as the northern tower (T2) on Parcel B. The northern tower is not required to set back, but may be set back within the setback zone.

C.4 Build-To Lines and Setbacks

Setback zones are allowed facing Union Park Promenade and on Grand Central Parkway. Build-to lines must be maintained on the Discovery Avenue corners of the site. Minor setbacks are allowed on Discovery Avenue, but the majority of the street wall shall be at the back of sidewalk. At the base of the building the allowable setback shall not exceed 10'-0", and 80% of the face of the building shall be placed on the build-to line at the back of the

sidewalk.

C.5 Parking Access

Parking access shall only be brought in from Grand Central Parkway, West Bridger Avenue and Discovery Avenue. Parking is in a structure adjacent to and under the office buildings.

C.6 Concealed and Exposed Parking

The parking structure shall not be exposed except on a portion of Grand Central Parkway. On other frontages, parking shall be wrapped with active uses and residential units.

C.7 Open Space and Amenities

An open space amenity deck or other shading and screening devices should be developed on the roof of the parking structure.

C.8 Base of Towers

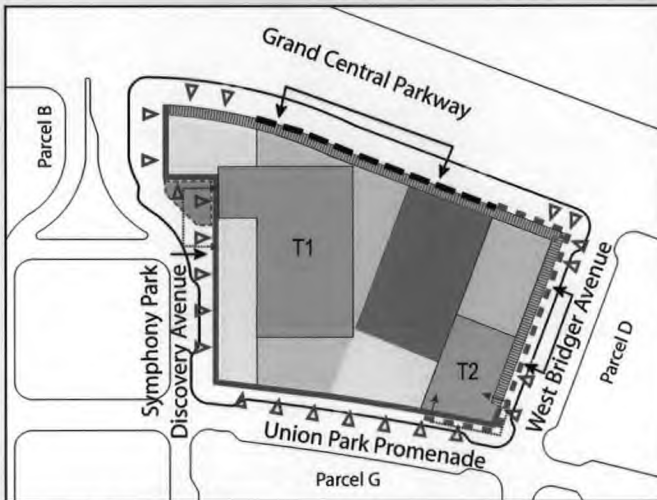
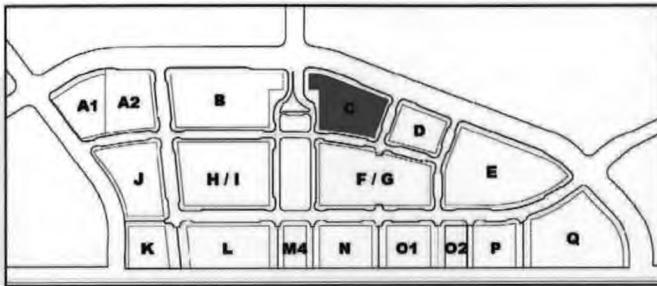
The two towers will have their bases sitting on a podium level behind lower residential units.

C.9 Axes and Views

The two towers shall be positioned so that sites to the east have views to the west between them, and that the towers have views past each other.

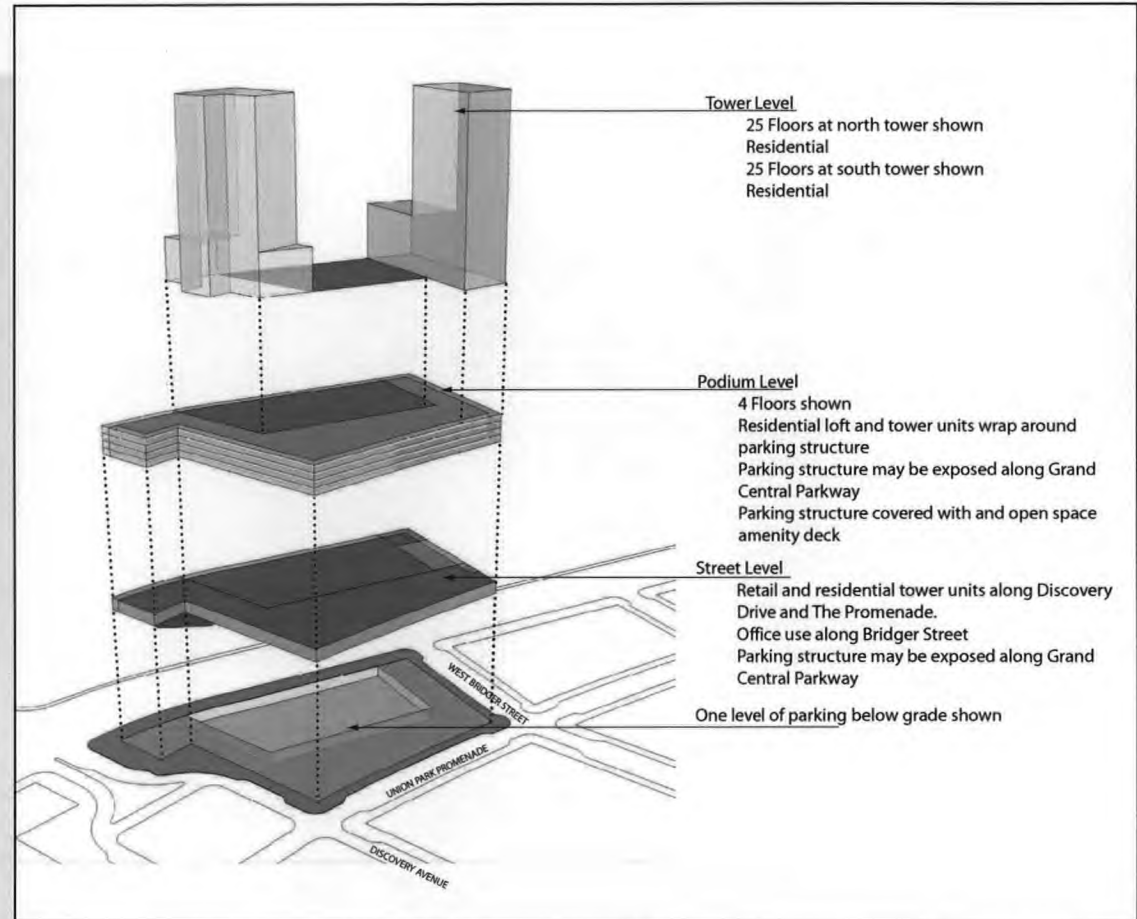
C.10 Tower Height

Lower tower height is limited to 150'. There is no maximum tower height for T1 and T2.



PARCEL C

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ↑ ALLOWABLE PARKING OR SERVICE ACCESS
- ↑ SERVICE ACCESS
- ↑ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

D – Grand Central Block (North of C)

OBJECTIVE:

- *This parcel fronts on Grand Central Parkway and The Union Park Promenade, as well as two east-west neighborhood streets. Its primary role is to be a residential parcel as part of the neighborhood, as well as part of Union Park Promenade's street front retail frontage.*

Program Shown

Residential	328 units
Retail	11,960 SF
Parking	791 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

D.1 Pedestrian Circulation

The major pedestrian movement is along Union Park Promenade, with minor movement along Carson and Bridger Avenues. No pedestrian walkways are required on the interior of the parcel.

D.2 Active Frontages

Active street frontages shall be developed along The Union Park Promenade, potentially wrapping around the corners on Bridger and Carson Avenues. Second level retail or restaurant space may be developed on the corners of the site.

D.3 Tower Locations

Two towers shall only be located on the north and south sides of the site. Towers T1 is not required to be set back; it should be brought to the sidewalk level.

D.4 Build-To Lines and Setbacks

A setback zone is allowed facing Union Park Promenade, along Grand Central Parkway and wrapping around to Carson and Bridger Avenues. The majority of the length of the street walls shall be built to the back of sidewalk along Union Park Promenade. At the base of the building the allowable setback shall not exceed 10'-0", and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

D.5 Parking Access

Parking access shall only be brought in from Grand Central Parkway and Carson Avenue. Parking shall be in a podium. Service access shall be brought in from no more than 2 different locations.

D.6 Concealed and Exposed Parking

The parking structure shall only be exposed on a portion of Grand Central Parkway, wrapping around to Carson Avenue. On the remaining frontages, parking shall be wrapped with active uses and residential units. Parking shall not be exposed directly under a tower.

D.7 Open Space and Amenities

An open space amenity deck should be developed on the roof of the parking structure.

D.8 Base of Towers

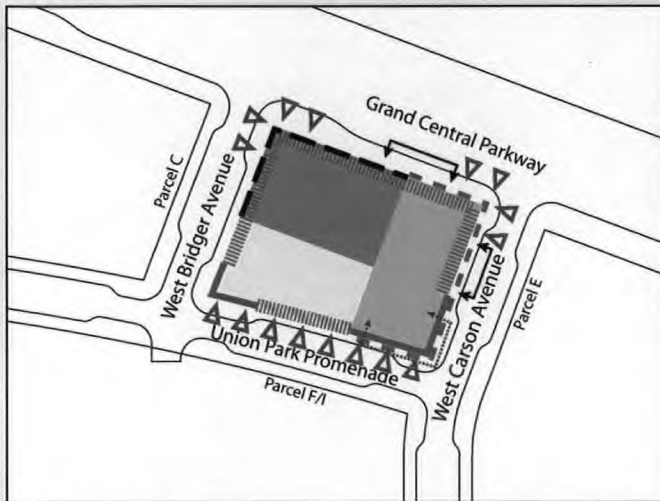
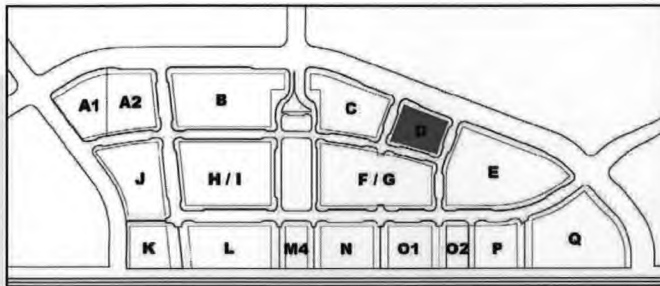
The tower will have its base beginning at the ground level on the West Carson Avenue frontage.

D.9 Axes and Views

The tower shall be positioned so that sites to the east have views to the west.

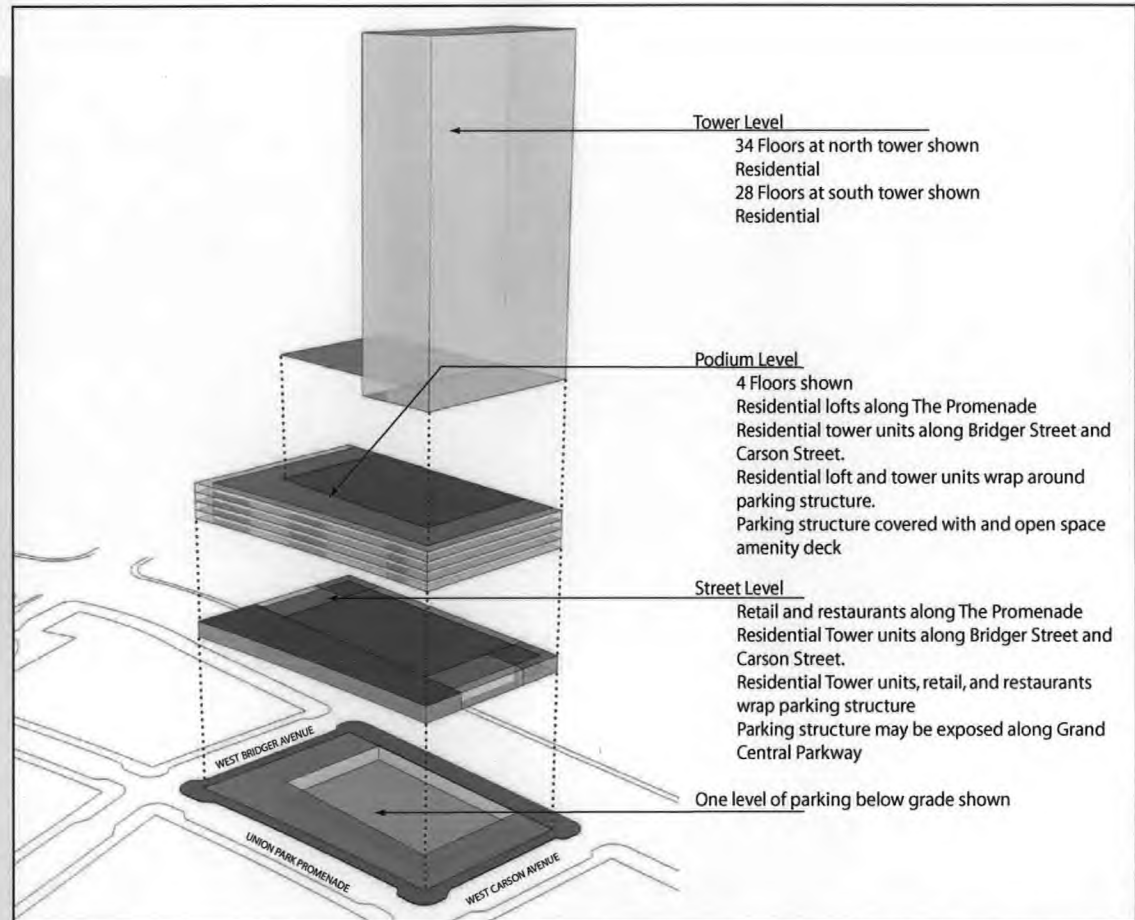
D.10 Tower Height

There is no maximum height for Tower T1.



PARCEL D

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ↑ ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ SERVICE ACCESS
- ↑ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

E - City Parkway

OBJECTIVE:

- *This parcel is a key Gateway parcel, part of the introduction to Union Park from City Parkway, across Grand Central Avenue. An iconic high rise office tower is expected on this parcel, with lower, perhaps multi-level retail and an internal parking structure podium wrapped by retail space facing onto a mid-block pedestrian promenade.*
- *The Union Park Promenade as a pedestrian and visual access and connection to Parcel Q and to Union Park Promenade continued to the south is a key linkage from Fremont Street and the Gateway entertainment uses to other parts of Union Park.*

78

Program Shown

Office	500,000 SF
Retail	152,192 SF
Parking	2000 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

E.1 Pedestrian Circulation

The major pedestrian movement is along the extension of Union Park Promenade, which will be an open mid-block plaza element through the parcel to City Parkway. There will be some pedestrian activity along City Parkway.

E.2 Union Park Promenade Through the Block

The Union Park Promenade through the block should be open air but if covered shall be open to the pedestrian traffic at each end, shall be light, airy and street like. The Union Park Promenade through the block may be designed slightly differently than the rest of the Union Park Promenade but maintain basic tree planting and material character.

E.3 Active Frontages

Active street frontages should be developed along Union Park Promenade, potentially wrapping around the corner on Carson Avenue. Second level retail or restaurant space may be developed on the corners of the site.

E.4 Tower Location

An office tower may be located on the north end of the site. It should relate directly to the open space on the other side of City Parkway on Parcel Q. The tower should rise directly from the sidewalk level.

E.5 Build-To Lines and Setbacks

The faces of buildings should extend the visual line of the faces of buildings along Union Park Promenade. Setback zones are allowed facing Union Park Promenade and on Grand Central Parkway. The majority of the length of the street walls shall be built to the back of sidewalk. Union Park Promenade presents a special opportunity to create retail and restaurant exposure to this street-width plaza. The low retail/restaurant pavilion across

Union Park Promenade should optimize use of the east side of Union Park Promenade open space. At the base of the building the allowable setback shall not exceed 10'-0", and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

E.6 Parking Access

Parking access will be from Grand Central Parkway and Carson Avenue. Parking will be in a podium south of the office building.

E.7 Concealed and Exposed Parking

The parking structure shall not be exposed except to Grand Central Parkway and to Carson Avenue. On other frontages the parking structure shall be wrapped with active uses.

E.8 Open Space and Amenities

An open space amenity deck or other shading and screening devices should be developed on a portion of the roof of the parking structure.

E.9 Base of Tower

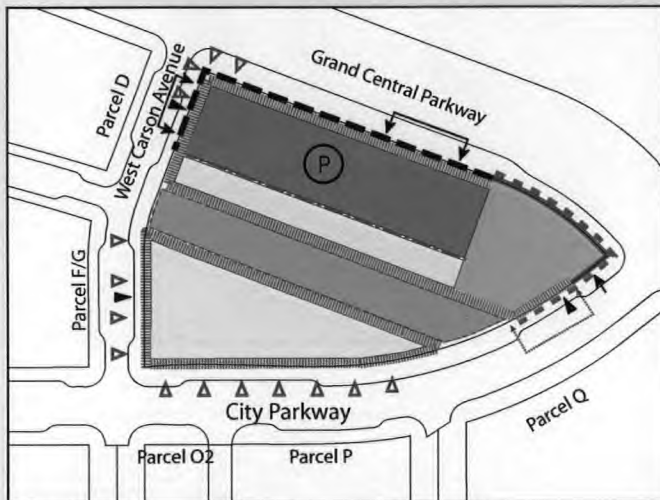
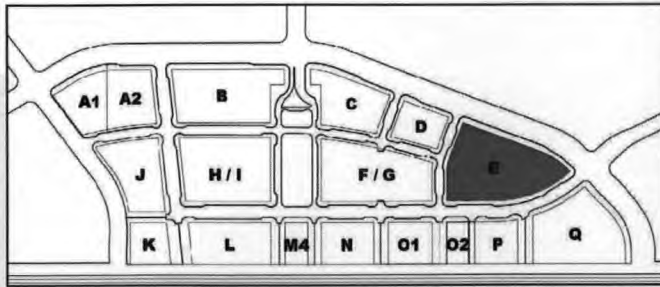
The tower will have its base beginning at the ground level on City Parkway at Grand Central Parkway.

E.10 Axes and Views

The view through the site along Union Park Promenade shall not be obstructed. The tower shall be a compact form so as to minimize the obstructions to views from the site and to other buildings on the site.

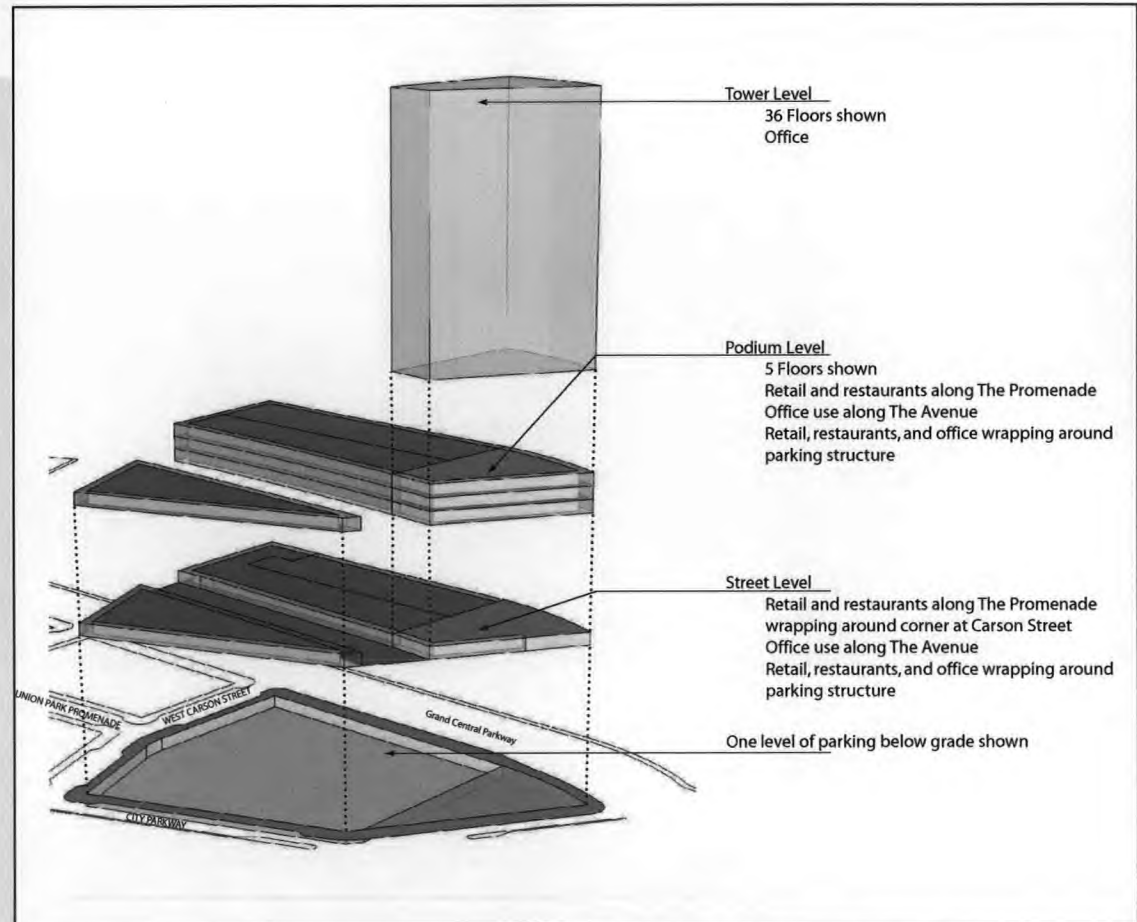
E.11 Tower Height

There is no maximum height for the Tower T1.



PARCEL E

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ▲ ▲ ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ SERVICE ACCESS
- ▲ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

F/G - Middle Neighborhood Block

OBJECTIVE:

- *This parcel is an internal residential neighborhood parcel with active retail edges along City Parkway and The Union Park Promenade. The unit types in this parcel are town house types combined with a residential tower, in contrast to the higher residential towers along Grand Central Parkway and City Parkway.*

Program Shown

Residential	280 units
Retail	41,470 SF
Hotel	250 rooms
Parking	898 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

F/G.1 Pedestrian Circulation

The major pedestrian movement is along Union Park Promenade and City Parkway. A walkway across the Union Commons park in the interior of the parcel shall connect Union Park Promenade and City Parkway. This walkway shall have enough width and open configuration to allow and encourage unimpeded pedestrian movement across the block between Union Park Promenade and City Parkway. Other pedestrian walkways to the interior of the block may be created from the surrounding streets.

F/G.2 Active Frontages

Active street frontages shall be developed along Union Park Promenade and City Parkway. Second level retail or restaurant space may be developed on the corners of the site. Retail frontage shall be developed along City Parkway.

F/G.3 Tower Locations

Residential towers shall be located on the north end and south ends of the site. The towers shall establish their bases at the podium level. They are not required to be set back.

F/G.4 Build-To Lines and Setbacks

Buildings shall be built on the build-to line along Union Park Promenade to maintain a strong definition of this street space. Buildings may be setback within the setback zone along City Parkway. The majority of the length of the street walls shall be built to the back of sidewalk along this street. At the base of the building the allowable setback shall not exceed 10'-0" and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

F/G.5 Parking Access

Parking access shall only be brought in from City Parkway in the vicinity of West Bridger Avenue. Parking is underground on this parcel.

F/G.6 Exposed Parking

Parking structures shall not be exposed on this parcel.

F/G.7 Open Space and Amenities

Ground level open space shall be developed as a private park, identified as Union Commons. This park is for the use of the surrounding neighborhood and visitors, as well as residents of Block F/G. The park may be gated for resident use even though it will be a public visual amenity. Design and final size should be a function of the final architectural design of adjacent buildings.

F/G.8 Bases of Towers

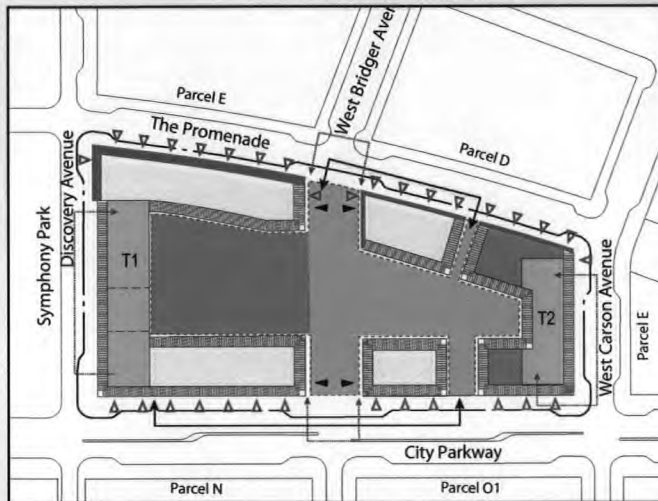
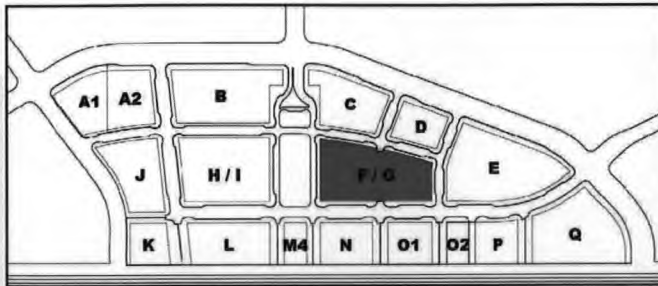
The north tower shall have its base beginning at the podium level on the Carson Avenue frontage. The south tower (T1) shall begin on a podium in a position fronting Symphony Park.

F/G.9 Axes and Views

A view and access across the parcel between Union Park Promenade and City Parkway shall be kept open to visual and walking access.

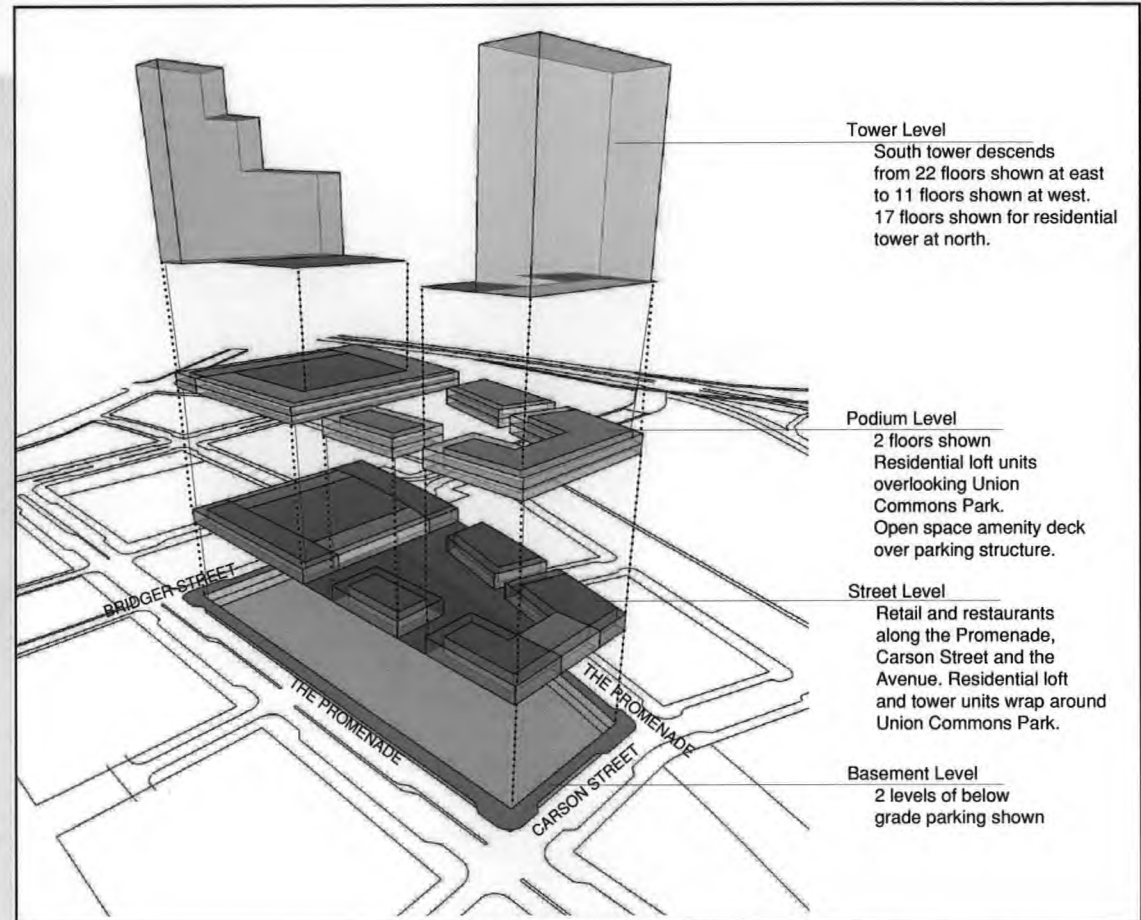
F/G.10 Tower Height

There is no maximum height for T1 or T2.



PARCEL F/G

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ▲ — ▲ ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ — ▲ SERVICE ACCESS
- ▲ — ▲ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



Tower Level
South tower descends from 22 floors shown at east to 11 floors shown at west. 17 floors shown for residential tower at north.

Podium Level
2 floors shown
Residential loft units overlooking Union Commons Park.
Open space amenity deck over parking structure.

Street Level
Retail and restaurants along the Promenade, Carson Street and the Avenue. Residential loft and tower units wrap around Union Commons Park.

Basement Level
2 levels of below grade parking shown

NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

H/I – Performing Arts Center

OBJECTIVE:

- *This is the Performing Arts Center parcel, facing onto Symphony Park and the Civic Axis. The west side of the parcel will have retail and restaurant uses facing onto Union Park Promenade. The back of the parcel shall contain service and office space.*

Program Shown

Performing Arts Center	586,000
Office	13,000 SF

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

H/I.1 Pedestrian Circulation

The major pedestrian movement and the building's main access shall be from the Symphony Park (north) side of the site. No other pedestrian circulation is required internal to this site, except in the building.

H/I.2 Active Frontages

Union Park Promenade side of the site shall have active retail or restaurant uses facing Union Park Promenade.

H/I.3 Build-To Lines and Setbacks

A build-to line shall be established along Symphony Park (front entrance) side of the site to maintain a strong definition of this street space. Setback zones are allowed on City Parkway and on Union Park Promenade. The majority of the length of the street walls shall be built to the back of the sidewalk along this street. The building may extend beyond the back-of-sidewalk line (over the sidewalk) at upper levels, but not at the sidewalk level. The sidewalk level on Discovery Avenue is to be kept open as a pre-and-post-function outdoor circulation space. At the base of the building the allowable setback shall not exceed 10'-0" and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

H/I.4 Parking and Delivery Access

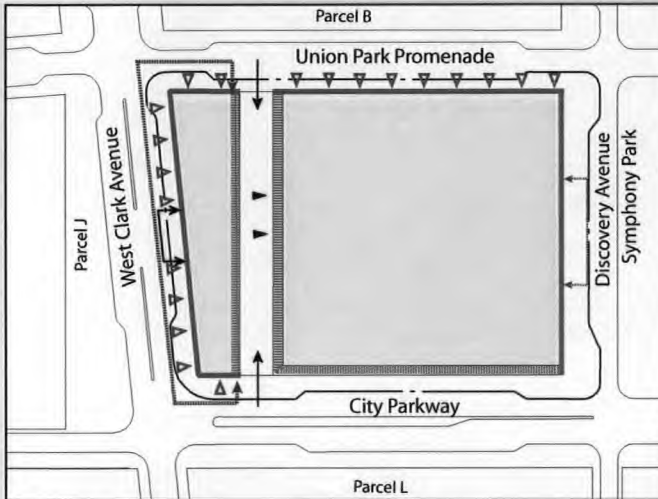
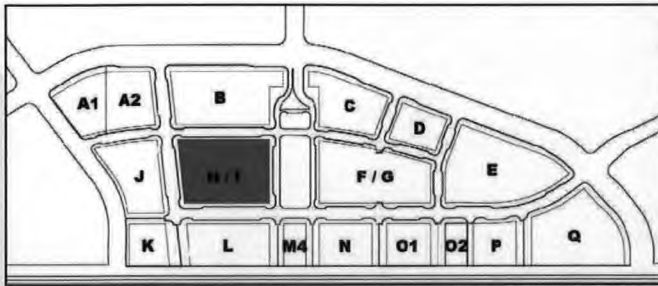
Parking access to the West Clark Avenue side of Parcel H/I is shall be brought in from Union Park Promenade and City Parkway. There shall be no underground parking on this site. Delivery access for the Performing Arts Center is to be brought in from Union Park Promenade and City Parkway. Truck docks are to be placed along this access between the two streets, sufficient for heavy truck access.

H/I.5 Open Space and Amenities

The open space of the site shall be focused on the sidewalk in front of the main entrance to the Performing Arts Center, facing Symphony Park.

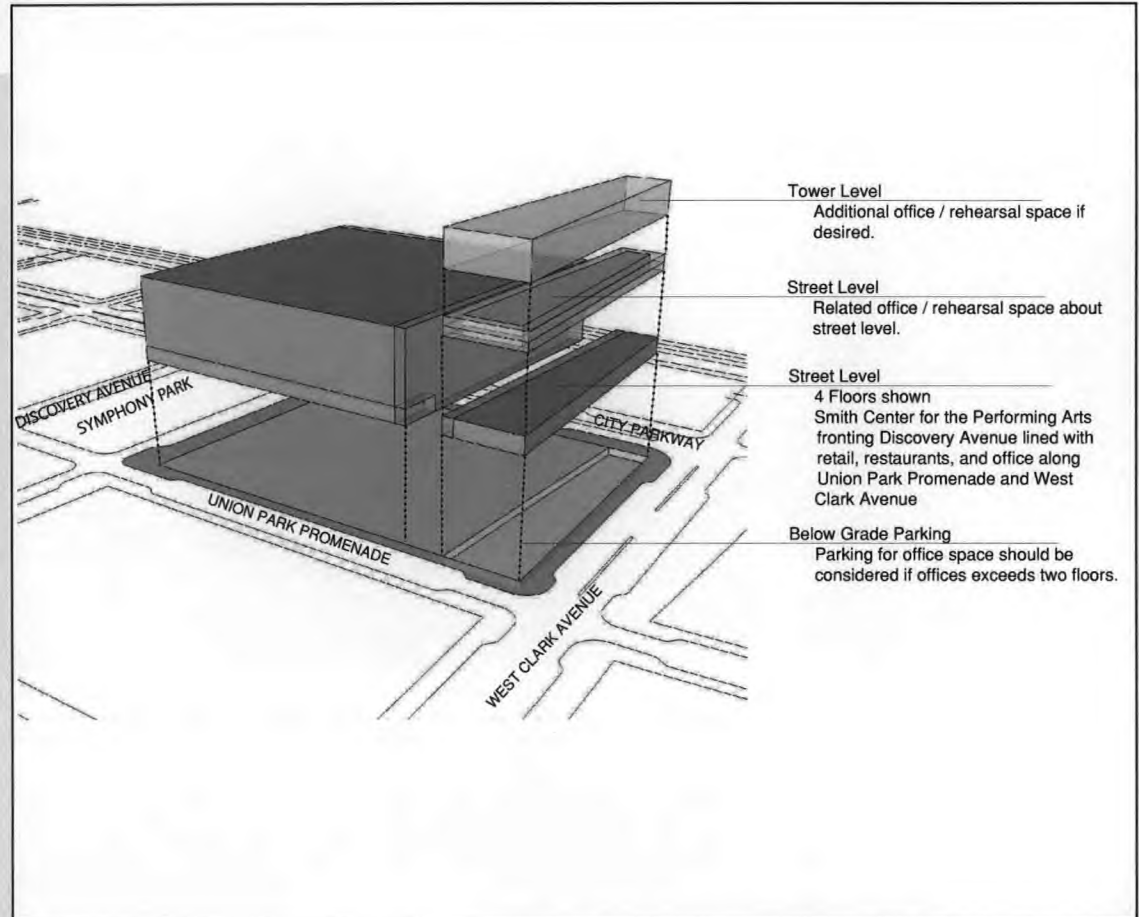
H/I.6 Axes and Views

The view of the front of the Performing Arts Center from the Civic Axis should be maximized.



PARCEL H/I

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- - - BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- - - ALLOWABLE PARKING STRUCTURE EXPOSURE
- ↑ ↑ ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ ▲ SERVICE ACCESS
- ↑ ↑ BUILDING LOBBY ENTRANCE
- - - TOWER VISUALLY EXPRESSED TO THE GROUND



NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

J – West Clark Avenue South Side

OBJECTIVE:

- *This is a hotel and office site fronting on West Clark Avenue, just east of the Lou Ruvo Alzheimer's Center. It also has a frontage on the section of Union Park Promenade which is not required to be an active frontage.*

Program Shown

Office	166,000 SF
Hotel	500 rooms
Parking	1185 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

J.1 Pedestrian Circulation

The major pedestrian movement is along West Clark Avenue. No pedestrian walkways are required on the interior of the parcel.

J.2 Active Frontages

There shall be active frontages along West Bridger Avenue, wrapping around the corner on Union Park Promenade. Second level retail or restaurant space may be developed on the corners of the site.

J.3 Tower Locations

Two towers shall be located on the block—on the east and west sides of the site. The west (hotel) tower from its hotel base and the east (office) towers shall establish their bases at the podium level.

J.4 Build-To Lines and Setbacks

Setback zones are allowed facing Union Park Promenade and West Clark Avenue. The majority of the length of the street walls shall be built to the back of sidewalk. At the base of the building the allowable setback shall not exceed 10'-0", and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

J.5 Parking Access

Parking access shall only be brought in from Union Park Promenade, at the mid-parcel from West Clark Avenue and from an extension of City Parkway on the east side of the block. Parking shall be in a podium under the east tower and east of the hotel tower.

J.6 Concealed and Exposed Parking

The parking structure shall only be exposed on a portion of Bonneville Street east of the hotel tower. On other frontages, the parking shall be wrapped with hotel uses and active uses.

J.7 Open Space and Amenities

The building setback on West Clark Avenue shall create a linear open space which widens as it approaches Parcel K at City Parkway. This shall be a landscaped sidewalk/plaza for the hotel and the office tower and act as the central amenity space for this medical/office district. (See Streetscape Section) An open space amenity deck or other shading and screening devices should be developed on the roof of the parking structure.

J.8 Base of Towers

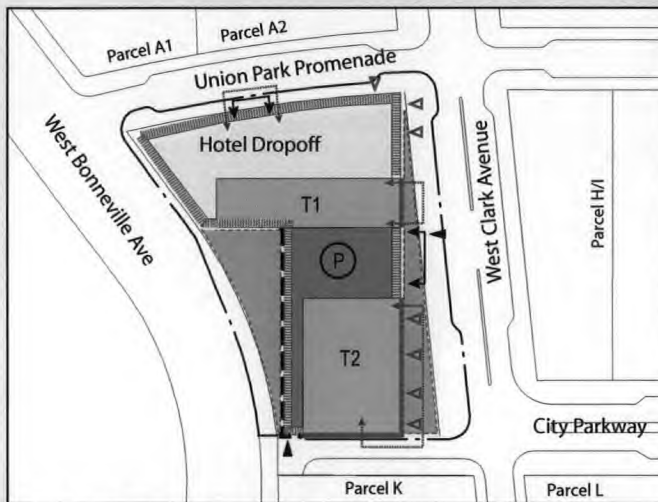
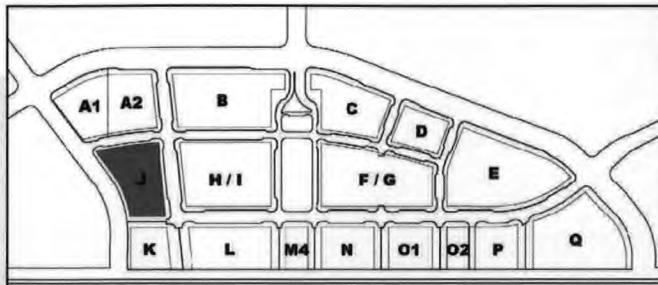
The east (office) tower shall have its base beginning at the podium level on West Clark Avenue. The west (hotel) tower shall have a base beginning at the podium level.

J.9 Axes and Views

The two towers shall be positioned so that sites to the north have views to the south between them, and so that the towers have views past each other.

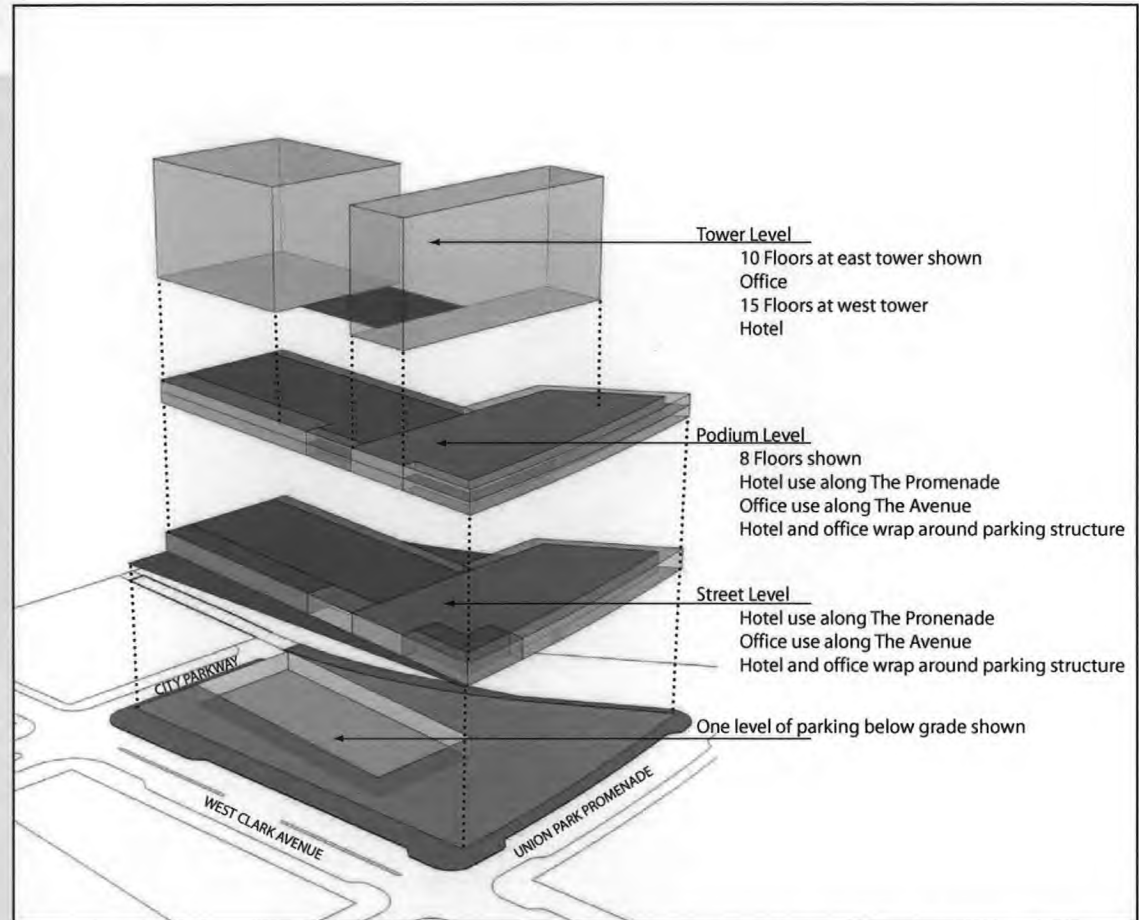
J.10 Tower Height

There are no maximum heights for Tower T1 or T2.



PARCEL J

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ SERVICE ACCESS
- ▲ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

K - Southeast Corner Block

OBJECTIVE:

- *This parcel is at the SE corner of West Clark Avenue and City Parkway, and plays a role in terminating the axes of both of these streets. It is primarily an office parcel. Passing immediately in front of this parcel is the access to the pedestrian bridge across Bonneville Street to the Clark County Government Center.*

Program Shown

Office	175,940SF
Parking	1080 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

K.1 Pedestrian Circulation

The major pedestrian movement is along the extension of City Parkway, which will be an open plaza element through the parcel, continuing on to a possible pedestrian bridge to the Clark County Government Center. Other pedestrian activity shall be focused at the northwest corner of the site.

K.2 Active Frontages

No active frontages are required on this site. Any active uses on this parcel should be at the northwest corner of the site, relating to City Parkway.

K.3 Tower Location

An office tower should be located on the west side of the site. It should rise directly from the parking podium.

K.4 Build-To Lines and Setbacks

The majority of the length of the street wall along City Parkway should be built to the back of sidewalk to frame the views down City Parkway. At the base of the building the allowable setback shall not exceed 10'-0", and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

K.5 Parking Access

Parking access will be from an extension of City Parkway, at the south end of the site or from the extension of West Clark Avenue. Parking will be in a podium east of the office building.

K.6 Concealed and Exposed Parking

The parking structure may be exposed to Bonneville Street, the railroad r.o.w. and a portion of the north edge of the site. Elsewhere, the parking structure shall be wrapped with office or other active uses.

K.7 Open Space and Amenities

A sidewalk-level landscaped plaza should be developed on the northwest corner of the site at sidewalk level. An open space amenity deck or other shading and screening devices should be developed on the roof of the parking structure.

K.8 Base of Tower

The tower will have its base beginning at the ground level on City Parkway.

K.9 Axes and Views

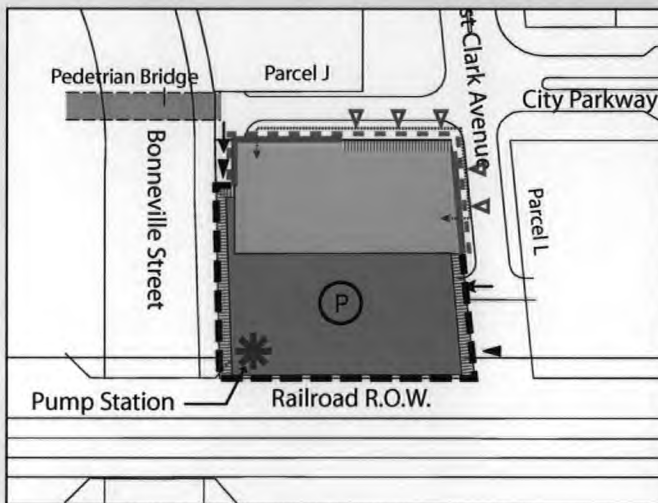
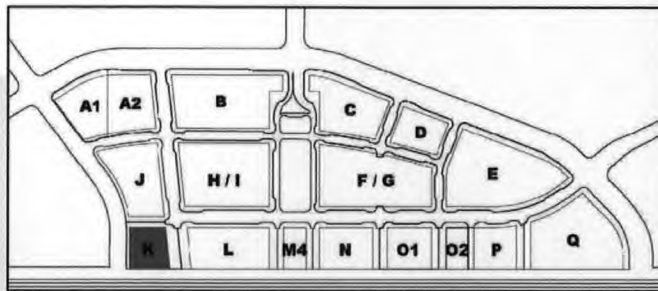
A view of the tower from the south side of West Clark Avenue will be framed by other development along West Clark Avenue, including a setback of the street wall on Parcel J. The tower design should respond to this view at the end of the street.

K.10 Tower Height

There is no maximum height for T1.

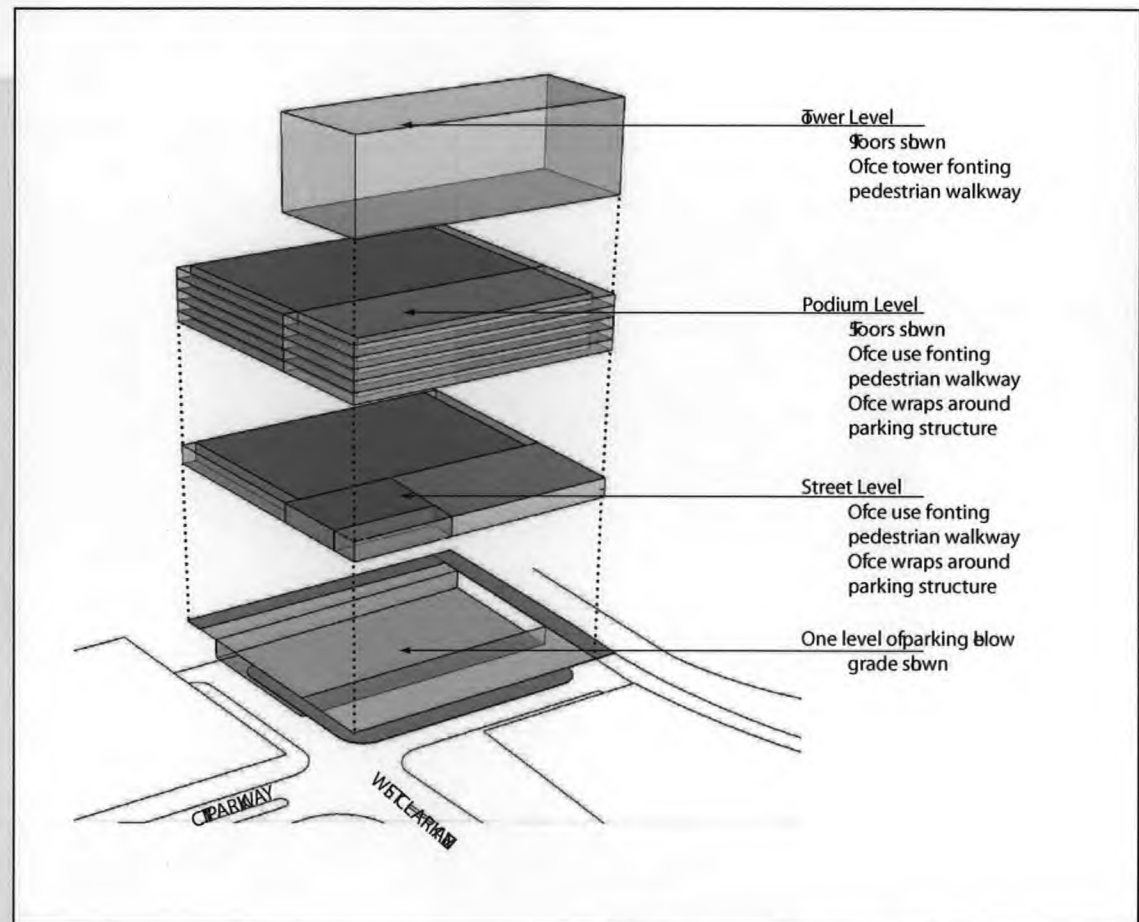
K.11

A pumping station and service access shall be provided on the southeast corner of the parcel.



PARCEL K

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ↑ ↑ ALLOWABLE PARKING OR SERVICE ACCESS
- ↑ ↑ SERVICE ACCESS
- ↑ ↑ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



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L – South Site Civic Access

OBJECTIVE:

- *This is primarily a residential parcel facing City Parkway on the west, the railroad r.o.w. on the east, and the park transition over the rail tracks on the north (Parcel M). Retail and restaurant uses face onto City Parkway at sidewalk level.*

Program Shown

Residential	479 units
Retail	20,863 SF
Parking	1624 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

L.1 Pedestrian Circulation

The major pedestrian movement is along City Parkway. No pedestrian walkways are required on the interior of the parcel.

L.2 Active Frontages

Active street frontages should be developed along City Parkway, potentially wrapping around the corner on West Clark and Discovery Avenues. Second level retail or restaurant space may be developed on the corners of the site.

L.3 Tower Locations

Two towers can be located on the north and south portions of the site. The southern and northern towers shall establish their bases at the sidewalk level. The towers are not required to be setback, but may be set back within the setback zone.

L.4 Build-To Lines and Setbacks

Setback zones are allowed facing Union Park Promenade and Wellness Way and Discovery Drive. The majority of the length of the street walls should be built to the back of sidewalk. At the base of the building the allowable setback shall not exceed 10'-0", and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

L.5 Parking Access

Parking access can be brought in from West Clark Avenue and Discovery Avenue. Parking shall be in a podium under and between the office buildings.

L.6 Concealed and Exposed Parking

The parking structure may be exposed on a portion of railroad R.O.W. On the City Parkway frontage, parking shall be wrapped with active uses and residential units.

L.7 Open Space and Amenities

An open space amenity deck shall be developed on the roof of the parking structure.

L.8 Base of Towers

The northern and southern towers will have their bases beginning at ground level.

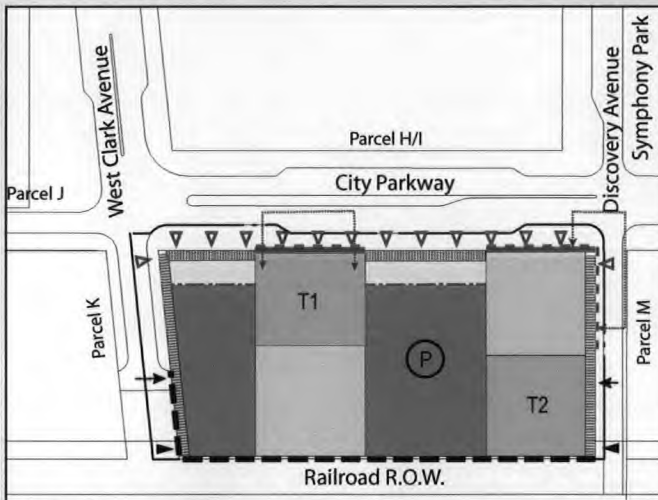
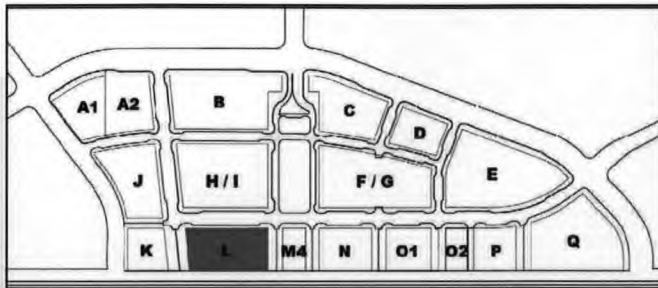
L.9 Axes and Views

The two towers shall be positioned so that sites to the east have views to the west between them, and so that the towers have views past each other.

L.10 Tower Heights

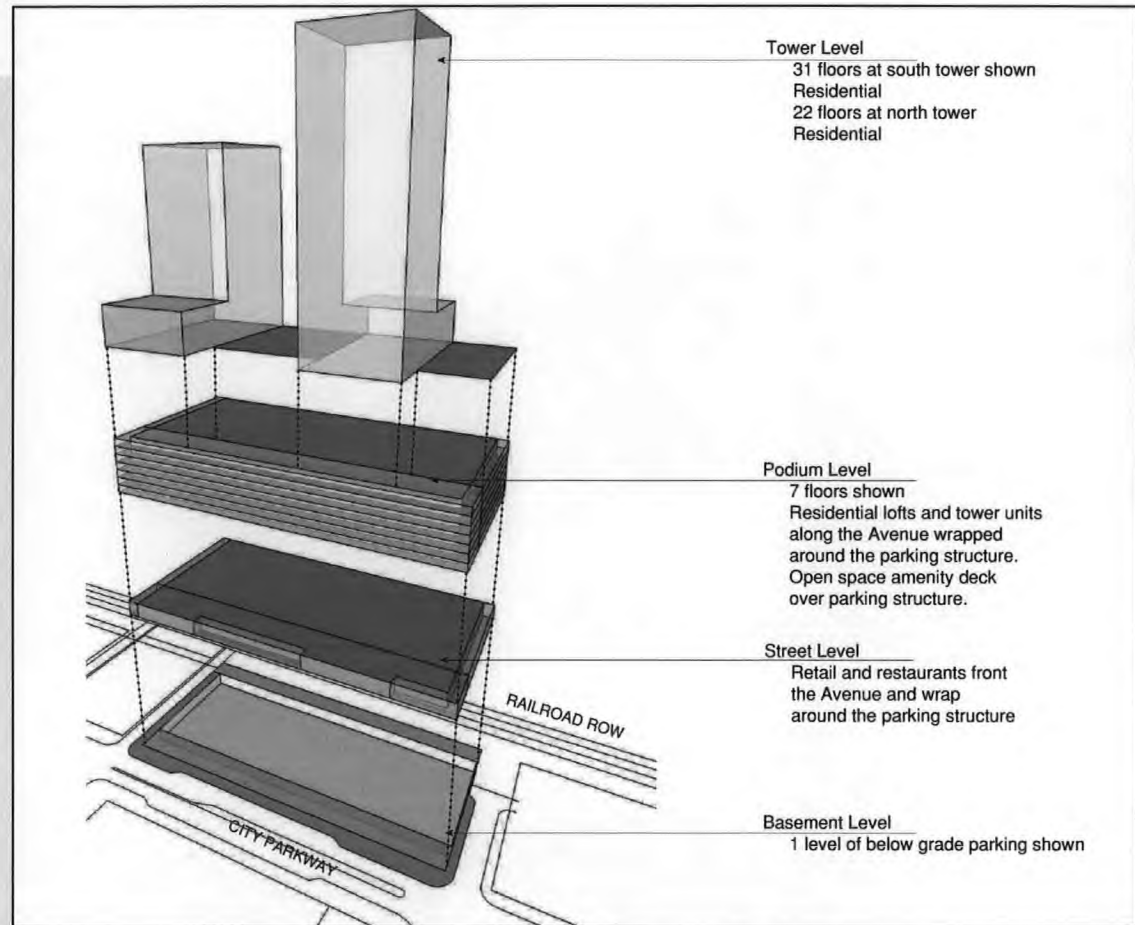
There is no maximum height for towers T1 and T2. There is a 150' maximum height for the lower towers.

4.10 Character of the Blocks



PARCEL L

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ↑ ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ SERVICE ACCESS
- ↑ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



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M4 – Civic Access Block

OBJECTIVE:

- *This parcel has no active uses at this time. It is a pedestrian open space, linear park and transitional space up to the railroad tracks between the Performing Arts Center and proposed City Hall. The park space is built over structured parking with entrances from City Parkway and Discovery Avenue. The parcel is one of four M parcels, which, taken together make up the entire Symphony Park Civic Axis open space through the middle of the site. This is a possible site for a modest public use consistent with the site size and civic nature.*

Program Shown

Parking 300 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

M.1 Pedestrian Circulation

The major pedestrian movements shall be along City Parkway, and up from City Avenue across the railroad r.o.w. to the proposed City Hall site. Pedestrian movement up to and across the tracks will be facilitated by steps, and potentially escalators or elevators as required by ADA regulations.

M.2 Parking Access

Parking access shall be from City Parkway along each side of the parcel, into the parking structure which will be under the linear park bridge connection on the west side of the railroad r.o.w.

M.3 Concealed and Exposed Parking

The parking structure shall only be exposed to the railroad r.o.w. On other frontages, the parking shall be wrapped with open space, stairs, walkways and landscape areas.

M.4 Open Space and Amenities

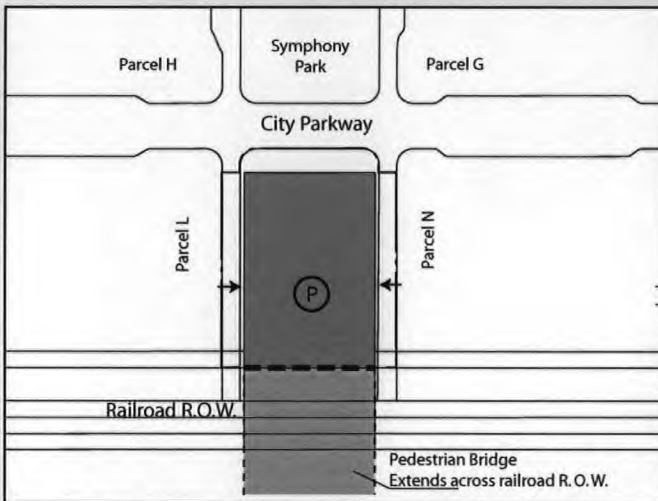
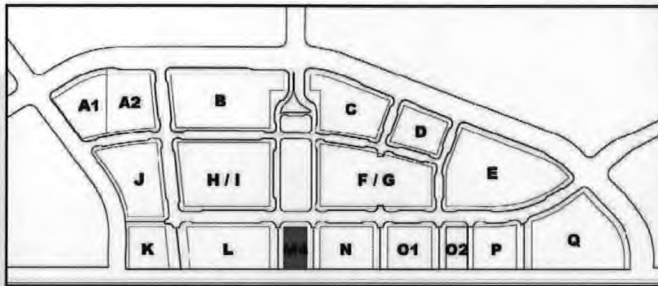
The parcel is the extension of the civic axis that connects Discovery Drive and Symphony Park through City Hall to the Federal Courts on Lewis Street.

M.5 Axes and Views

The view along the civic axis will be facilitated by a gradual step up in the open space levels so that views up and down along the crossing are unobstructed. An example is the view of the proposed City Hall across the tracks from Union Park.

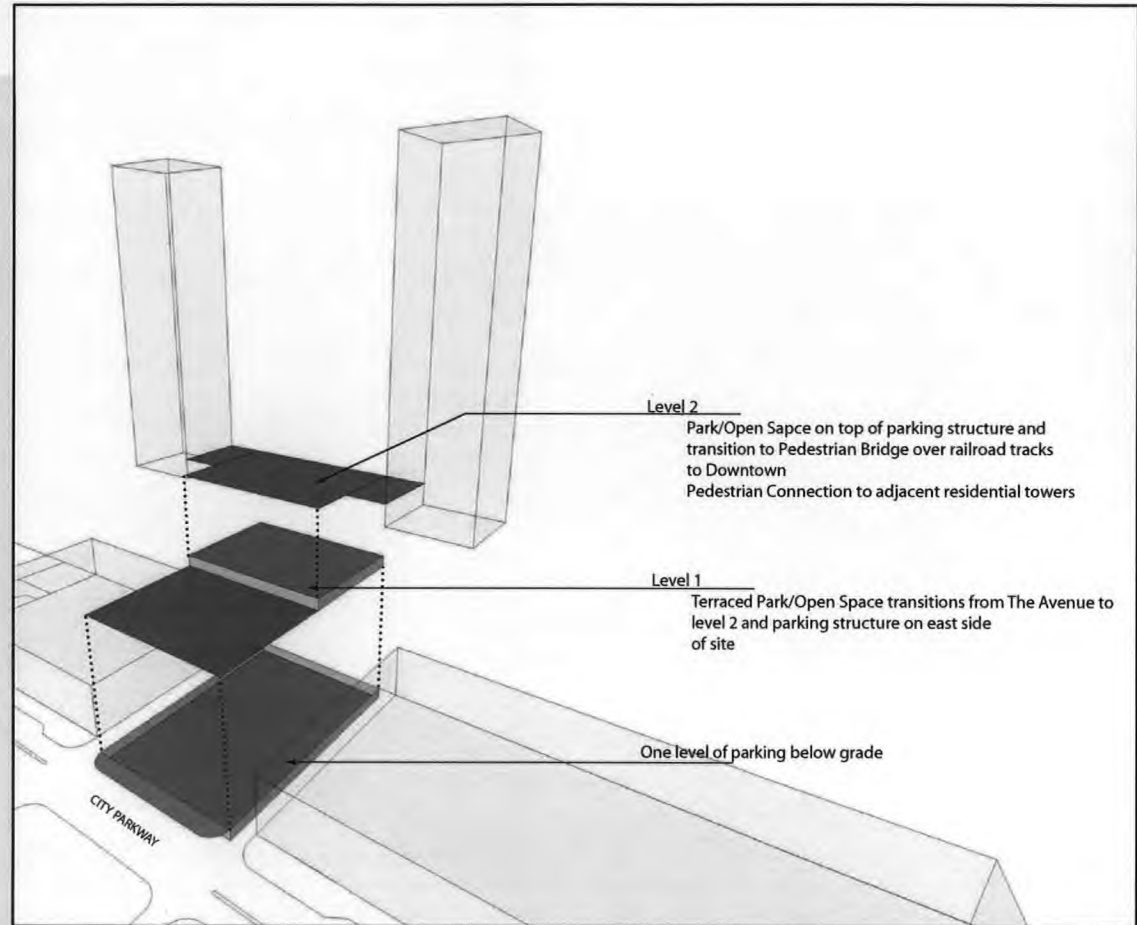
M.6 Standards for Future Uses

At such time as future uses may be contemplated for this site, setbacks, heights, uses and views, circulation and pedestrian circulation will be established for this site.



PARCEL M4

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ↑ ↑ ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ ▲ SERVICE ACCESS
- ↑ ↑ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



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N - North Side Civic Access

OBJECTIVE:

- *A residential parcel similar to Parcel L, on the north side of the Parcel M adjacent to the tracks.*

Program Shown

Residential	578 units
Retail	12,482 SF
Parking	966 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

N.1 Pedestrian Circulation

The major pedestrian movements are along City Parkway and across Parcel M. No pedestrian walkways are required in Parcel N.

N.2 Active Frontages

An active street frontage shall be developed along City Parkway, wrapping around the corners into the parking access streets on either side of the parcel.

N.3 Tower Locations

Two towers can be located on the north and south sides of the site. The southern and northern towers are not required to set back, but shall establish their bases at the podium level.

N.4 Build-To Lines and Setbacks

Setback zones are allowed facing City Parkway and the parking access streets. At the base of the building the allowable setback shall not exceed 10'-0", and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

N.5 Parking Access

Parking access will be from the parking access streets to the north and south of the parcel. Parking shall be in a podium adjacent to the railway tracks.

N.6 Concealed and Exposed Parking

The parking structure may be exposed to the railway tracks. On other frontages, the parking shall be wrapped with active uses and residential units.

N.7 Open Space and Amenities

An open space amenity deck shall be developed on the roof of the parking structure.

N.8 Base of Towers

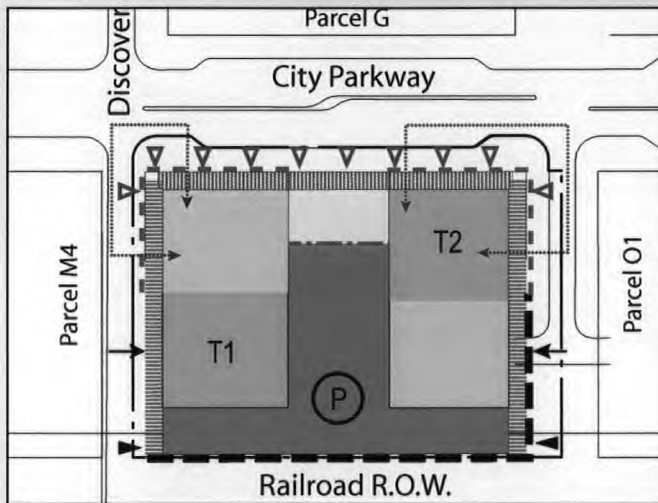
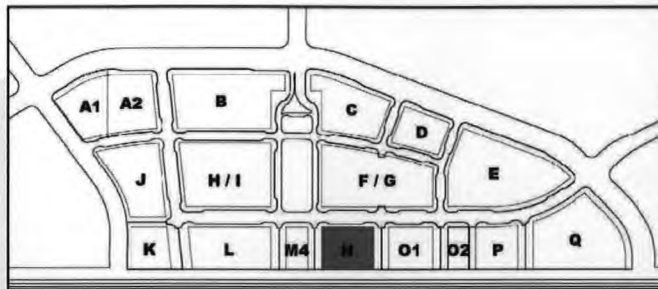
The south tower shall have its base beginning at the podium on City Parkway and the parking access street frontages. The north tower shall have its base beginnings at street level.

N.9 Axes and Views

The two towers shall be positioned so that views are maintained across the site between them, and so that the towers have views past each other.

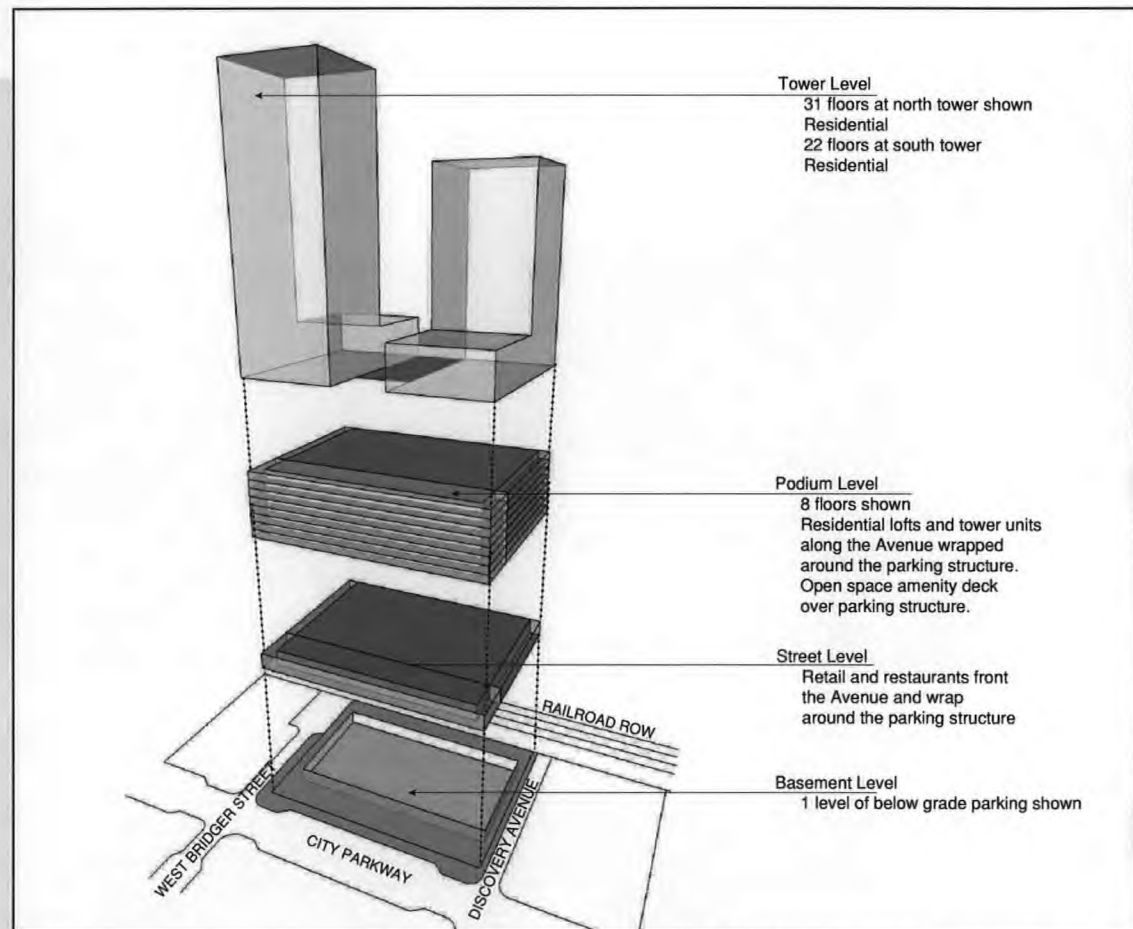
N.10 Tower Heights

There is no maximum height for towers T1 and T2. There is a 150' maximum height for the lower towers.



PARCEL N

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ SERVICE ACCESS
- ▲ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

01 – Middle Avenue Block

OBJECTIVE:

- *A residential parcel on City Parkway, similar to Parcels L and N in terms of uses and relationship to City Parkway.*

Program Shown

Residential	406 units
Retail	26,882 SF
Parking	747 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

01.1 Pedestrian Circulation

The major pedestrian movement is along City Parkway. No public pedestrian walkways are required within the parcel.

01.2 Active Frontages

Active street frontages shall be developed along City Parkway, wrapping around the corners into the parking access streets. A grocery store may be developed along City Parkway.

01.3 Tower Locations

Two towers shall be located on the north and south sides of the site. The southern tower may be set back from the south side of the site; however it shall establish its base at the podium along City Parkway. The northern tower is not required to set back. It shall establish its base at the podium along City Parkway and the parking access street.

01.4 Build-To Lines and Setbacks

Setback zones are allowed on all sides of the parcel, along City Parkway and the parking access streets. At the base of the building the allowable setback shall not exceed 10'-0", and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

01.5 Parking Access

Parking access will be from the parking access streets to the north and south of the parcel. These are the extensions of West Bridger Avenue and West Carson Avenue. Parking is in a podium adjacent to the railway tracks.

01.6 Concealed and Exposed Parking

The parking structure may be exposed to the railway tracks. On other frontages the parking structure shall be wrapped with active uses and residential units.

01.7 Concealing Parking Structure

The parking structure shall be wrapped on the City Parkway frontage with active uses at the street level and residential units above.

01.8 Open Space and Amenities

An open space amenity deck shall be developed on the roof of the parking structure.

01.9 Base of Towers

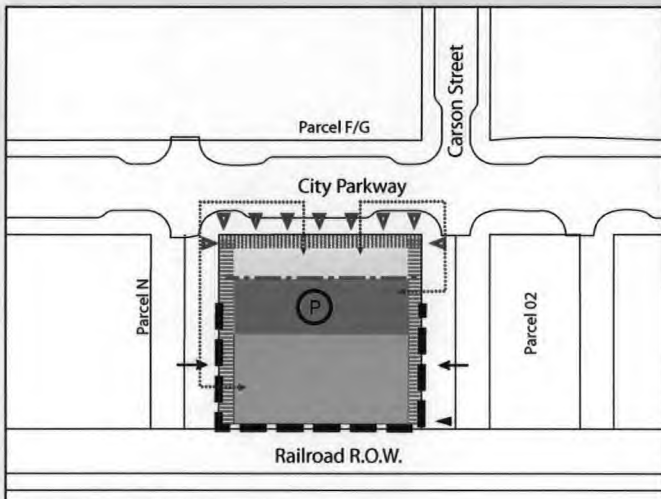
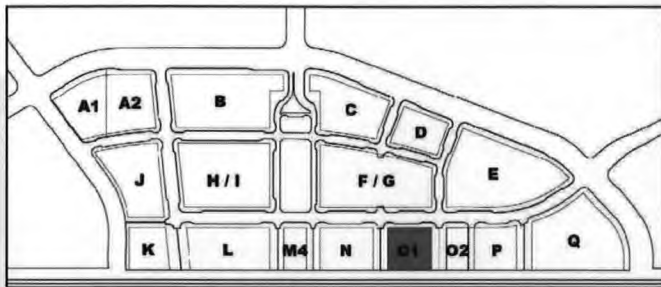
The tower will have their bases beginning at the podium level on City Parkway.

01.10 Axes and Views

The tower shall be positioned on the east side of the site.

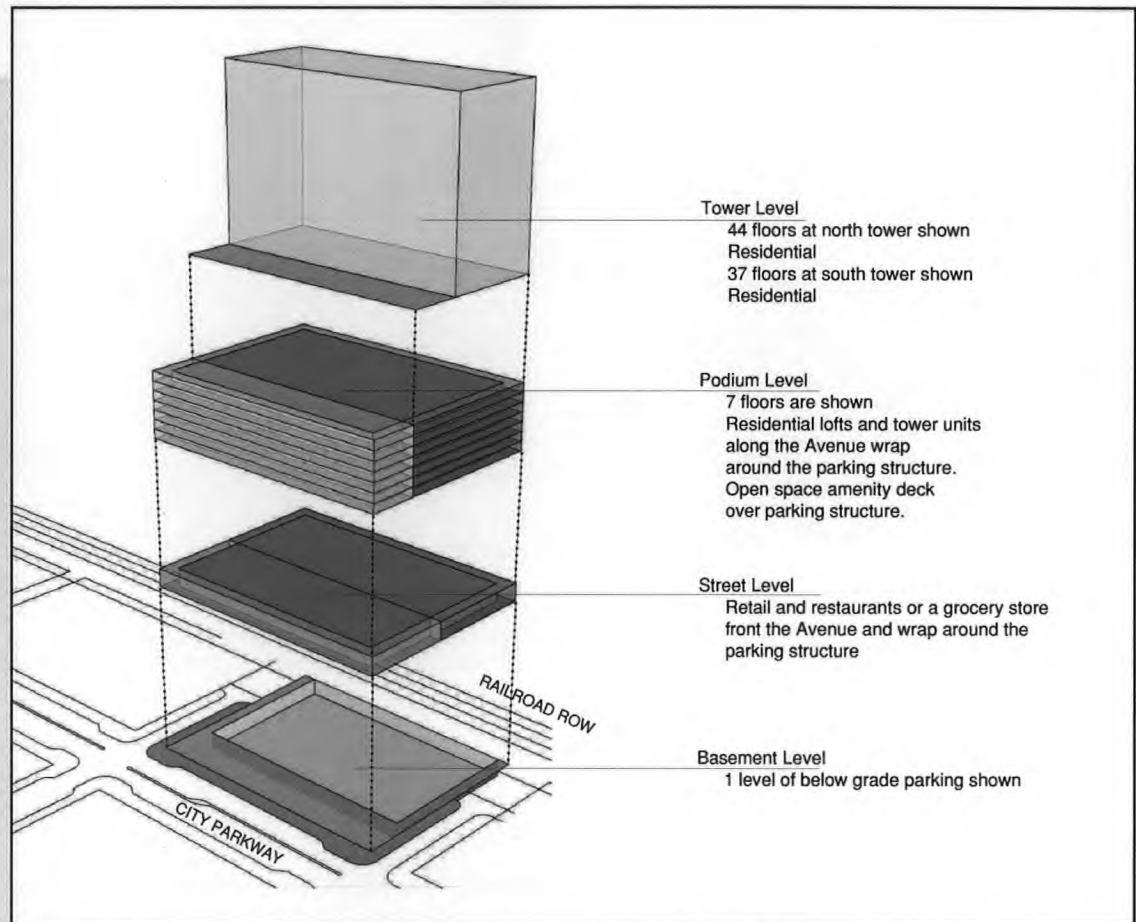
01.11 Tower Height

There is no maximum height for Tower T1.



PARCEL O1

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ↔ ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ SERVICE ACCESS
- ▲ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

O2 – South of Gateway Block

OBJECTIVE:

- A residential parcel facing City Parkway.

Program Shown

Residential	243 units
Retail	4,068 SF
Parking	472 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

O2.1 Pedestrian Circulation

The major pedestrian movement is along City Parkway. No pedestrian walkways internal to the parcel are required.

O2.2 Active Frontages

Active street frontages shall be developed along City Parkway, wrapping around the corners into the parking access streets.

O2.3 Tower Location

The tower is to be located on the front (street side) of the parcel. It will be architecturally expressed as a building that originates at the sidewalk level rather than at the podium.

O2.4 Lobby Location

The lobby location shall be at or near the southwest corner of the parcel.

O2.5 Build-To Lines and Setbacks

A setback zone is allowed along the parking access on the north side of the parcel. Build-to lines are important to maintain on the City Parkway and south side of the parcel. At the base of the building the allowable setback shall not exceed 10'-0", and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

O2.6 Parking Access

Parking access will be from the parking access streets to the south of the parcel. Parking is in a podium under the building and adjacent to the railway tracks.

O2.7 Concealed and Exposed Parking

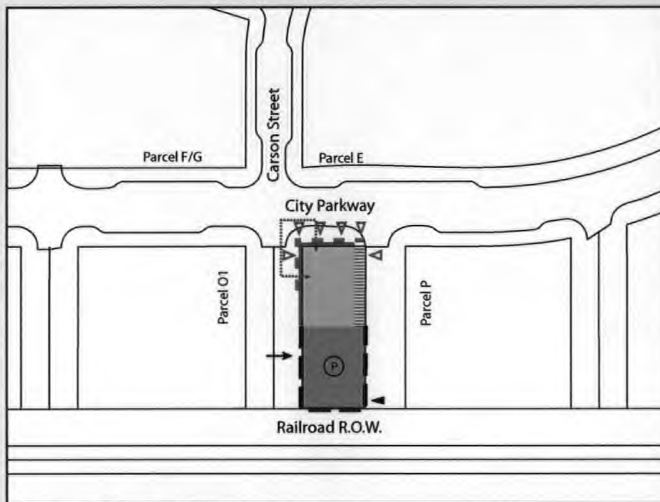
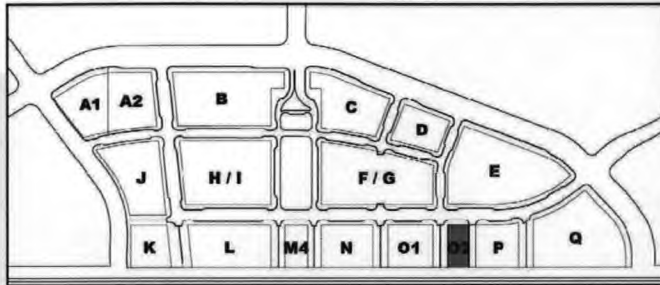
The parking structure shall only be exposed to the railway tracks and the rear portion of the parking accesses. The parking structure shall be wrapped with active uses along the City Parkway frontage. The retail on City Parkway may be two or more stories in height.

O2.8 Open Space and Amenities

No open space is required interior to this parcel.

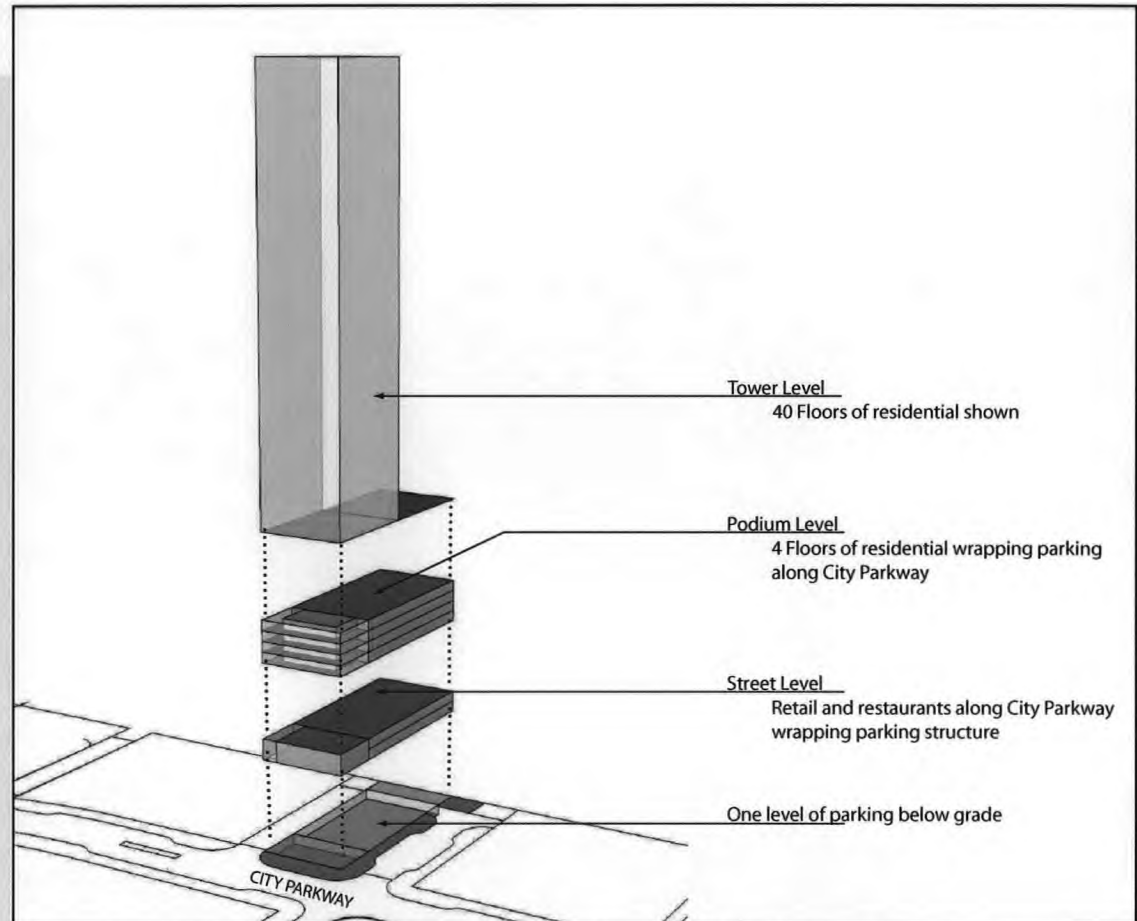
O2.9 Tower Height

There is no maximum height for Tower T1.



PARCEL O2

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ ▲ SERVICE ACCESS
- BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

4.15 Character of the Blocks

P – Gateway Block-South

OBJECTIVE:

- *An entertainment/commercial and parking parcel facing City Parkway.*

Program Shown

Retail	15,996
Parking	986 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

P.1 Pedestrian Circulation

The major pedestrian movement is along City Parkway. No pedestrian walkways internal to the parcel are required.

P.2 Active Frontages

Active street frontages shall be developed along City Parkway, wrapping around the corners into the parking access streets.

P.3 Tower Location

No tower is required on this parcel.

P.4 Build-To Lines and Setbacks

Setback zones are allowed along City Parkway and the parking access streets. At the base of the building the allowable setback shall not exceed 10'-0", and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

P.5 Parking Access

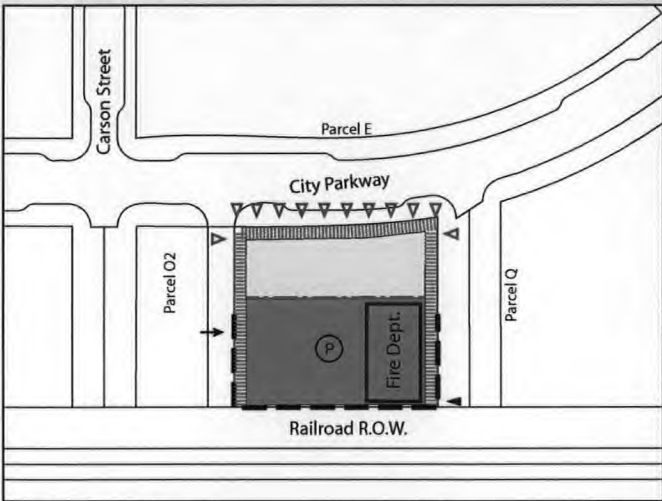
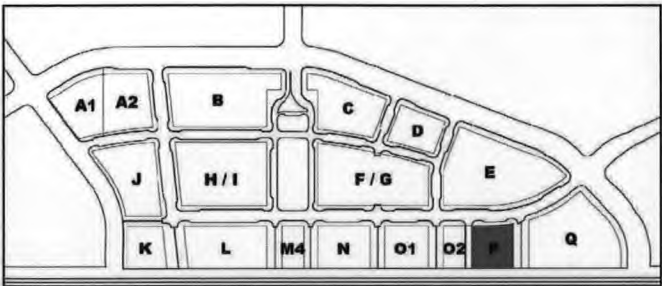
Parking access will be from the parking access streets to the north and south of the parcel. Parking is in a podium adjacent to the railway tracks.

P.6 Concealed and Exposed Parking

The parking structure shall only be exposed to the railway tracks. The parking structure shall be wrapped with active uses along the City Parkway frontage. The retail may be two or more stories in height.

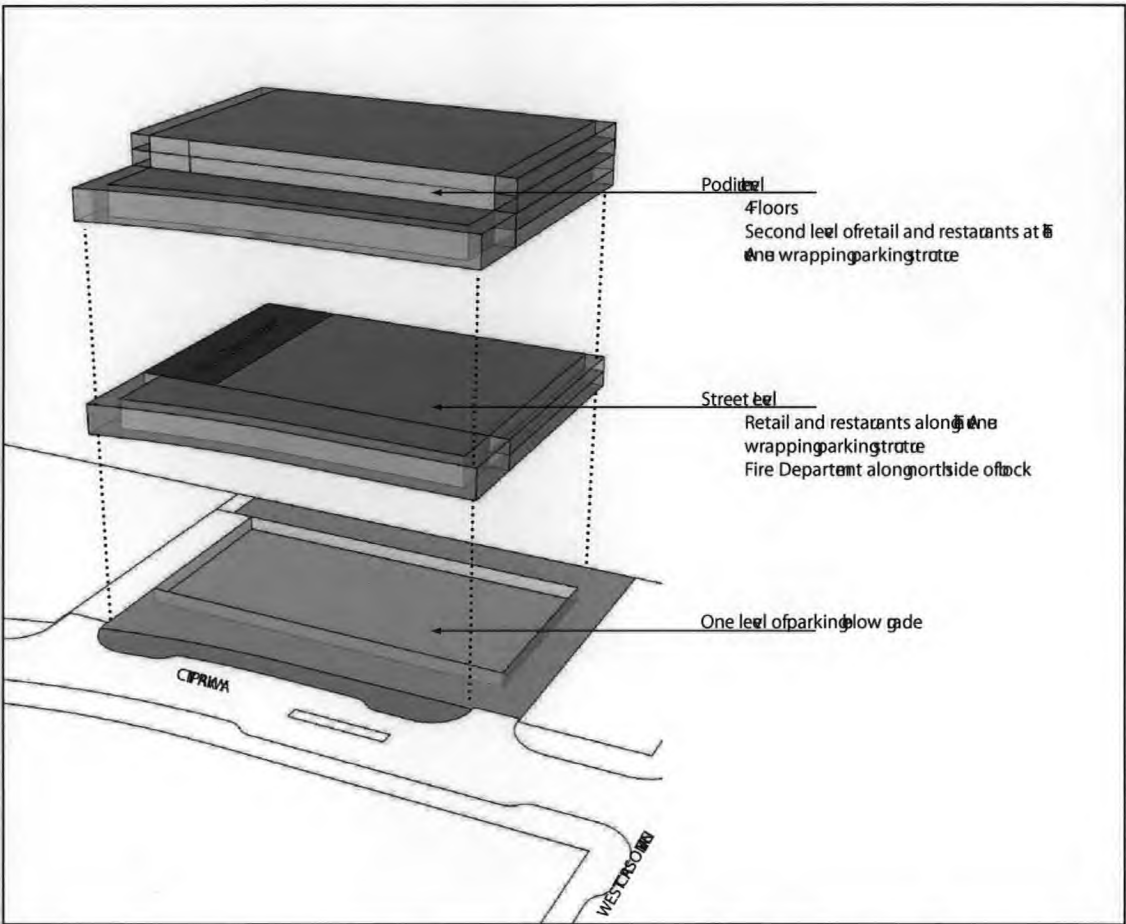
P.7 Open Space and Amenities

There are no open space requirements.



PARCEL P

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ↑ ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ SERVICE ACCESS
- ↑ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

Q – Gateway Block-North

OBJECTIVE:

- *This is a key Gateway parcel greeting arrivals from City Parkway. Along with Parcel E, this parcel will feature an iconic tower forming part of a gateway off City Parkway. A major element of this site is the large hotel tower envisioned for the west side of the site. Another major feature is the auto court that enters the site from City Parkway and provides the drop off and turnaround needed for the hotel and casino.*

Program Shown

Hotel	1000 rooms
Parking	1170 spaces

NOTE:

The number of units, square footage and parking spaces planned for each block are generalizations.

The actual numbers shall be approved by City Council on a case-by-case basis.

Q.1 Pedestrian Circulation

The major pedestrian movement is along City Parkway. A pedestrian bridge through the parcel will bridge across the railway line to connect the site to Fremont Street and the entertainment district on the other side of the tracks. The pedestrian connection to Fremont Street at the pedestrian bridge level shall be very direct and open to the public through the site, not internalized to a hotel or casino.

Q.2 Active Frontages

Active street frontages should be developed along City Parkway and the pedestrian bridge.

Q.3 Tower Location

The hotel tower will be located at the north end of the site. It shall relate directly to the auto court, and form the gateway to the site together with the office tower on Parcel E. Tower T1 should rise from the podium level rather than off the parking and retail podium.

Q.4 Build-To Lines and Setbacks

Setback zones are allowed on all sides of the parcel. At the base of the building the allowable setback shall not exceed 10'-0", and 80% of the face of the building shall be placed on the build-to line at the back of the sidewalk.

Q.5 Parking Access

Parking access will be from the parking access street to the south of the parcel and can also come in through the auto drive. Parking

is in a podium to the north of the site, to the west of the hotel tower.

Q.6 Concealed and Exposed Parking

The parking structure shall only be exposed to the railway tracks. The parking structure elsewhere on the parcel shall be wrapped with hotel lobby, function areas and active uses.

Q.7 Open Space and Amenities

The auto court with its central median can be developed as an open space amenity. An elevated pedestrian bridge shall connect the auto court via a pedestrian bridge to development on the other side of the railway tracks.

Q.8 Base of Tower

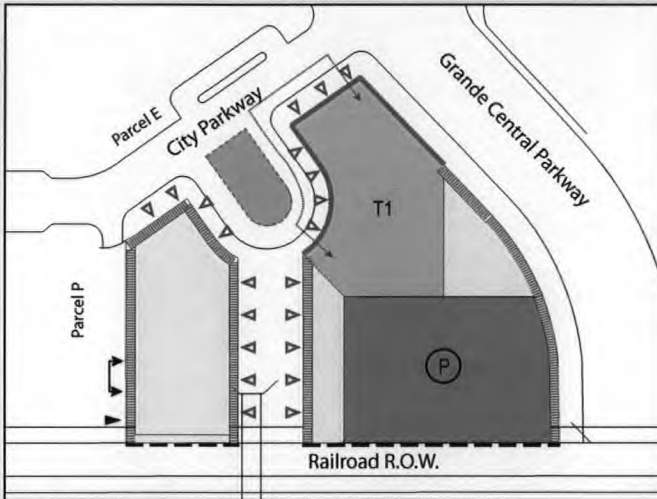
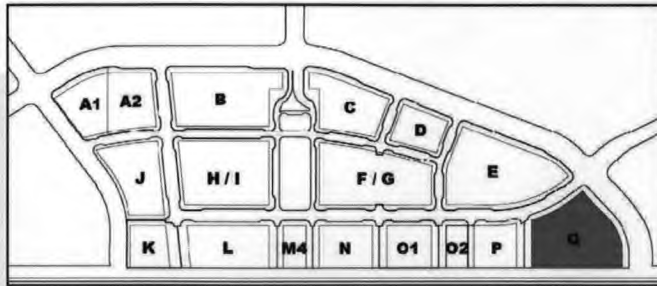
The hotel tower should establish its base at the parking podium off the auto court, City Parkway and Grand Central Parkway.

Q.9 Axes and Views

Physical and visual access should be maintained along the pedestrian bridge spanning across the railway tracks.

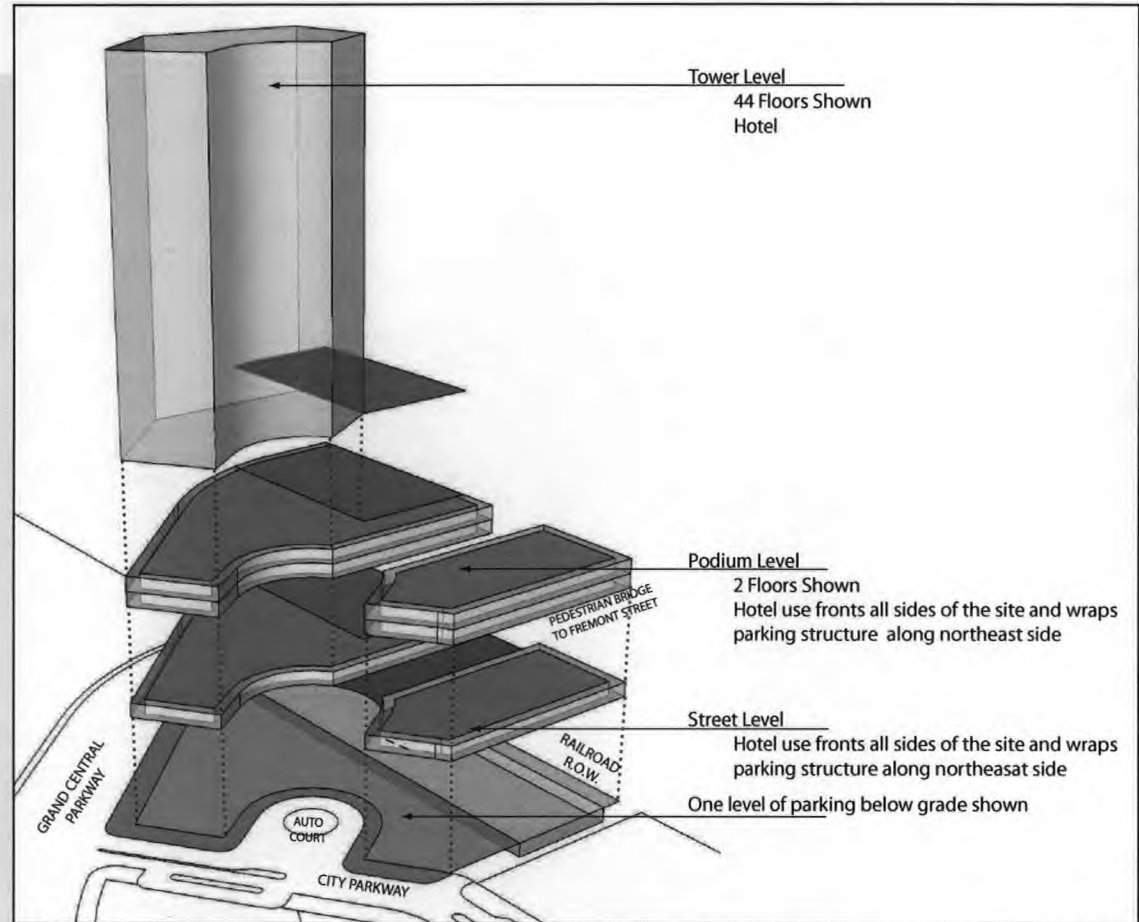
Q.10 Tower Height

There is no maximum height for Tower T1.



PARCEL Q

- ▲ ▲ ▲ ACTIVE RETAIL FRONTAGE
- BUILD-TO LINE
- ALLOWABLE SETBACK
- BUILDING LIMIT ABOVE
- PREFERRED TOWER LOCATION
- LOWER TOWER UP TO 150' ABOVE THE GROUND
- GROUND LEVEL OPEN SPACE
- ROOF DECK OPEN SPACE
- ALLOWABLE PARKING STRUCTURE EXPOSURE
- ↑ ↑ ALLOWABLE PARKING OR SERVICE ACCESS
- ▲ ▲ SERVICE ACCESS
- ↑ ↑ BUILDING LOBBY ENTRANCE
- TOWER VISUALLY EXPRESSED TO THE GROUND



NOTE: These plan and perspective views illustrate a typical program. The actual program may differ in some respects. All proposed building envelopes are subject to review and approval by the Design Review Committee.

DESIGN REVIEW

To ensure that each project in Union Park complies with the Design Standards, each project in Union Park will be reviewed with respect to its urban design, architectural and landscape design qualities, as measured by the Design Standards. A related goal is that each developer be directed toward the most beneficial planning and design approaches so that projects can proceed without undue delays.

The objectives of the Design Review process are:

- To provide an equitable, orderly application of the Design Standards for all projects.
- To implement the goals and requirements of the Master Plan,
- To insure compliance with the Design Standards and the Master Plan, especially in regard to:
- Establishment of a high quality urban planned community
- Provision of the overall density, mix of uses, heights and building types as contemplated by the Master Plan and Design Standards.
- To protect the City's capital investment in infrastructure.
- To enhance the value of all property in Union Park by maintaining a high level of architectural design.
- To provide timely, fair and firm design direction for each project, and to resolve differences in design approach between the developer, Newland Communities and the City of Las Vegas.

Design Review Committee

To review and evaluate each proposal and protect these values, the Union Park Design Review Committee (UP-DRC) is hereby created. The UP-DRC shall consist of five members, with two members to be appointed by Newland Communities, and one representative each from the Office of Business Development, the Planning and Development Department, and the Public Works Department. The UP-DRC may retain consultants as necessary to review plans for conformance to the design guidelines. The UP-DRC shall have the authority to adopt rules and regulations concerning its administrative procedures.

The design review process shall consist of the procedures listed below:

1. Block Plan Review. The applicant will provide the UP-DRC with a submittal including conceptual plans of the first phases and subsequent block buildout for the block in question. Application for the review shall be made to the Office of Business Development, serving as support staff to the UP-DRC, and shall include the following information:

- Site plan, including the location of all buildings;
- Parking and access;
- Pedestrian access and open space;
- Conceptual elevations;
- Computer-generated 3-D massing model (to enable the project to be seen from all sides and in context to the overall Union Park development);
- Building program;
- LEED Checklist (preliminary).

The UP-DRC shall have 30 working days from the date of submittal to make a recommendation on the submitted plans. The UP-DRC may make a recommendation of approval, approval with conditions, or denial. Upon making a recommendation, the UP-DRC shall provide the applicant with written notice of the decision; recommendations for denial shall include the basis for the denial. Failure to make a recommendation within 30 working days by the committee shall constitute a recommendation of approval.

2. Design Development Review. Upon approval of the initial block plan, the applicant shall prepare design development drawings for review by the UP-DRC. Application for the review shall be made to the Office of Business Development, serving as support staff to the UP-DRC, and shall include the following information:

- Site plan, showing all driveways and access points;
- Grading plan;
- Floor plans;
- Elevations, showing key façade details;
- Landscape and streetscape plans;

- Materials, finishes and colors;
- Site signage;
- Refined computer-generated 3-D massing model;
- Solar shading diagram;
- LEED Checklist (with explanation).

The UP-DRC shall have 30 working days from the date of submittal to make a recommendation regarding the submitted application. Utilizing a development standards checklist, the UP-DRC may make a recommendation of approval, approval with conditions, or denial. Upon making a recommendation, the UP-DRC shall provide the applicant with written notice of the decision; recommendations for denial shall include the basis for the denial. Failure to make a recommendation within 30 working days by the committee shall constitute a recommendation of approval.

3. Site Development Plan Review. Upon approval of the Design Development Review application, the applicant shall submit a Site Development Plan Review application and any other required applications to the Planning and Development Department for review by the City of Las Vegas in accordance with the requirements of Title 19.18 of the Las Vegas Municipal Code. Applications will not be accepted unless accompanied by a letter with a recommendation for approval from the UP-DRC.

4. Building Permit Review. After receiving approval of the Site Development Plan Review application and any other required applications, the application shall submit construction documents for review by the UP-DRC. The construction documents shall be submitted to the Office of Business Development, serving as staff support for the UP-DRC, and shall be submitted prior to or concurrently with an application for a building permit. The UP-DRC shall have 30 working days from the date of submittal to make a recommendation regarding the submitted documents. The review by the UP-DRC shall be limited to the conditions of approval placed upon the project by the City of Las Vegas; any amendment to the approved plans shall be in accordance with the requirements

listed in Title 19.18 of the Las Vegas Municipal Code. Upon making a recommendation, the UP-DRC shall provide the applicant with written notice of the decision; recommendations for denial shall include the basis for the denial. Failure to make a recommendation within 30 working days by the committee shall constitute a recommendation of approval. Building permits shall not be issued until the applicant provides a letter of recommendation for approval from the UP-DRC.

Review of Construction

The UP-DRC may review construction documents to ensure that approved developments are constructed in accordance with approved plans and drawings. Consultants may be retained by the UP-DRC to assist with construction document review.

Approval of Subsequent Phases

All building developments within any Block shall be developed as established in the Block Plans and related documents, except as changes may be mutually agreed upon in writing by the Design Review Committee. Newland Communities may submit different plans for Building Developments within such Block so long as such plans are in compliance with the Master Plan and other relevant terms and conditions.

Waivers to the Design Standards

Waivers to the Union Park Design Standards contained herein may be granted by City Council upon a recommendation from the UP-DRC, with clear and convincing evidence for demonstrated economic hardship or to further the City's redevelopment efforts.

Amendments to the Design Standards

The UP-DRC may recommend amendments to these development standards, as warranted to address deficiencies or changes in development patterns. Changes to these standards shall be processed in the form of a Text Amendment, in accordance with the requirements of Title 19.18 of the Las Vegas Municipal Code.

PERMITTED USES – PARKWAY CENTER DEVELOPMENT STANDARDS

PERMITTED LAND USES:

Commercial Office, Class A, including without limitation:

- Professional and General
- High-Technology
- Service
- Research and Development
- Major or Minor Medical

Flexible Office/Work Space, Class B, including without limitation:

- Internet and high-technology incubators
- Computer server farms
- Internet backbone facilities

Government/Public Office, including without limitation:

- United States
- State of Nevada
- Regional Bodies and related
- Clark County
- City of Las Vegas
- United States Post Office

Commercial/Retail, including without limitation:

- General Retail
- Restaurant/Delicatessen/Coffee Shop/Bakery
- Health Club
- Bank/Credit Union/Savings and Loan/Trust
- Children's Day Care
- Convenience Retail
- Offices with frequent public access requirements
- Trade Center/Wholesale and Retail Showrooms
- Exhibition Space
- Transportation Services, including without limitation:
- Transportation Center, heliport, monorail, gasoline facilities
- Parking Facilities, including multi-level parking structures
- Entertainment/Retail

- Tavern, Supperclub, restaurant service bars, and beer/wine uses subject to special use permit
- Convention/Conferencing Facilities/ Temporary Exhibitions
- Non-Profit/Institutional, including:
- Museums, Performing arts centers, Musical Theaters

Residential

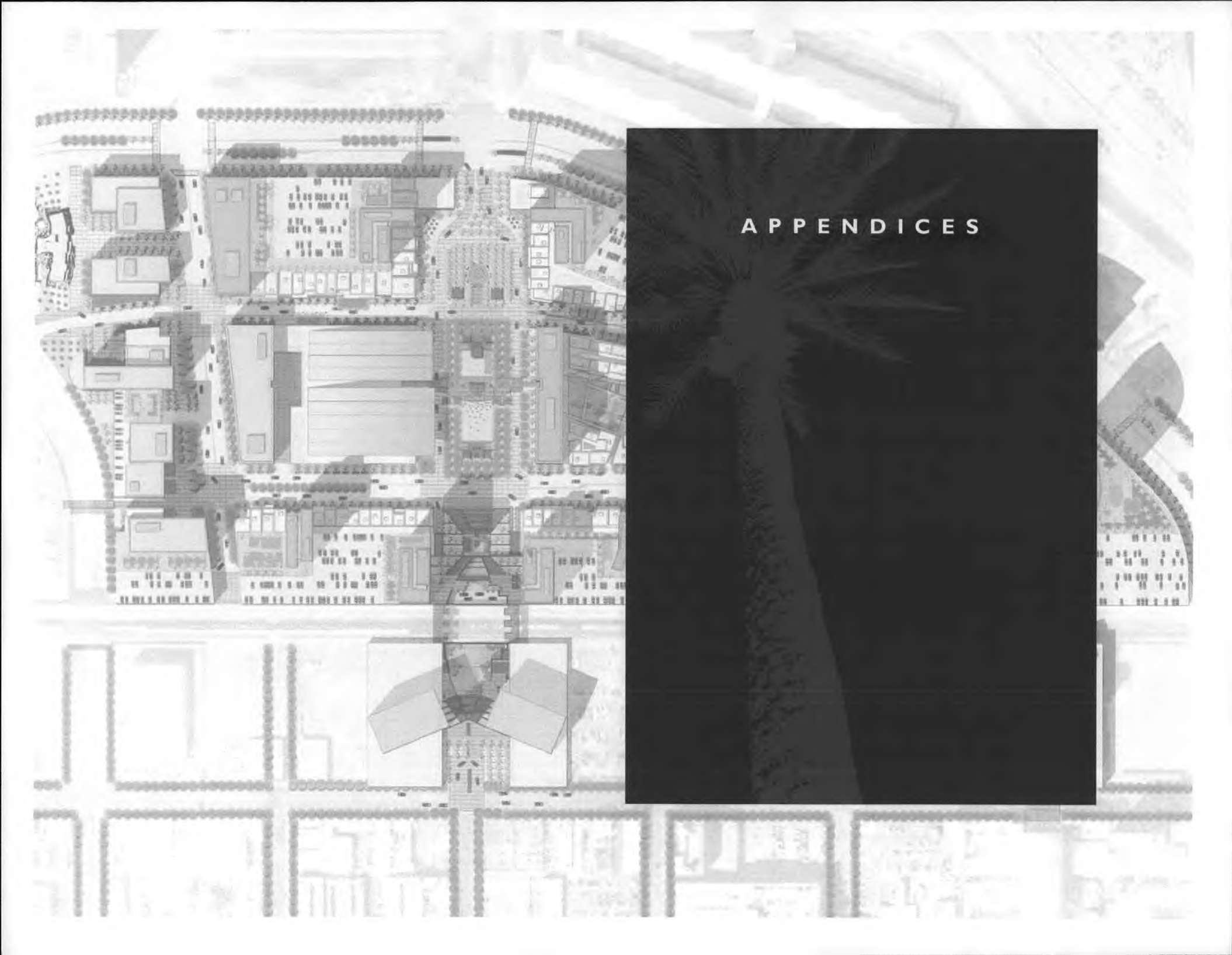
- High Density Residential, market rate, including without limitation:
- Townhouses, flats, lofts, live-work units
- Mid-Rise Housing
- Courtyard/streetwall apartments or condominiums
- Loft-style apartments or condominiums
- High-Rise Housing apartments or condominiums

Hotels

- Non-Gaming Hotels
- Casino/Hotels, and non-restricted Gaming but only within the Gaming Enterprise Overlay District, as amended
- Existing Interim Billboard Signs, to be removed or incorporated with adjacent development

PROHIBITED LAND USES:

- Trailer Parks and RV Camps
- Transient Sales Lots
- Rental Storage Businesses, with outdoor storage
- Contractors Plant, Shop and Storage Yard
- Construction materials and Supply Yard
- Auto Repair Garage
- Asphalt and Concrete Batch Plants
- Environmentally Hazardous Materials
- Salvage or Reclamation Yards
- Landfill
- Outside storage
- Trucking Company
- Heavy Manufacturing
- Towing and Impound Yards
- Cold Storage Plants
- Wholesale Distribution Centers
- Sexually Oriented Businesses
- Any other use that would otherwise be permitted as-of-right in Manufacturing (M) or Commercial Manufacturing (CM) zoning districts

An aerial architectural rendering of a city grid, showing various building footprints, streets, and landscaping. A large, dark, semi-transparent rectangular overlay covers the right half of the image. The word "APPENDICES" is printed in white, uppercase letters on this dark area.

APPENDICES

These references are keyed to streetscape elements identified in Section 2.

REF. COMPONENT

EX.0 Existing Conditions/Work by Others

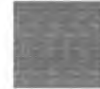
- EX.1 UTILITY MANHOLE, BOX OR OTHER STRUCTURE
- EX.2 TRAFFIC SIGNAL BY OTHERS
- EX.3 POTENTIAL FUTURE DRIVEWAY LOCATION
- EX.4 BUS STOP/TURN OUT BY OTHERS

PV.0 Pavements, Ramps, Curbs

- PV.1 CAST-IN-PLACE CONCRETE @ PEDESTRIAN AREA



- PV.2 CAST-IN-PLACE CONCRETE @ VEHICULAR AREA
- PV.3 CONCRETE UNIT PAVER @ PEDESTRIAN AREA
- PV.4 CONCRETE UNIT PAVER @ VEHICULAR AREA
- PV.5 STONE PAVER @ PEDESTRIAN AREA



- PV.6 STONE PAVER @ VEHICULAR AREA
- PV.7 STONE PAVING BAND
- PV.8 STONE STOP BAR
- PV.9 STONE ROLLOVER CURB
- PV.10 CAST-IN-PLACE CONCRETE ROLLOVER CURB
- PV.11 STANDARD CURB AND GUTTER
- PV.12 VALLEY GUTTER
- PV.13 DECOMPOSED GRANITE PAVING
- PV.14 RAISED PLANTER CURB
- PV.15 PRECAST CONCRETE TREE GRATE
- PV.16 HANDICAP RAMP (TYPE A)
- PV.17 HANDICAP RAMP (TYPE B)

JN.0 Jointing

- JN.1 SAWN CONTROL JOINT @ CAST-IN-PLACE CONCRETE PAVEMENT
- JN.2 SAND-SWEPT JOINT @ CONCRETE UNIT PAVING
- JN.3 CONTROL JOINT @ CURB AND GUTTER

SW.0 Site Walls

- SW.1 CAST-IN-PLACE CONCRETE OR STONE SEATWALL
- SW.2 RETAINING WALL

MM.0 Miscellaneous Metals



- MM.1 METAL TREE GRATE @ PALM



- MM.2 METAL TREE GRATE @ DECIDUOUS TREE (TYPE A)



- MM.3 METAL TREE GRATE @ DECIDUOUS TREE (TYPE B)

- MM.4 METAL EDGING
- MM.5 LOW DECORATIVE METAL RAIL AT PLANTING AREA

SL.0 Site Lighting



- SL.1 STREET LIGHT
 1. Manufacturer: Hellux - <http://www.hellux.de/>
 2. Model: Edelstahl-Hängeleuchte 535
 3. Color:
 4. Finish: TBD
 5. Quantity



- SL.2 SUSPENDED LIGHTS
 1. Manufacturer: Hellux - <http://www.hellux.de/>
 2. Model: XXX
 3. Color:
 4. Finish: TBD
 5. Quantity



- SL.3 PEDESTRIAN LIGHT STANDARD (TYPE A)
 1. Manufacturer: Lumec Schreder or approved equal - <http://www.lumec.com/>
 2. Model: Nemo series
 - i) 12'-0" to 15'-0" ht. post mounted luminaire
 3. Color/Finish: Stainless Steel



- SL.4 PEDESTRIAN LIGHT STANDARD (TYPE B)
 1. Manufacturer: Lumec Schreder or approved equal - <http://www.lumec.com/>
 2. Model: Nemo series
 - i) 12'-0" to 15'-0" ht. post mounted luminaire
 3. Color/Finish: XXX



SL.5 LIGHTED BOLLARD



SL.6 PALM UPLIGHT



SL.7 TREE UPLIGHT

SL.8 GROUND COVER DOWN LIGHT

SF.0 Site Furniture



SF.1 WOOD BENCH (TYPE A), BACKLESS
1. Manufacturer: Landscape Forms - www.landscapeforms.com
2. Model: Arcata Series - Backless, surface mounted
3. Color/Material: Black/ipe - Powder-coat finish



SF.2 WOOD BENCH (TYPE A2) WITH BACK
1. Manufacturer: Landscape Forms - www.landscapeforms.com
2. Model: Arcata Series - Backed, surface mounted
3. Color/Material: Black/ipe - Powder-coat finish



SF.3 BENCH (TYPE B)
1. Manufacturer: Gandia Blasco - www.gandiablasco.com
2. Model: Valencia - Banco Sin Respaldo, surface mounted
3. Color/Material: White - Galvanized steel and polyethylene



SF.4 BENCH (TYPE C - CIRCULAR)
1. Manufacturer: XXX
2. Model: XXX
3. Color/Material: XXX



SF.5 PRECAST CONCRETE BENCH
1. Manufacturer: XXX
2. Model: XXX
3. Color/Material: XXX

SF.6 WALL-MOUNTED BENCH



SF.7 TRASH RECEPTACLE
A.
1. Manufacturer: Landscape Forms, www.landscapeforms.com
2. Model: Banco Simple - Surface mounted
3. Color/Material: Silver - Metal powder coat finish

SF.8 DRINKING FOUNTAIN

SF.9 BICYCLE RACK



SF.10 NEWSPAPER BOX
A.
1. Manufacturer: XXX
2. Model: XXX
3. Color/Material: XXX



SF.11 PLANTER POT, TYPE I

SF.12 PLANTER POT, TYPE 2

SF.13 BOLLARD - TYPE I

SF.14 BOLLARD - TYPE 2



SF.15 MOVABLE TABLES AND CHAIRS

SF.16 MOVABLE CHAIRS

SM.0 Signage and Monumentation

SM.1 PRIMARY ENTRY MONUMENT

SM.2 SECONDARY ENTRY MONUMENT

SM.3 PRIMARY WAYFINDING DIRECTIONAL SIGN

SM.4 SECONDARY WAYFINDING DIRECTIONAL SIGN

SM.5 VEHICULAR REGULATORY SIGN

SM.6 PEDESTRIAN ENTRY MONUMENTATION

SM.7 PEDESTRIAN DIRECTIONAL SIGN

SM.8 INTERPRETIVE SIGN

DR.0 Drainage

DR.1 SUB-DRAINAGE @ TREE TRENCH

DR.2 SUB-DRAINAGE @ PALM PLANTING

PL.0 Planting and Landscape

PL.1 TREE PLANTING IN TREE TRENCH

PL.2 PALM PLANTING

PL.3 TREE PLANTING ON SLOPE

PL.4 TREE PLANTING IN DECOMPOSED GRANITE

PL.5 GROUND COVER PLANTING

PL.6 ORNAMENTAL GRASS GROUND COVER PLANTING

PL.7 PLANTER PLANTING

PL.8 TURF GRASS

MS.0 Miscellaneous Elements

MS.1 BUS SHELTER

MS.2 SHADE STRUCTURE @ PROMENADE

Grand Central Parkway - Plant List

Legend:

AA - Tree
Aa - Flowering Tree
aa - Shrub
aaa - Groundcover / Vine

Water Req. Key

VL - Very Low
L - Low
M - Moderate
H - High

Exposure

FS - Full Sun
PS - Part Sun
PSH - Part Shade
SH - Shade

Color

P-Pink
Y-Yellow
W-White
O-Orange
L-Lavender

R-Red
G-Green
Purp-Purple
B-Blue
V-Violet

Season of Interest

F - Fall
Sp - Spring
S - Summer
W - Winter
All - All Seasons

ABR.	BOTANICAL NAME	COMMON NAME	QTY.	Size	Spacing on center	Height	Spread	Water Req. H/M/L	Hardiness (in Fahrenheit)	Exposure	Flower	Season of Interest	Spacing on center	Lower Limb Height	Remarks/Notes
TREES															
CDM	Cercidium 'Desert Museum'	Desert Museum Palo Verde		24" box	30'	20-25'	20'	L	12	FS	Y	Early-SP	30'	6'	
* CL	Chilopsis Linearis 'Rio Salado'	Desert Willow		24" box	30'	20'	18-20'	L	0	FS	P	Late Sp, S	30'	6'	
PALMS															
PD	Phoenix dactylifera 'Medjool'	Medjool Date Palm		22' CT	12'	40'	10-20'	LM	18	FS	NA	NA	12'	NA	
SHRUBS															
le	Leucophyllum zygomphyllum 'Cimarron'	Cimarron Leucophyllum		5 ga.	30"	36"	36"	L	15	FS-PSH	B-Purp	S-F	30"	na	
er	Eremophila maculata 'Valentine'	Valentine Eremophila		5 gal.	6'	4'	5-6'	L,M	15	FS-PSH	P-red	W-Sp	4'	na	
np	Nerium oleander 'Petite Red'	Petite Red Dwarf Oleander		5 gal.	4'	3-4'	4'	L	15	FS-PSH	R	Sp-S	4'	na	
GROUND COVER															
acr	Acacia redolens 'Desert Carpet'	Desert Carpet Acacia		1 gal.	18"	24"	12"	L,M	12	FS,PSH	Y	Sp	18"	na	
vtp	Verbena temari 'Purple'	Temari Purple Verbena		1 gal.	30"	18"	30"	I	15	FS,PSH	P	Sp	1.5'	na	
pre	Pyracantha 'Red Elf'	Red Elf Piracantha		1 gal.	24"	24"	24"	L	10	FS,PSH	W	Sp	2'	na	
ACCENT															
agb	Agave Bactiosa	Squid Agave		5 gal.	30"	24-30"	24-30"	L	10	FS,PSH		All	24"	na	
agt	Agave geminiflora	Twin-flowered Agave		5 gal.	3'	3'	3'	L	10	FS,PSH		All	3'	na	

City Parkway - Plant List

Legend:																
AA - Tree			Water Req. Key:			Exposure:			Season of Interest:			Color:				
Aa - Flowering Tree			VL - Very Low			FS - Full Sun			F - Fall			P-Pink			R-Red	
aa - Shrub			L - Low			PS - Part Sun			Sp - Spring			Y-Yellow			G-Green	
aaa - Groundcover / Vine			M - Moderate			PSH - Part Shade			S - Summer			W-White			Purp-Purple	
			H - High			SH - Shade			W - Winter			O-Orange			B-Blue	
									All - All Seasons			L-Lavender			V-Violet	
ABR.	BOTANICAL NAME	COMMON NAME	QTY.	Height	Spread	Water Req. H/M/L	Hardiness (in Fahrenheit)	Exposure	Flower	Season of Interest	Spacing	Minimum Install Size	Lower Limb Height	Remarks/Notes	TYPE	Desert
TREES																
PA	Prosopis alba	Argentine Mesquite		30	30	L	10-15	FS	G-Y, W	Late Sp	66'	30' box	7'	Potential use problem related to pollen production - Allergenic. Invasive roots.	TR	✓
Alternative	Prosopis hybrid 'AZT'	Thornless hybrid Mesquite		30	30	L	10-15	FS	G-Y, W	Late SP					TR	✓
FV	Fraxinus velutina 'Rio Grande'	Velvet Ash		30	na		0		Inconspicuous		22'	30' box	7'	Potential signature street tree	TR	✓
Palms																
PD	Phoenix dactylifera 'Medjool'	Medjool Date Palm		40'	10-20'	L-M	18	FS	NA	NA	See Plan	22' CT	NA	22' Clear trunk, matched, diamond cut, straight trunk, free of cuts, scars, and damage due to handling - 5'x5' rootball dimer.		
SHRUBS																
NOT USED																
GROUND COVER																
RO	Rosmarinus officinalis 'Prostratus'	Dwarf Rosemary		3	4	L	-14	FS	VB	Sp, S	2' grid			GC		✓
GRASSES																
	Buchloe dactyloides	Buffalo Grass		0.5		L	Hardy	FS	Tan	S-F	sod			Allergenic. May require substantial water. GC		

West Clark Avenue - Plant List

Legend:																
AA - Tree			Water Req. Key:			Exposure:			Season of Interest:			Color:				
Aa - Flowering Tree			VL - Very Low			FS - Full Sun			F - Fall			P-Pink			R-Red	
aa - Shrub			L - Low			PS - Part Sun			Sp - Spring			Y-Yellow			G-Green	
aaa - Groundcover / Vine			M - Moderate			PSH - Part Shade			S - Summer			W-White			Purp-Purple	
			H - High			SH - Shade			W - Winter			O-Orange			B-Blue	
									All - All Seasons			L-Lavender			V-Violet	
ABR.	BOTANICAL NAME	COMMON NAME	QTY.	Height	Spread	Water Req. H/M/L	Hardiness (in Fahrenheit)	Exposure	Flower	Season of Interest	Spacing	Min. Install Size	Lower Limb Height	Remarks/Notes	TYPE	Desert
TREES																
RP	Pistacia x 'Red Push'	Red Push Pistache		20-30'	25 - 40'	L	20°					36" box				

Union Park' Promenade - Plant List

Legend:														
AA - Tree							Water Req. Key		Exposure		Season of Interest		Color	
Aa - Flowering Tree							VL - Very Low		FS - Full Sun		F - Fall		P - Pink	
aa - Shrub							L - Low		PS - Part Sun		Sp - Spring		Y - Yellow	
aaa - Groundcover / Vine							M - Moderate		PSH - Part Shade		S - Summer		W - White	
							H - High		SH - Shade		W - Winter		O - Orange	
											All - All Seasons		L - Lavender	
													R - Red	
													G - Green	
													P - Purple	
													B - Blue	
													V - Violet	
ABR.	BOTANICAL NAME	COMMON NAME	Qty.	Installed Size	Height	Spread	Water Req. H/M/L	Hardiness (in Fahrenheit)	Exposure	Flower	Season of Interest	Spacing	QTY.	Remarks / Spec.
PALMS														
pd	Phoenix dactylifera 'Medjool'	Medjool Date Palm		22' CT	40'	10-20'	L-M	18	FS	NA	NA	See Plan	68	22' Clear trunk, matched, diamond cut, straight trunk, free of cuts, scars, and damage due to handling - 5'x5' rootball dimen.
SHRUBS														
dl	Dasylerion longissimum	Desert Spoon		5 Gal.	7	3.5	M	15	FS/PS	GY	ALL	See Plan		6-8" CT (some exposed stalk)
GROUND COVER														
asu	Asclepias subulata	Desert Milkweed		5 Gal.	4	4	L	20	FS	Y-W	SP-F	See Plan		
hep	Hesperaloe parviflora	Red Yucca		5 Gal.	2-3	2-3	L	0	FS	R	SP-F	See Plan		

Discovery Avenue - Plant List

Legend:			Water Req. Key		Exposure		Season of Interest		Color									
AA - Tree	VL - Very Low	FS - Full Sun	F - Fall	P - Pink	R - Red													
Aa - Flowering Tree	L - Low	PS - Part Sun	Sp - Spring	Y - Yellow	G - Green													
aa - Shrub	M - Moderate	PSH - Part Shade	S - Summer	W - White	Purp - Purple													
aaa - Groundcover / Vine	H - High	SH - Shade	W - Winter	O - Orange	B - Blue													
			All - All Seasons	L - Lavender	V - Violet													
ABR.	BOTANICAL NAME	COMMON NAME	QTY.	Height	Spread	Water Req. H/M/L	Hardiness (in Farenheit)	Exposure	Flower	Season of Interest	Spacing	Minimum Install Size	Lower Limb Height	Remarks/Notes	TYPE	Desert	Transitional	Chalk
TREES																		
UP	Ulmus parvifolia v. 'sempervirens'	Allee Elm		40-50	45-55	M	-5 to 0	FS	insignificant	All	30' - south edge 60' - north edge	30" box	7'	Upright, vase shaped shade tree; good for urban plantings; Attractive, exfoliating bark; Tolerates hot, dry, sunny conditions	TR	✓	✓	✓
Alt:	Fraxinus velutina 'Modesto'	Medesto Black Ash																
MG	Magnolia grandiflora 'Little Gem'	Little Gem Magnolia		20-40	8-12	M	-5 to 0	FS	Fruit	All / S	30' - south edge 16' - north edge	30" box	7'	Semi-Evergreen in moderate climates - Potential signature street tree	TR	✓	✓	✓
SHRUBS																		
	NOT USED																	
GROUND COVER																		
roo	Rosmarinus officinalis 'Prostratus'	Dwarf Rosemary		3	4	L	-14	FS	V, B	Sp / S	2' grid	2 gallon	na			✓	✓	

Neighborhood Streets - Plant List

Legend: AA - Tree Aa - Flowering Tree aa - Shrub aaa - Groundcover / Vine Water Req. Key VL - Very Low L - Low M - Moderate H - High Exposure FS - Full Sun PS - Part Sun PSH - Part Shade SH - Shade Season of Interest F - Fall Sp - Spring S - Summer W - Winter All - All Seasons Color P - Pink Y - Yellow W - White O - Orange L - Lavender Remarks R - Red G - Green Purp - Purple B - Blue V - Violet																
ABR.	BOTANICAL NAME	COMMON NAME	QTY.	Height	Spread	Water Req. H/M/L	Hardiness (in Fahrenheit)	Exposure	Flower	Season of Interest	Spacing	Minimum Install Size	Lower Limb Height	Remarks/Notes	TYPE	Plant
TREES																
PA	Prosopis alba	Argentine Mesquite		30	30	L	10-15	FS	G-Y, W	Late Sp	66'	30" box	7'	Potential use problem related to pollen production - Allergenic. Invasive roots.	TR	✓
Alternative	Prosopis hybrid 'AZT'	Thornless hybrid Mesquite		30	30	L	10-15	FS	G-Y, W	Late SP					TR	✓
FV	Fraxinus velutina 'Rio Grande'	Velvet Ash		30	na		0		Inconspicuous		22'	30" box	7'	Potential signature street tree	TR	✓
GROUND COVER																
RO	Rosmarinus officinalis 'Prostratus'	Dwarf Rosemary		3	4	L	-14	FS	VB	Sp, S	2' grid			GC		✓
GRASSES																
	Buchloe dactyloides	Buffalo Grass		0.5		L	Hardy	FS	Tan	S-F	sod			Allergenic. May require substantial water. GC		

Recommended Design Standard: A non-mandatory but important design recommendation, denoted by the words "should" or "is encouraged," as in "the building height should be..."

Required Design Standard: A design requirement which is mandatory, denoted by the word "shall," as in "the building height shall be..."

Build-to Line: A required location for a building face, usually at the back of sidewalk. The building shall not be set back behind that line.

Setback Zone: A width of land usually beginning at the back of sidewalk in which a percentage of the building face can be located instead of at the build-to line.

Design Review: The administrative process by which a development proposal's design is evaluated, critiqued and either approved, denied or modified.

Mixed-Use: Different activities housed in the same building or adjacent to each other. Minimum requirement for mixed use is residential, office and retail/restaurant in the same building or same block.

Waiver: A deviation from the standards and guidelines, which the developer may request, and which will be considered by the Design Review Committee.

High-Albedo: A property of a surface that describes its ability to reflect and reject heat. High albedo surfaces have both a light color (high solar reflectance) and a high emittance (can reject heat back to the environment).

Active Uses/Active Street Frontages: Ground floor businesses that serve and engage the public and generate pedestrian traffic through retail and restaurant activity rather than closed spaces such as offices, parking and residential uses.

Solar Orientation: The relationship of a building's facades and massing to the movement and exposure to the sun.

Block Face: The street edge of a block bounded by building facades.

Infrastructure: The utilities and public services which are typically placed underground. These may have visible elements which appear at street level.

Right of Way (ROW): The width of a public street or other public way, which is measured from back of sidewalk to back of sidewalk, including the sidewalk, curb, gutter and vehicle travel and parking lanes.

Sustainability: An economic state where the demands placed upon the environment by people and commerce can be met without reducing the capacity of the environment to provide for future generations.

Arcade: A linear, shaded building setback at the street level which has storefronts along its edge. It is shaded by the building mass above, which usually is located at the property line, supported on columns which are located at the property line.

Massing: An element of architectural design which places the spatial volumes of the building in relationship to each other.

Awnings and Canopies: Overhead extensions from the front of a building, over the sidewalk, for the purpose of shading the sidewalk from the sun. They may be fixed or movable, as defined in the guidelines.

Site Furnishings: Individual elements which are placed on a site or a public right-of-way as convenience, aesthetic or safety items, such as benches, light fixtures, trash receptacles, bollards and other similar elements.

AGENDA SUMMARY PAGE
CITY COUNCIL MEETING OF: JANUARY 3, 2007

DEPARTMENT: CITY ATTORNEY

DIRECTOR: BRADFORD R. JERBIC

☐ Consent ☒ Discussion

SUBJECT:

RECOMMENDING COMMITTEE: BILL ELIGIBLE FOR ADOPTION AT A LATER MEETING:

Bill No. 2006-70 – Amends the legal description and map describing and depicting the boundaries of the Pedestrian Mall to reflect certain street vacation actions. Proposed by: Bradford R. Jerbic, City Attorney

Fiscal Impact



No Impact



Augmentation Required



Budget Funds Available

Amount:

Funding Source:

Dept./Division:

PURPOSE/BACKGROUND:

The boundaries of the City's Pedestrian Mall are described by ordinance. This bill will amend the description of the Pedestrian Mall to reflect certain street vacation actions that have taken place.

RECOMMENDATION:

ADOPTION at 1/17/2007 City Council meeting as a First Amendment pursuant to the 1/2/2007 Recommending Committee.

First Reading – 12/20/2006; First Publication – 1/5/2007

BACKUP DOCUMENTATION:

1. Bill No. 2006-70
2. Business Impact Statement

Minutes:

Recommendation noted.

1/17/2007 Council Agenda

1 **BILL NO. 2006-70**

2 **ORDINANCE NO. _____**

3 **AN ORDINANCE TO AMEND THE LEGAL DESCRIPTION AND MAP DESCRIBING AND**
4 **DEPICTING THE BOUNDARIES OF THE PEDESTRIAN MALL TO REFLECT CERTAIN**
5 **STREET VACATION ACTIONS, AND TO PROVIDE FOR OTHER RELATED MATTERS.**

5 Proposed by: Bradford R. Jerbic, City Attorney Summary: Amends the legal description and
6 map describing and depicting the boundaries of
7 the Pedestrian Mall to reflect certain street
8 vacation actions.

8 **THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN**
9 **AS FOLLOWS:**

10 **SECTION 1:** The legal description and the boundaries of the area constituting and
11 comprising the Pedestrian Mall, as described in Chapters 11.68 and 11.68A of the Municipal Code
12 of the City of Las Vegas, Nevada, 1983 Edition, are as set forth respectively in Exhibits A and B,
13 which are attached to and incorporated into this Ordinance.

14 **SECTION 2:** Title 11, Chapter 68, Section 40, of the Municipal Code of the City of
15 Las Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

16 **11.68.040:** (A) The following area constituting and comprising the Pedestrian Mall is legally
17 described in Exhibit A attached to Ordinance No. [3941,] _____, which is codified in this Chapter
18 and adopted herein as a part of this Chapter.

19 (B) The area legally described in Subsection (A) of this Section is indicated on the
20 map attached as Exhibit B to Ordinance No. [3941,] _____, which is codified in this Chapter and
21 adopted herein as a part of this Chapter.

22 **SECTION 3:** Title 11, Chapter 68A, Section 40, of the Municipal Code of the City
23 of Las Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

24 **11.68A.040:** (A) The following area constituting and comprising the Pedestrian Mall is legally
25 described in Exhibit A attached to Ordinance No. [5046,] _____, which is codified in this Chapter
26 and adopted herein as a part of this Chapter.

27 (B) The area legally described in Subsection (A) of this Section is indicated on the
28 map attached as Exhibit B to Ordinance No. [5046,] _____, which is codified in this Chapter

1 and adopted herein as a part of this Chapter.

2 SECTION 4: Following the adoption of this Ordinance, the City Clerk is authorized
3 and directed to insert into the blanks appearing in Sections 2 and 3 of this Ordinance the ordinance
4 number that has been assigned to this Ordinance.

5 SECTION 5: If any section, subsection, subdivision, paragraph, sentence, clause or
6 phrase in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or
7 ineffective by any court of competent jurisdiction, such decision shall not affect the validity or
8 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the
9 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
10 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
11 subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,
12 invalid or ineffective.

13 SECTION 6: All ordinances or parts of ordinances or sections, subsections, phrases,
14 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
15 1983 Edition, in conflict herewith are hereby repealed.

16 PASSED, ADOPTED and APPROVED this _____ day of _____, 2007.

17 APPROVED:

18
19 By _____
20 OSCAR B. GOODMAN, Mayor

21 ATTEST:

22 _____
23 BARBARA JO RONEMUS, City Clerk

24 APPROVED AS TO FORM:

25 Val Steed 12-7-06
26 Date
27
28

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2006, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2007, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as first introduced and adopted by the following vote:

8 VOTING "AYE": _____

9 VOTING "NAY": _____

10 ABSENT: _____

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12 APPROVED:

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14 By OSCAR B. GOODMAN, Mayor

15 ATTEST:

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17 BARBARA JO RONEMUS, City Clerk

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EXHIBIT "A"
FREMONT STREET EXPERIENCE
CLARK'S LAS VEGAS TOWNSITE
A.P.N. 139-34-199-, 299, 599- & 699- (020-400- & 020-410-)

Those portions of the North Half (N 1/2) of Section 34, Township 20 South, Range 61 East, M.D.M., in the city of Las Vegas, County of Clark, State of Nevada, being those portions of CLARK'S LAS VEGAS TOWNSITE as shown on the plat thereof on file in Book 1 of Plats, Page 37 of Clark County, Nevada Records, described as follows:

The Right-of-Way of FREMONT STREET (80 feet wide) from the Southeasterly Right-of-Way line of MAIN STREET (80 feet wide) to the Northwesterly Right-of-Way line of LAS VEGAS BOULEVARD (formerly FIFTH STREET, 80 feet wide) as shown on said plat of CLARK'S LAS VEGAS TOWNSITE.

The Right-of-Way of FIRST STREET (80 feet wide) from a line that is parallel with and distant approximately 130 feet Southwesterly from the Southwesterly Right-of-Way line of OGDEN AVENUE (80 feet wide) as shown on said plat of CLARK'S LAS VEGAS TOWNSITE to a line that is parallel with and distant 40 feet Northeasterly from the centerline of the PEDESTRIAN MALL (formerly FREMONT STREET 80 feet wide) as shown on said plat of CLARK'S LAS VEGAS TOWNSITE.

EXCEPT THEREFROM that portion of the FIRST STREET cul-de-sac, lying Northeasterly of said PEDESTRIAN MALL, the cul-de-sac exception will include the curb, gutter and street paving only as existing until such time that new curb, gutter and street paving is constructed in the future.

The Right-of-Way of CASINO CENTER BOULEVARD (formerly SECOND STREET, 80 feet wide) from a line that is parallel with and distant 170 feet Northeasterly from the centerline of the PEDESTRIAN MALL (formerly FREMONT STREET 80 feet wide) as shown on said plat of CLARK'S LAS VEGAS TOWNSITE to a line that is parallel with and distant 170 feet Southwesterly from said centerline of the PEDESTRIAN MALL.

The Right-of-Way of THIRD STREET (80 feet wide) from the Southwesterly Right-of-Way line of OGDEN AVENUE (80 feet wide) as shown on said plat of CLARK'S LAS VEGAS TOWNSITE to a line that is parallel with and distant 170 feet Southwesterly from the centerline of the PEDESTRIAN MALL (formerly FREMONT STREET 80 feet wide) as shown on said plat of CLARK'S LAS VEGAS TOWNSITE.

EXHIBIT "A"
FREMONT STREET EXPERIENCE
CLARK'S LAS VEGAS TOWNSITE
A.P.N. 139-34-199-, 299, 599- & 699- (020-400- & 020-410-)

Together with that portion of said THIRD STREET from said Southwesterly Right-of-Way line of OGDEN AVENUE to the existing Southwesterly back of curb of said OGDEN AVENUE, said existing back of curb lying 9.5 feet, more or less, Northeasterly from said Southwesterly Right-of-Way line.

EXCEPT THEREFROM that portion of the THIRD STREET cul-de-sac, constructed Southwesterly of said PEDESTRIAN MALL, the cul-de-sac exception will include the curb, gutter and street paving only.

The Right-of-Way of FOURTH STREET (80 feet wide) from a line that is parallel with and distant 170 feet Northeasterly from the centerline of the PEDESTRIAN MALL (formerly FREMONT STREET, 80 feet wide) as shown on said plat of CLARK'S LAS VEGAS TOWNSITE to a line that is parallel with and distant 170 feet Southwesterly from said centerline of the PEDESTRIAN MALL.

RESERVING UNTO THE CITY OF LAS VEGAS all City owned utilities located within the above described Rights-of-Way, together with the rights of ingress and egress to maintain all existing City owned utility systems and the rights to add to, remove, repair or replace any City owned utility system.

City owned utility systems are to include but are not limited to: fire alarm, sewer, street light and traffic control systems.

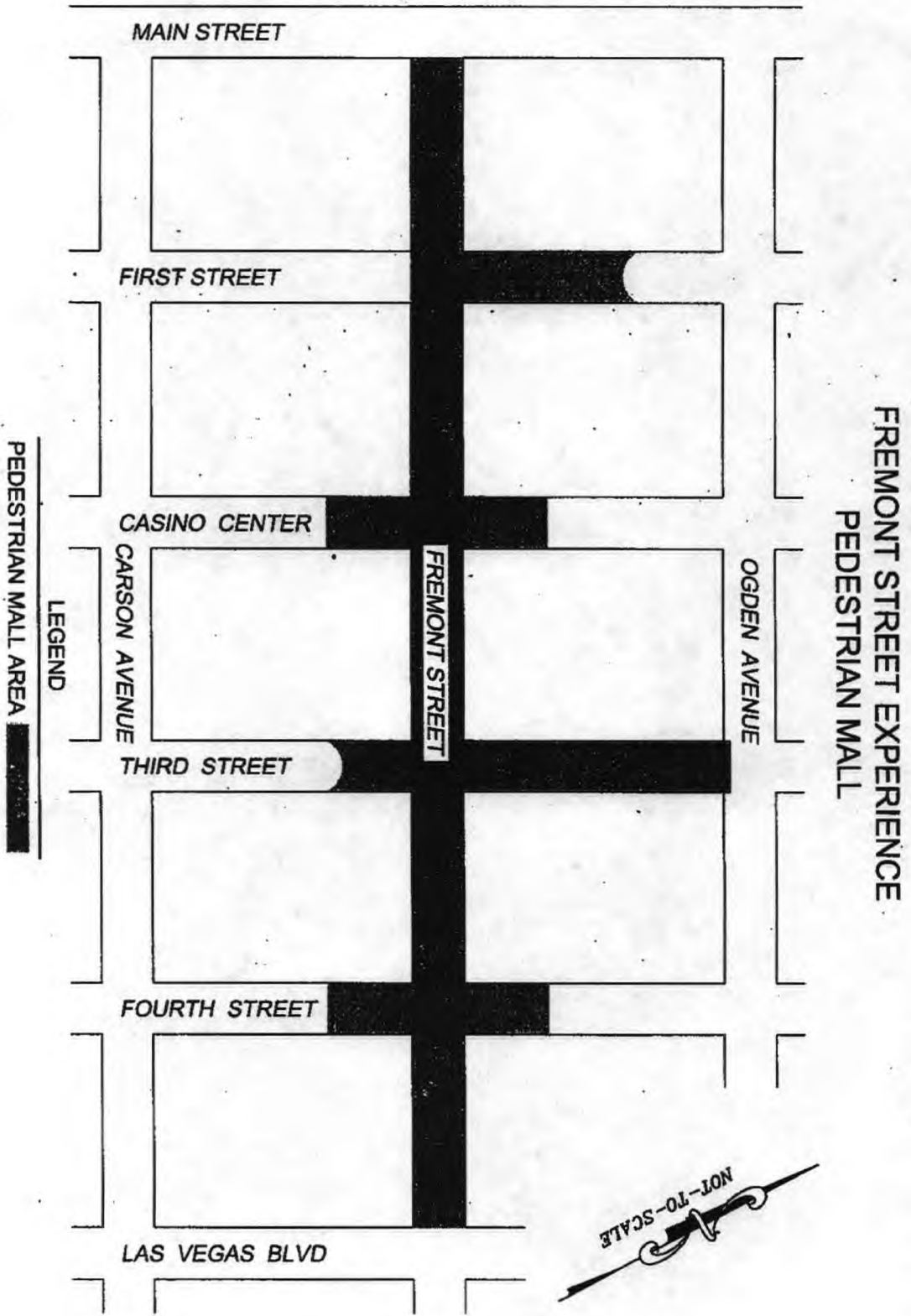


EXHIBIT "B"

BUSINESS IMPACT STATEMENT

BILL NO. 2006-70

(Amends the legal description and map describing and depicting the boundaries of the Pedestrian Mall to reflect certain street vacation actions)

This business impact statement was prepared pursuant to NRS 237.090 to address the impact of a proposed ordinance, Bill No. 2006-70, that will amend the legal description and map describing and depicting the boundaries of the Pedestrian Mall to reflect certain street vacation actions.

1. The following constitutes a description of the number of the manner in which comment was solicited from affected businesses, a summary of their responses and an explanation of the manner in which other interested persons may obtain a copy of the summary.

Not applicable

2. The estimated economic effect of the proposed rule on businesses, including, without limitation, both adverse and beneficial effects, and both direct and indirect effects:

Adverse effects:

None

Beneficial effects:

None

Direct effects:

None

Indirect effects:

None

3. The following constitutes a description of the methods the local government considered to reduce the impact of the proposed rule on businesses and a statement regarding whether any, and if so which, of these methods were used:

Not applicable

4. The governing body estimates the annual cost to the local government for enforcement of the proposed rule is:

No additional cost

5. If the proposed rule provides for a new fee or increases an existing fee, the total annual amount expected to be collected is:

Not applicable

6. If the proposed rule provides for a new fee or increases an existing fee, the money generated by the new fee or increase in existing fee will be used by the local government to:

Not applicable

7. If the proposed rule includes provisions that duplicate or are more stringent than federal, state or local standards regulating the same activity, the following explains when such duplicative or more stringent provisions are necessary:

Not applicable

Date: December 6, 2006

AGENDA SUMMARY PAGE
CITY COUNCIL MEETING OF: JANUARY 3, 2007

DEPARTMENT: CITY ATTORNEY

DIRECTOR: BRADFORD R. JERBIC

☐ Consent ☒ Discussion

SUBJECT:

RECOMMENDING COMMITTEE: BILL ELIGIBLE FOR ADOPTION AT A LATER MEETING:

Bill No. 2006-71 – Adopts provisions regarding the use of public streets for motorized racing events. Sponsored by: Councilman Gary Reese and Councilman Lawrence Weekly

Fiscal Impact

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☐

No Impact

Budget Funds Available

☐

Augmentation Required

Amount:

Funding Source:

Dept./Division:

PURPOSE/BACKGROUND:

Last July the City Council approved an agreement with Vegas Grand Prix, LLC, to allow a Champ Car World Series road race to be held on City streets in the downtown area. This bill will establish the process and guidelines for the issuance of an appropriate permit to authorize and govern the event.

RECOMMENDATION:

ADOPTION at 1/17/2007 City Council meeting pursuant to the 1/2/2007 Recommending Committee.

First Reading – 12/20/2006; First Publication – 1/5/2007

BACKUP DOCUMENTATION:

1. Bill No. 2006-71
2. Business Impact Statement

Minutes:

Recommendation noted.

1/17/2007 Council Agenda

1 **BILL NO. 2006-71**

2 **ORDINANCE NO. _____**

3 **AN ORDINANCE TO ADOPT PROVISIONS REGARDING THE USE OF PUBLIC STREETS**
4 **FOR MOTORIZED RACING EVENTS, AND TO PROVIDE FOR OTHER RELATED MATTERS.**

5 Sponsored by:
6 Councilman Gary Reese
7 Councilman Lawrence Weekly

Summary: Adopts provisions regarding the use
of public streets for motorized racing events.

8 **THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN**
9 **AS FOLLOWS:**

10 **SECTION 1:** Title 11 of the Municipal Code of the City of Las Vegas, Nevada, 1983
11 Edition, is hereby amended by adding thereto a new chapter, designated as Chapter 57, consisting of
12 Sections 10 and 20, reading as follows:

13 **11.57.010:** For purposes of this Chapter:

14 "Metro" means the Las Vegas Metropolitan Police Department.

15 "Motorized racing event" mean a race involving motorized vehicles that is held:

16 (1) Pursuant to a written agreement between the sponsor or promoter and the City;
17 and

18 (2) Under the auspices or with the approval of a statewide, national or international
19 organization that regularly engages in the governance, supervision or sanctioning of such events.

20 **11.57.020:** (A) In order to stage a motorized racing event on any public street within the City,
21 the applicant must first obtain a permit approved by Metro and the City Manager. The application for
22 a permit must be filed at least sixty days prior to the date scheduled for the racing event.

23 (B) At the time an application for a permit is submitted pursuant to Subsection (A),
24 the applicant must submit a traffic control plan to Metro and to the City Traffic Engineer. The traffic
25 control plan shall describe the proposed placement of any temporary barricades, temporary traffic
26 signs or similar traffic control devices. The approval of a permit shall be contingent on:

27 (1) The approval of the traffic control plan by Metro and the City Traffic
28 Engineer;

(2) The provision of liability insurance in accordance with LVMC

1 11.56.030, subject to the minimum policy limits listed therein or such higher limits as Metro and the
2 City may require; and

3 (3) Compliance with any special requirements imposed by Metro, the City
4 Manager or the City Traffic Engineer.

5 (C) The City may close public streets in connection with the staging of a motorized
6 racing event for which a permit has been approved under this Section. Such action may take the form
7 of a resolution adopted by the City Council, or the Council may delegate to the City Traffic Engineer
8 the authority to close such streets by means of a street closure order.

9 (D) In connection with a motorized racing event for which a permit has been
10 approved and streets have been closed pursuant to this Section, certain provisions of City ordinances
11 and the Municipal Code which otherwise would prohibit, or be violated by, the motorized racing event
12 shall be deemed suspended for the period of time specified in the street closure resolution or order.
13 The suspension shall include the following regulations, as well as any others specified in the resolution
14 or order:

15 (1) Any traffic regulations set forth in LVMC Title 11 that would prohibit
16 or unduly interfere with conducting the event.

17 (2) Any noise regulations set forth in LVMC Chapter 9.16 that would
18 prohibit or limit the noise emanating from the vehicles participating in the event.

19 (3) Any fueling regulations set forth in the Fire Code adopted pursuant to
20 LVMC Chapter 16.16 that would prohibit the outdoor fueling activities, including the storage and
21 dispensing of methanol and other fuels at the racing track, paddock area, pit row or any other fueling
22 site required for the racing event, provided that event participants and sponsors have complied with
23 the conditions and requirements imposed by the Fire Chief for the safety of spectators, event
24 participants and owners of neighboring properties.

25 SECTION 2: If any section, subsection, subdivision, paragraph, sentence, clause or
26 phrase in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or
27 ineffective by any court of competent jurisdiction, such decision shall not affect the validity or
28 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the

1 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
2 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
3 subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,
4 invalid or ineffective.

5 SECTION 3: All ordinances or parts of ordinances or sections, subsections, phrases,
6 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
7 1983 Edition, in conflict herewith are hereby repealed.

8 PASSED, ADOPTED and APPROVED this ____ day of _____, 2007.

9 APPROVED:

10
11 By _____
12 OSCAR B. GOODMAN, Mayor

13 ATTEST:

14 _____
15 BARBARA JO RONEMUS, City Clerk

16 APPROVED AS TO FORM:

17 Val Steed 12-7-06
18 Date

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2006, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2007, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as first introduced and adopted by the following vote:

8 VOTING "AYE": _____
9 VOTING "NAY": _____
10 ABSENT: _____
11

12 APPROVED:

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14 By _____
15 OSCAR B. GOODMAN, Mayor

16 ATTEST:

17 _____
18 BARBARA JO RONEMUS, City Clerk
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BUSINESS IMPACT STATEMENT

BILL NO. 2006-71

(Adopts provisions regarding the use of public streets for motorized racing events)

This business impact statement was prepared pursuant to NRS 237.090 to address the impact of a proposed ordinance, Bill No. 2006-71, that will adopt provisions regarding the use of public streets for motorized racing events.

1. The following constitutes a description of the manner in which comment was solicited from affected businesses, a summary of their responses and an explanation of the manner in which other interested persons may obtain a copy of the summary.

The ordinance itself will not affect any identifiable businesses or types of businesses in particular. The immediate purpose of the ordinance is to facilitate motorized racing events that will occur in the downtown area. Discussions have been had with a number of businesses who might be affected about the potential impacts of the racing events themselves

2. The estimated economic effect of the proposed rule on businesses, including, without limitation, both adverse and beneficial effects, and both direct and indirect effects:

Adverse effects:

The ordinance is not anticipated to produce any adverse effects. Any such effects would be the result of the events themselves

Beneficial effects:

The ordinance is not anticipated to produce any beneficial effects. Any such effects would be result of the events themselves

Direct effects:

The ordinance is not anticipated to produce any adverse effects. Any such effects would be the result of the events themselves

Indirect effects:

The ordinance is not anticipated to produce any adverse effects. Any such effects would be the result of the events themselves

3. The following constitutes a description of the methods the local government considered to reduce the impact of the proposed rule on businesses and a statement regarding whether any, and if so which, of these methods were used:

Not applicable

4. The governing body estimates the annual cost to the local government for enforcement of the proposed rule is:

Any costs of enforcement will be tied to the events themselves and will be the responsibility of those staging the events

5. If the proposed rule provides for a new fee or increases an existing fee, the total annual amount expected to be collected is:

Not applicable

6. If the proposed rule provides for a new fee or increases an existing fee, the money generated by the new fee or increase in existing fee will be used by the local government to:

Not applicable

7. If the proposed rule includes provisions that duplicate or are more stringent than federal, state or local standards regulating the same activity, the following explains when such duplicative or more stringent provisions are necessary:

Not applicable

Date: December 6, 2006

AGENDA SUMMARY PAGE
CITY COUNCIL MEETING OF: JANUARY 3, 2007

DEPARTMENT: CITY ATTORNEY

DIRECTOR: BRADFORD R. JERBIC

☐ Consent ☒ Discussion

SUBJECT:

RECOMMENDING COMMITTEE: BILL ELIGIBLE FOR ADOPTION AT A LATER MEETING:

Bill No. 2006-72 – Adopts the 2005 Edition of the National Electrical Code, together with amendments and supplementary material. Proposed by: Paul K. Wilkins, Director of Building and Safety

Fiscal Impact



No Impact



Augmentation Required



Budget Funds Available

Amount:

Funding Source:

Dept./Division:

PURPOSE/BACKGROUND:

This bill will adopt the 2005 Edition of the National Electrical Code, together with amendments agreed upon by local governments within the Southern Nevada area.

RECOMMENDATION:

ADOPTION at 1/17/2007 City Council meeting as a First Amendment pursuant to the 1/2/2007 Recommending Committee.

First Reading – 12/20/2006; First Publication – 1/5/2007

BACKUP DOCUMENTATION:

Bill No. 2006-72

Minutes:

Recommendation noted.

1/17/2007 Council Agenda

1 **BILL NO. 2006-72**

2 **ORDINANCE NO. _____**

3 **AN ORDINANCE TO ADOPT THE 2005 EDITION OF THE NATIONAL ELECTRICAL CODE,**
4 **TOGETHER WITH AMENDMENTS AND SUPPLEMENTARY MATERIAL, AND TO PROVIDE**
5 **FOR OTHER RELATED MATTERS.**

5 Proposed by: Paul K. Wilkins, Director of
6 Building and Safety

Summary: Adopts the 2005 Edition of the
National Electrical Code, together with
amendments and supplementary material.

7 **THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN**
8 **AS FOLLOWS:**

9 **SECTION 1:** Title 16, Chapter 12, Section 10, of the Municipal Code of the City of
10 Las Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

11 **16.12.010:** Those certain documents, three copies of which are on file in the Office of the City
12 Clerk, and being marked and designated as follows, are adopted by reference as and for the City's
13 Electrical Code:

14 (A) National Electrical Code, [2002] 2005 Edition, hereby designated as Part 1 of
15 this Chapter;

16 (B) A document entitled "A Supplemental Document Amending the National
17 Electrical Code, [2002] 2005 Edition," deleting from and adding to the National Electrical Code,
18 [2002] 2005 Edition, hereby designated as Part 2 of this Chapter; and

19 (C) The Southern Nevada Amendments to the [2002] 2005 National Electrical
20 Code, hereby designated as Part 3 of this Chapter.

21 **SECTION 2:** The document entitled "A Supplemental Document Amending the
22 National Electrical Code, 2005 Edition," is attached hereto. The document entitled the "Southern
23 Nevada Amendments to the 2005 National Electrical Code," which is attached hereto, is modified as
24 set forth in Sections 3 and 4 of this Ordinance.

25 **SECTION 3:** Where necessary for the sake of consistency, references in the Southern
26 Nevada Amendments to the 2005 National Electrical Code to "Article" numbers shall be deemed to
27 refer to "Section" numbers as contemplated in the National Electrical Code.

28 **SECTION 4:** The document entitled the "Southern Nevada Amendments to the 2005

1 National Electrical Code" is amended by adding the following after the heading reference to Section
2 210.8:

3 The introductory language of Subsection (B) of Section 210.8 of the National Electrical Code, 2005
4 Edition, following the heading and ending with the colon, is amended to read as follows:

5 All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified
6 in (1) through (6) shall have ground fault circuit-interruptor protection for personnel:

7 SECTION 5: The National Electrical Code, 2002 Edition, the supplemental document
8 amending that edition, and the Southern Nevada Amendments to the 2002 National Electrical Code,
9 are hereby repealed in their entirety.

10 SECTION 6: If any section, subsection, subdivision, paragraph, sentence, clause or
11 phrase in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or
12 ineffective by any court of competent jurisdiction, such decision shall not affect the validity or
13 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the
14 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
15 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
16 subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,
17 invalid or ineffective.

18 SECTION 7: All ordinances or parts of ordinances or sections, subsections, phrases,
19 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
20 1983 Edition, in conflict herewith are hereby repealed.

21 PASSED, ADOPTED and APPROVED this ____ day of _____, 2007.

22 APPROVED:

23
24 By _____
OSCAR B. GOODMAN, Mayor

25 ATTEST:

26 BARBARA JO RONEMUS, City Clerk

27 APPROVED AS TO FORM:

28 Val Steed 12-7-06
Date

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2006, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2007, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as first introduced and adopted by the following vote:

8 VOTING "AYE": _____
9 VOTING "NAY": _____
10 ABSENT: _____

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APPROVED:

By _____
OSCAR B. GOODMAN, Mayor

ATTEST:

BARBARA JO RONEMUS, City Clerk

**A SUPPLEMENTAL DOCUMENT AMENDING
THE NATIONAL ELECTRICAL CODE, 2005 EDITION**

Section 1: Certain provisions of the National Electrical Code, 2005 Edition, are hereby amended, deleted or added to as set forth in this Supplemental Document. Except as otherwise indicated, all section and chapter references contained in this Supplemental Document are to the National Electrical Code, 2005 Edition.

Section 2: Chapter 1 of the National Electrical Code, 2002 Edition, is hereby amended by adding thereto a new article designated as Article 120, reading as follows:

Article 120 - ADMINISTRATION

Section 120-1. ABBREVIATIONS AND DEFINITIONS. For the purpose of this Code, as adopted and amended by the City, certain terms, phrases, words and their derivatives shall be construed as specified in this section. Where terms are within the context with which they are used. Webster's Third New International Dictionary of the English Language, Unabridged, Copyright 1981, shall be considered as providing ordinarily accepted meanings. Words used in the singular include the plural and the plural the singular. Words used in the masculine gender include the feminine and the feminine the masculine.

"APPROVED" - As to materials, equipment or method of construction, refers to approval by the Building Official as the result of investigation and tests by recognized authorities, technical or scientific organizations. Unless otherwise stated, a current listing of a product by the Underwriter's Laboratories (UL) or other testing agency approved by the Building Official shall be considered as an approval of that product.

"AWG" - American Wire Gauge; a standard of conductor measure.

"BUILDING OFFICIAL" - The officer or employee of the City who is charged with the administration and enforcement of the building and technical codes; or the Authority Having Jurisdiction as specified in the National Electrical Code. Except as otherwise provided, the term includes a designated representative of the Building Official who is duly authorized with respect to a particular act or responsibility.

"CITY ELECTRICAL INSPECTOR" - One or more of the electrical inspectors employed by the City.

"FIRE ASSEMBLY AND FIRE RESISTIVE CONSTRUCTION" - As defined in the IBC.

"IBC" - International Building Code, adopted as the Building Code of the City of Las Vegas.

"LISTED, LABELED, and LISTING" - Refer to equipment and materials which are shown in a list

published by an approved testing agency, qualified and equipped for experimental testing and maintaining an adequate periodic inspection of current productions and whose listing states that the equipment complies with recognized safety standards.

"MASTER" - A generic term including Master Electricians, Master Neon Electricians and Master Technicians certified as such by Clark County before July 1, 1985 as well as individuals who have passed the appropriate examination(s) of the State of Nevada Contractor's Board subsequent to July 1, 1985 and otherwise met the qualifications of and been accepted by the State of Nevada Contractor's Board as Qualified Individuals for the full extent of Category C-2 Electrical Contractor after July 1, 1985.

"MASTER NEON ELECTRICIAN" - A person capable of laying out, installing and supervising electrical and gas-tube sign fabrication and erection who was certified as such by Clark County before July 1, 1985.

"MASTER TECHNICIAN" - A person capable of laying out and supervising commercial sound, radio, television, and low voltage control systems involving solid state devices or electronic tubes who was certified as such by Clark County before July 1, 1985.

"OCCUPANCY" - The purpose for which a building, or part thereof, is used or intended to be used.

"QUALIFIED INDIVIDUAL/QI" - For the purposes of this ordinance, an individual who has passed an appropriate examination(s) of the State of Nevada Contractor's Board subsequent to July 1, 1985 and otherwise met the qualifications of and been accepted by the State of Nevada Contractor's Board as a Qualified Individual in one or more of the subcategories of electrical contracting after July 1, 1985.

"UL" - Underwriters' Laboratories, Inc.

"UNIT" - One home, apartment building, store, warehouse, hall auditorium, condominium unit or hotel. Each interior remodel for single occupancy of a store or warehouse shall establish a new unit.

Section 120-2. AUTHORITY AND ENFORCEMENT

I. **Administration.** The purpose of this Code is to provide requirements for installation of electric wiring devices, appliances, and equipment within the City of Las Vegas. The provisions of this Code are intended to be used in conjunction with the Uniform Administrative Code adopted by the City of Las Vegas (the "UAC") and other appropriate codes and ordinances. Several provisions of this Code are parallel or similar to

provisions of the UAC. Both codes shall be applied to the extent possible. In the event of conflict, the provisions of Section 106 of the UAC shall govern, unless otherwise deemed appropriate by the Building Official or his designee.

II. Compliance. It shall be unlawful for any person, firm, or corporation to use within the City of Las Vegas any electrical wiring, fixture, appliance, or apparatus that does not conform to the requirements of this Code and the UL (or any other approved testing agency with equivalent standards). Upon notice or otherwise, the City Electrical Inspector is authorized to conduct any inspection necessary to ascertain that all electrical wiring, fixtures, appliances, and apparatuses for use, used, or installed within the City comply with the requirements of this Code and the UL (or any other approved testing agency with equivalent standards).

III. Unlawful Installations. If the City Electrical Inspector finds any part of any electric light or power wiring, appliance, apparatus, or fixture in or upon any building in the City of Las Vegas to have been installed without a permit or installed in such a manner to constitute a hazard, the Building Official shall have the right and power to disconnect electrical service and place a seal upon the same, and shall at the same time give written notice of such disconnection to the owner or occupant of the building and the electrical power utility company. After the wiring, fixtures, appliances or apparatus have been put in the condition required by this Chapter, the seal so placed shall be removed by order of the Building Official. It shall be unlawful for any person to use any current in or through such disconnected wiring, appliance, apparatus, or fixture, or otherwise supply current to such disconnected wiring, fixture, appliance, or apparatus, or to remove, break, or deface any seal so placed.

Section 120-3. PERMITS, CERTIFICATION AND LICENSING

I. Permit Requirements.

A. General. No wiring shall be installed or laid out for any lights, power, heating devices, or any apparatus which generates, transmits, transforms, or utilizes any electricity, including private telephone systems, nor shall any alteration or addition be made in existing wiring without securing a permit therefor; provided, however, that no permit shall be required for service work or changeouts up to the first means of disconnect, in single family dwellings only, of existing air conditioning/heating units which have identical ampacity requirements. Permit applications must describe the proposed work and shall be made in writing

by the person, firm or other entity that will do the work. The application must identify the work location by street and house number, and the permit shall be valid only for that location.

B. Drawings. Each application for a permit to install electrical wiring in a single family dwelling or an accessory building (shed, garage, etc.) must have attached thereto a drawing showing the electrical layout, including the wire apparatus. Load calculations must be included if required by the City Electrical Inspector or by the Building Official or his designee. Each application for a permit to install electrical wiring in a structure other than a single family dwelling or an accessory building must have attached thereto drawings showing in detail the electrical layout, including the wire apparatus and load calculations. The City Electrical Inspector may waive drawings for small, insignificant structures or additions.

II. Journeyman Electrician. A Journeyman Electrician is an individual who has demonstrated qualifications in having the skills to perform independent work in the electrical field or to supervise lesser qualified electricians. The individual has taken and passed the Journeyman Electrician examination given by an independent agency accepted by the Building Official. Such examination shall be designed for the purpose of establishing qualifications to perform the work of a Journeyman Electrician. An individual holding a valid, current certificate of Journeyman Electrician qualification from an accepted independent testing agency or from a political subdivision of the State of Nevada within the geographic boundaries of Clark County may be recognized as a Journeyman Electrician.

III. Master Electrician and Qualified Individual.

A. General. A Master Electrician and Qualified Individual (QI) are individuals who have demonstrated competency to lay out, inspect, install and supervise all aspects of electrical work in one or more categories of the field. The term "Master" shall be considered generic to include Master Neon Electricians, Master Electricians, and Master Technicians who were certified under the Joint Board of Electrical Examiners of Clark County program prior to July 1, 1985.

B. Duties.

(1) Supervision and Inspection. The Master or QI is responsible to supervise and inspect the work to be performed pursuant to the scope of the permit and the approved plans and verify that said work shall meet all the requirements of this Code, and to ensure that the work is installed in good

workmanlike manner. The Master or QI is responsible to the Building Official for conformance with the requirements of this Code and other applicable standards and requirements.

(2) **Plan/Calculation Preparation.** When plans and calculations have been required pursuant to this Code or other building-related code and are not done by an electrical engineer who is responsible for the work, the Master or QI is responsible for the correctness of calculation and design in conformance to the Electrical Code of the City of Las Vegas. This includes all work provided for review by the Building Official prior to issuance of a permit or provided for approval of a change to approved plans. Electrical plans shall be prepared only by one or more of the following: an electrical engineer registered in the State of Nevada, an architect registered in the State of Nevada, a Master, or a QI. Plans prepared by an engineer or architect shall be stamped, dated, and signed by that person. Plans prepared by a Master or a QI must be signed by that person and shall indicate whether the person is a Master or a QI.

(3) **Pretesting Required.** It is the responsibility of the Master or QI to ensure that all required life safety systems provided in any building (i.e., fire alarms, emergency generators, duct detector devices, voice alarm/paging systems, central controls, and other electrical systems) are pretested and in proper working order prior to making inspection requests to the Building Official.

C. Certification. A certification issued by a third-party independent agency in compliance with the following standards and maintained in current standing by renewal of the certification shall be recognized by the Official as meeting the technical requirements inherent in the duties of a Master or QI stated above:

(1) **A Master Electrician, Master Neon Electrician or Master Technician** who was previously tested and certified under the Joint Board of Electrical Examiners of Clark County Program prior to July 1, 1985.

(2) **A Qualified Individual** who, after July 1, 1985, has taken and passed the qualification examination of the State of Nevada Contractor's Board (or their authorized third-party testing agency) for one or more categories of electrical contracting.

The City of Las Vegas accepts a QI who has been tested and certified by the State of Nevada Contractor's Board as being competent to perform duties equivalent to any or all functions of Masters identified in the Electrical Code of the City of Las Vegas to the extent of this qualification. This means that

a Qualified Individual must be verified as competent in the specific area of electrical work related to the scope of work requested for the permit.

D. Renewal of Certificates. It is the duty of every Master and QI to maintain Master and QI certifications in a current active status in accordance with the third-party testing agency accepted by the State of Nevada Contractor's Board and to renew as required.

E. Currency of State Certification. A Master or QI found not to meet the qualification standard of the State of Nevada Contractor's Board for a Qualified Individual in any electrical contractor's license classification, or whose certification has been revoked, shall not be recognized as certified, until that person again meets the standards of certification by re-examination.

F. Multiple Affiliations. In order for a Master or QI to act as such on behalf of more than one electrical contracting business, the Master or QI must have supervisory responsibility for, and at least a 50% ownership interest in, each such business.

IV. Contractors' Responsibilities.

A. Business License. Any person engaged in the business of installing electrical wires (including, but not limited to power, signal, or control fixtures, appliances, apparatus, raceways or conduits, or any parts thereof), which utilize energy in any form and in connection with which electrical energy is used for any purpose whatsoever in the City of Las Vegas shall first secure the appropriate contractor's license from the State Contractor's Board and a contractor's business license from the City's Department of Finance and Business Services.

B. Competent Employees. No person, firm or corporation shall engage in the installation, alteration, construction of any electrical work, wiring devices, fixtures, appliances or equipment inside or outside of any building either by himself or through his agents or employees unless he holds an appropriate category of business license, and he or one of his employees holds an appropriate Master or QI certification or its equivalent, issued by the County. The contractor is responsible to hire competent employees to perform all electrical work.

(1) Master or QI Required. It is the contractor's responsibility to employ at least one Master or QI of the appropriate category for permits requested to perform the duties of a Master or QI. In

addition, the contractor shall ensure that all employees engaged in electrical work are qualified to perform that work. Upon written request by the City Electrical Inspector or other representatives of the Building Official, the contractor shall provide a written list of Masters, QI, and other employees performing electrical work with their respective certification qualification control numbers and issuing agency, by each job or permit in effect.

(2) **Supervision on Site.** Every building construction job site, at which there is electrical work being performed under a permitted scope of work, shall have one or more Journeyman Electricians present during work hours in a supervisory capacity for the permitted work.

(3) **Duties.** Each electrical contractor, whether he possesses a valid appropriate Master or QI certification or employs a person possessing either the Master or QI certification shall at all times be responsible for the proper supervision and inspection of the work to be performed pursuant to the scope of the electrical permit(s) issued to him and that said work shall meet all the requirements of the Electrical and Building Codes of the City of Las Vegas, and be installed in a workmanlike manner.

C. **Exception.** The requirements of this Subsection IV do not apply to work done under a permit issued to an owner/builder for a work in or on a one or two family dwelling used exclusively for living purposes, including any customary and incidental accessory structure, if the permittee:

(1) Is the bona fide owner of the premises on which the structures are located; and

(2) Occupies or demonstrates an intention to occupy those premises for living purposes.

Section 120-4. Violation and Penalties. It shall be unlawful for any person, firm or corporation to erect, install, alter, repair, relocate, add to, replace, use, or maintain electrical installation or electrical fixtures in this jurisdiction, or cause the same to be done, contrary to or in violation of any of the provisions of this Code, as amended. Maintenance of an electrical installation or electrical fixtures which was unlawful at the time it was installed and which would be unlawful under this Code if installed after the effective date of this Code or any amendment thereto, shall constitute a continuing violation of this Code.

Southern Nevada Amendments

To The

2005

National Electrical Code

Published: October 12, 2006

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Preface

This document comprises the Southern Nevada Amendments to the 2005 National Electrical Code as published by the National Fire Protection Association. It was developed by the jurisdictions listed on the cover page as a document to be adopted by reference. These provisions are not code unless adopted and codified by governmental jurisdictions. These amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternate has been approved and its use authorized by the Building Official (Authority Having Jurisdiction). This document is available to be adopted as code by any jurisdiction without permission or approval from the jurisdictions listed.

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Article 100

100 Definitions.

Add a new Definition to Article 100 to read:

Bedroom. A room or area which may be used for sleeping with clothes storage, provisions for privacy and meeting Building Code requirements for emergency escape and rescue.

Chapter 1 General

110.12 Mechanical Execution of Work.

Add a new Sentence to the end of 110.12 to read as follows:

Every contractor shall provide qualified supervision while performing electrical installations. To meet this requirement, the individual leading or directing the installation shall have a current approved Clark County Journeyman electrical certification.

Add a new Subsection (D) to Article 110.12 to read as follows:

(D) Abandoned Conductors and Cables. No electrical conductors or cables shall be abandoned in place. Such conductors or cables shall be removed from the building or structure back to the panelboard unless otherwise approved by the Building Official or designated representative based upon consideration of safety and combustibility.

Add a new Subsection (E) to Article 110.12 to read as follows:

(E) Old, Used or Damaged Material and Equipment. Old, used or damaged materials or equipment shall not be installed or used in any work without the prior approval of the Building Official or designated representative.

110.26 Spaces About Electrical Equipment

Add a new Sentence to the end of 110.26(C)(2) to read as follows:

When more than one entrance is required by this section both entrances shall open to the exterior of the building or into an approved means of egress that is not under the control of an individual tenant.

110.33 Entrance and Access to Work Space

Add a new Sentence to the end of 110.33(A)(1) to read as follows:

When more than one entrance is required by this section both entrances shall open to the exterior of the building or into an approved means of egress that is not under the control of an individual tenant.

Chapter 2 Wiring and Protection

210.8 Ground-Fault Circuit-Interrupter Protection for Personnel.

Add a new Subsection (6) to Article 210.8(B) to read as follows:

(6) Commercial Bars — Where the receptacles are installed to serve the countertop surfaces

Add a new Subsection (D) to Article 210.8 to read as follows:

(D) All Occupancies.

- (1) All 125-volt, single-phase, 15-and 20-ampere receptacles installed within 1.8 m (6 ft) of sinks or basins shall have ground-fault circuit-interrupter protection for personnel.
- (2) All luminaires (lighting fixtures) permitted to be installed within the zone defined in Article 410.4(D) shall be ground-fault circuit-interrupter protected.

210.23 Permissible Loads.

Add a new Subsection (E) to Article 210.23 to read as follows:

(E) Dwelling Branch Circuits.

- (1) **Maximum Number.** The maximum number of outlets on a 15-ampere, 125-volt (nominal) lighting fixture circuit shall be twelve (12) and shall not contain general purpose outlets.

Exception No 1: Dedicated branch circuits feeding only IC rated recessed fixtures may use Article 220.14(D) for maximum number of lighting outlets.

Exception No 2: In branch circuits serving smoke detectors the smoke detectors outlets need not be counted with the other lighting outlets

- (2) **Maximum Number.** The maximum number of outlets on a 20-ampere, 125-volt (nominal) circuit used either exclusively for receptacles, for lighting outlets or for any combination of receptacles and lighting outlets shall be twelve (12).

Exception No 1: Dedicated branch circuits feeding only IC rated recessed fixtures may use Article 220.14(D) for maximum number of lighting outlets.

Exception No 2: In branch circuits serving smoke detectors the smoke detectors outlets need not be counted with the other lighting outlets.

- (3) **Counter Receptacles.** No more than five (5) duplex receptacle outlets serving the required counter top receptacles shall be installed on any small appliance branch circuit.

Exception: Receptacles installed to provide power for electric ignition systems or clock timers for gas-fired ranges, ovens or counter-mounted cooking units.

- (4) **Individual Branch Circuits.** The following fastened-in-place appliances are required to have a separate minimum 20-ampere circuit: dishwasher, trash compactor, microwave oven, and hydromassage bathtub. The required laundry circuit may serve one (1) additional outlet in the laundry area.

210.52 Dwelling Unit Receptacle Outlets.

Add a new sentence to the end of Subsection 210.52(A)(2) (2) to read as follows:

Where panels consist of multiple sliding panels only the first panel in each direction may be excluded.

Add a new sentence to the end of Subsection 210.52(A)(2) (3) to read as follows:

Where room dividers consist of multiple moving panels only the first moving panel in each direction may be excluded as a wall space.

Delete the exception to 210.52(C)(1) and Figure 210.52:

Add a new statement to the end of Subsection 210.52(C)(2) to read as follows:

This outlet shall serve the first 1.22 m (4 ft) of counter space, measured horizontally, in the long dimension. An additional outlet shall be required to serve each additional 1.22 m (4 ft) or fraction thereof, of counter space in the long dimension.

Add a new statement to the end of Subsection 210.52(C)(3) to read as follows:

This outlet shall serve the first 1.22 m (4 ft) of counter space, measured horizontally, in the long dimension. An additional outlet shall be required to serve each additional 1.22 m (4 ft) or fraction thereof, of counter space in the long dimension.

Add a new Exception No. 3 to Subsection 210.52(F) to read as follows:

Exception No. 3: In structures more than four (4) stories in height where the configuration of a laundry area is such that only an electrically heated stackable type washer/dryer unit utilizing 208 volt or 240 volt power can be accommodated, the receptacle may be considered as meeting the laundry circuit requirement.

Add a new Subsection (I) to Article 210.52 to read as follows:

(I) Stairwell Landings. Stairwell landings, which are 3.66 m (12 ft) or more from a receptacle outlet, shall have at least one receptacle.

210.62 Show Windows.

Add a new statement to the end of 210.62 to read as follows:

The receptacle outlet shall be located within 450mm (18 inches) of the top of the show window. Show windows that exceed 3.0 m (10 feet) in height shall require a receptacle at the first available structural member above the height of 3.0 m (10 feet) measured from the floor.

210.70 Lighting Outlets Required.

Add a new statement to the end of Article 210.70(A)(1), but before the exceptions, to read as follows:

Unless prohibited by structural design a wall switch shall be located within 1.8 m (6 ft) of the point of entry, and shall not be located behind an active door in the fully open position.

Add a new statement to the end of Article 210.70(A)(2)(a) to read as follows:

Hallways of 3.0 m (10 ft) or more in length shall have wall switches at every end. There shall be a wall switch within 1.8 m (6 ft) of each bedroom door unless prohibited by structural design.

Add a new statement to the end of 210.70(A)(2)(b) to read as follows:

At least one wall switch that controls an interior lighting outlet shall be located at each keyed exterior entry. This switch shall be located within 1.8 m (6 ft) of the latching jamb side, unless prohibited by structural design, and not behind an active door in the fully open position.

Add a new Subsection (A)(4) to Article 210.70 to read as follows:

(4) Closet. All walk-in closets or storage areas of 1.86 sq. m (20 square feet) or more in floor area shall contain a light fixture controlled by a wall switch.

Add a new Subsection (D) to Article 210.70 to read as follows:

(D) **Mini Storage.** All mini storage units shall have illumination as required in the Building Code for egress illumination.

220.5 Calculations.

Add a new Subsection (C) to Article 220.5 to read as follows:

220.5 (C) Calculated Loads. The calculated load of a new single family dwelling service shall allow a minimum of 4800 volt-amperes for future expansion. These 4800 volt-amperes shall be added to the total net computed load.

220.84 Optional Calculations – Multifamily Dwelling.

Delete 220.84(C)(5) and add a new Subsection (D) to read as follows:

(D) **Heating and Air Conditioning Load.** The largest of the following six selections (load in kVA) shall be included:

- (1) 100 percent of the nameplate rating(s) of the air conditioning and cooling.
- (2) 100 percent of the nameplate rating(s) of the heating when a heat pump is used without any supplemental electric heating.
- (3) 100 percent of the nameplate ratings of electric thermal storage and other heating systems where the usual load is expected to be continuous at the full nameplate value. Systems qualifying under this selection shall not be calculated under any other selection in 220.84(D).
- (4) 100 percent of the nameplate rating(s) of the heat pump compressor and 65 percent of the supplemental electric heating for central electric space heating systems. If the heat pump compressor is prevented from operating at the same time as the supplementary heat, it does not need to be added to the supplementary heat for the total central space heating load.
- (5) 65 percent of the nameplate rating(s) of electric space heating if less than four separately controlled units.
- (6) 40 percent of the nameplate rating(s) of electric space heating if four or more separately controlled units.

225.32 Location.

Delete Article 225.32 and add a new Article 225.32 to read as follows:

225.32 Location. The disconnecting means shall be installed as described in 230.70 of these amendments. For the purposes of this section the requirements in 230.6 shall be utilized.

Exception No. 5: For accessory buildings to one and two-family dwellings the disconnecting means may be installed either inside or on the exterior of the accessory structure.

230.11 Location of Customer Owned Service Lateral or Drop.

Add a new Article 230.11 to read as follows:

230.11 Location of Customer Owned Service Lateral or Drop. All conductors shall traverse only the property to be served except through recorded power easements.

Delete Article 230.70 and add a new Article 230.70 to read as follows:

230.70 General. Means shall be provided to disconnect all ungrounded service entrance conductors to a building or structure.

(A) Location. The service disconnecting means shall be installed in accordance with 230.70(A)(1), (2), (3), (4) and (5).

- (1) **Exterior of the Building.** The service disconnecting means shall be installed in a readily accessible exterior location and within 3.7 m (12 ft.) of the building or structure. Where the distance is greater than 3.7 m (12 ft.) from the building or structure the service disconnecting means shall be considered as a separate structure.

Exception No1: A fire pump and its associated electrical equipment.

- (2) **Electrical Equipment Room.** The service disconnecting means may be installed within a dedicated electrical equipment room with a readily accessible direct access on the exterior of a building or structure. Such rooms shall be separated from all other rooms or spaces within the building by a minimum of one (1) hour fire resistive construction and shall have approved Fire Department access.

FPN: A recessed 3200 series Knox Box may serve as the approved Fire Department access in some jurisdictions.

- (3) **Bathrooms.** Service disconnecting means shall not be installed in bathrooms.
- (4) **Remote Control.** Where a remote control device(s), required by another code such as in a fire command center, is used to actuate the service disconnecting means, the service disconnecting means shall be located in accordance with 230.70(A)(1) or (2).
- (5) **Emergency Systems, Information Technology Equipment and Uninterruptible Power Supplies (UPS).** Emergency Systems driven by prime movers and UPS Systems shall have separate disconnecting means with separate identification. Information Technology Equipment rooms complying with Article 645.2 shall be permitted to have their disconnecting means installed per article 645.10 and 645.11 if identified at the same location as the "Service Disconnect."

(B) Marking. Each service disconnecting means shall be marked with a sign(s). When located in an dedicated electrical room the exterior door(s) providing access to the disconnecting means located in a dedicated electrical room shall be permanently marked with a sign(s). Each sign shall be a minimum 0.093sq.m (1 sq. foot), colored yellow with 25.4mm (1 inch) high, 6.35 mm (¼ inch) stroke raised or engraved letters and/or numbers indicating the address or unit it serves and be identified as the "Electrical Service Disconnect(s)" and/or "Electrical Service Disconnect(s) Inside." Emergency Systems disconnects shall be permanently marked with sign(s), identified as "Emergency Electrical Disconnect(s)" and/or "Main Emergency Electrical Disconnect(s) Inside." When the service disconnecting means is located inside a dedicated electrical room and it is not the first service disconnect encountered or there are multiple service disconnects there shall be a directional 75mm (3inch) wide painted yellow stripe on the floor from the entry door(s) to each service disconnect. Other durable means of identification may be used with prior approval by The Authority Having Jurisdiction.

Exception: One and two family dwelling units and their associated accessory structures.

(C) Suitable for Use. Each service disconnecting means shall be suitable for the prevailing conditions. Service equipment installed in hazardous (classified) locations shall comply with the requirements of Articles 500 through 517.

240.6 Standard Ampere Ratings.

Delete "not meeting the requirements of 240.6(C)," from Subsection (B) of Article 240.6.

Delete Subsection (C) from Article 240.6.

250.32 Building or Structures Supplied by Feeder(s) or Branch Circuit(s).

Add a new statement at the end of Article 250.32 to read as follows:

For the purposes of this section all residential buildings or structures not joined by a continuous concrete foundation or footing and roof shall be considered as separate buildings or structures.

250.50 Grounding Electrode System.

Add a new sentence at the end the first paragraph of Article 250.50 to read as follows:

The concrete-encased electrode described in Article 250.52(A)(3) shall be required for new buildings and structures that are supplied with electrical power and have concrete foundations or footings.

250.52 Grounding Electrodes.

Delete Subsections (A)(5) and (A)(6) of Article 250.52 and add a new Subsection (A)(5) to read as follows:

- (5) **Rod Electrodes.** Rod electrodes shall not be less than 2.44 m (8 ft) in length and shall consist of the following materials and shall be installed according to Article 250.53 (G). Electrodes shall be copper clad or their equivalent and shall not be less than 15.875 mm (5/8 inch) in diameter, or listed non-ferrous rods or their equivalent and not less than 12.7 mm (inch) in diameter.

250.53 Grounding Electrode System Installation.

Delete ", Pipe and Plate" from the title and both sentences in Subsection (A) of Article 250.53 and from Subsection (D)(2).

Delete "or (A)(6)" from the first sentence in Subsection (B) of Article 250.53.

Delete "and Pipe" from the title of Subsection (G) of Article 250.53.

Delete Subsection (H) of 250.53

250.56 Resistance of Rod, Pipe, and Plate Electrodes

Delete "Pipe, and Plate" from the title and in both sentences in Article 250.56.

250.118 Types of Equipment Grounding Conductors.

Delete Subsection (5), (6) and (8) of Article 250.118.

250.120 Equipment Grounding Conductor Installation.

Add a new Subsection (D) to Article 250.120 to read as follows:

(D) **Equipment Grounding Conductor.** All raceways installed on roofs with a slope less than 102 mm per 306 mm (4 inches per 12 inches) shall contain an equipment grounding conductor sized per Table 250.122 installed with the circuit conductors.

Exception No. 1: Low voltage, communication and similar type systems unless required elsewhere in the Code.

Exception No. 2: As permitted by Article 250.86 for short sections of metal enclosures or raceways.

Chapter 3 Wiring Methods and Materials

300.1 Scope.

Add a new Subsection (D) to Article 300.1 to read as follows:

(D) Wiring of Buildings.

- (1) Wiring installed in the construction of buildings and structures shall be contained in a raceway or cable tray system.

Exception No. 1: AC cable, MC cable and MI cable. Articles 320, 330, and 332 respectively.

Exception No. 2: Special alarm sensing cable.

Exception No. 3: Where NM, NMC or NMS cable is permitted by this code. Article 334.

Exception No. 4: Low voltage wiring when installed exposed on walls and ceilings. Limited to Articles 725, 760, 770, 800, 810, 820 and 830.

Exception No. 5: Any listed under-carpet system. Article 324.

Exception No. 6: Per Article 645.

Exception No. 7: Listed Neon Cable Assemblies providing the equivalent mechanical protection of Liquid Tight Flexible Conduit.

- (2) Raceway systems for buildings and structures of Type I or Type II A construction as defined in the Building Code shall be of metallic non-combustible materials and cable trays shall be of the fully enclosed type.

Exception No. 1: Non-metallic raceways encased in concrete, or masonry, or underground or solid grouted building components that are in compliance with the Building Code.

Exception No. 2: Liquid-tight flexible conduit in lengths of 1.8 m (6 ft) or less which comply with NEC Articles 350 and 356.

310.5 Minimum Size of Conductors.

Add a new sentence to Article 310.5 to read as follows:

Aluminum and copper clad aluminum conductors smaller than No. 6 AWG shall not be used.

314.24 Depth of Outlet Boxes.

Add the following to the end of Article 314.24 to read as follows:

All outlet, switch or junction boxes less than 200 mm (8 inches) in any dimension, shall have no more than any combination of two extension boxes and/or plaster rings.

Exception: Listed unit(s) or assembly(s).

334.10 Uses Permitted.

Delete Subsection (3) of Article 334.10 and add a new Subsection (3) to read as follows:

- (3) Group R-1, R-2, R-3 and R-4 occupancies permitted to be Types III, IV, and V construction as defined in the Building Code and in buildings with accessory uses, such as: pool houses, recreation buildings, guard houses, garages, laundry rooms and offices except as prohibited in Article 334.12.

Conversions from R-3 to B occupancy as defined by the Building Code, Type NM and NMC cables may remain, provided the equipment grounding conductors are sized in accordance with Table 250.122 and are installed in accordance with this Code, or meet the requirements of Article 406.3(D).

334.12 Uses Not Permitted.

Add a new Subsection (11) to Article 334.12(A) to read as follows:

- (11) In Type I or Type II construction as defined in the Building Code.

352.10 Uses Permitted.

Add a new Subsection (I) to Article 352.10 to read as follows:

- (I) **Exposed to Direct Sunlight.** Rigid non-metallic conduit shall be a minimum Schedule 80 and identified for such use.

358.12 Uses Not Permitted.

Add new Subsections (7), (8) and (9) to Article 358.12, before the exception, to read as follows:

- (7) In concrete or masonry in contact with earth.
(8) Underground.
(9) In earth fills.

Chapter 4 Equipment for General Use

408.35 Number of Overcurrent Devices on One Panelboard.

Add the following paragraph to the end of Article 408.35 to read as follows:

Each panelboard or load center installed in a new one or two-family dwelling shall have a capacity for a minimum of two (2) additional full-size single pole overcurrent devices on adjacent opposite poles for expansion. All available overcurrent device spaces shall comply with Article 404.8(A).

410.4 Fixtures in Specific Locations.

Add the following sentence to the end of Subsection (D) of Article 410.4 to read as follows:

All luminaires (lighting fixtures) permitted to be installed in this zone shall be ground-fault circuit-interrupter protected.

Chapter 5 Special Occupancies

514.11 Circuit Disconnects.

Add the following to the end of Subsection (A) of Article 514.11 to read as follows:

The switch shall be a momentary contact type. The disconnect station sign shall be 0.093 sq. m (1 ft square), colored yellow and have black, 25.4 mm (1 inch) high, 6.35 mm (¼ inch) stroke permanent lettering describing it as "Emergency Pump Shutoff."

Delete Subsection (B) in its entirety.

Delete the words "Unattended Self-Service" from the title of Subsection (C).

550.30 Distribution System.

Add the following to the end of Article 550.30 to read as follows:

Electrical service to all mobile home parks and to all lots (sites, spaces, etc.) in mobile home parks, shall be provided by the franchised serving utility unless approved otherwise by the Building Official or designated representative.

590.2 All Wiring Installations.

Add the following to the end of Subsection (A) of Article 590.2 to read as follows:

Temporary power receptacle outlets installed in wet locations shall be permitted to have an enclosure that is weatherproof when the attachment plug is removed.

Chapter 6 Special Equipment

600.9 Location.

Add a new sentence to the end of (B) to read as follows:

(B) All electrical wiring and neon tubing shall be completely enclosed within an approved material or barrier to prevent physical contact up to a height of 2.44 m (8 ft) above finished grade or floor level.

680.26 Equipotential Bonding.

Delete Section 680.26(C) and add a new Section 680.26(C) to read as follows:

(C) Equipotential Bonding Grid. The parts specified in 680.26(B) shall be connected to an equipotential bonding grid with a solid copper conductor, insulated, covered, or bare, not smaller than 8 AWG or rigid metal conduit of brass or other identified corrosion-resistant metal conduit. Connection shall be made by exothermic welding or by listed pressure connectors or clamps that are labeled as being suitable for the purpose and are of stainless steel, brass, copper, or copper alloy. The following shall be bonded as part of the equipotential bonding grid:

- (1) If Structural Reinforcing Steel is present in the deck or coping within 1m (3 ft) of waters edge it shall be bonded to the structural reinforcing steel of a concrete pool where the reinforcing rods are bonded together by the usual steel tie wires or the equivalent.
- (2) Bolted or Welded Metal Pools. The wall of a bolted or welded metal pool.
- (3) Alternate Means shall be required for non-metallic reinforced pools. This system shall be permitted to be constructed as specified in (a) through (c):

- a. **Materials and Connections.** A grid shall be constructed of minimum 8 AWG bare solid copper conductors. Conductors shall be bonded to each other at all points of crossing. Connections shall be made as required by 680.26(D).
- b. **Grid Structure.** The equipotential bonding grid shall be installed under or in the pool deck extending 1 m (3 ft) horizontally from the inside walls of the pool. The equipotential bonding grid shall be arranged in a 300 mm (12 in.) by 300 mm (12 in.) network of conductors in a uniformly spaced perpendicular grid pattern with tolerance of 100 mm (4 in.).
- c. **Securing.** The below-grade grid shall be secured within or under the pool and deck media.

682 Natural and Artificially Made Bodies of Water.

Delete Article 682 in its Entirety.

Chapter 7 Special Conditions

700.1 Scope

Add a third paragraph to the beginning of 700.1 to read as follows:

For the purposes of this section items considered as meeting the requirements for high rise applications (i.e. buildings over 17m (55 feet) to be placed on the emergency distribution system may include: Emergency illumination, exit signage, electric fire pumps, fire jockey or makeup pumps, fire alarm equipment, smoke control equipment, one elevator per bank of elevators, cooling and heating equipment for emergency electrical rooms and elevator machine rooms, FAA required obstruction lighting, battery chargers for emergency generating equipment, heating equipment for freeze protection of fire sprinkler systems, telecommunications equipment (i.e. for 911 applications) fire command center loads such as monitoring and display equipment and other equipment approved by the Authority Having Jurisdiction that will enhance the survivability of life safety systems.

700.9 Wiring, Emergency System.

Change Subsection (D) of Article 700.9 (the portion before Paragraph (1)) to read as follows:

(D) Fire Protection. Emergency systems shall meet the following additional requirements in 700.9(D)(1) and (D)(2) in any occupancy(s) of 300 or more persons or in buildings above 17 m (55 ft) in height.

Add a new Sentence to the end of Article 700.9 (D)(2) to read as follows:

This equipment shall be located in room(s) dedicated to this equipment.

Exception: System components described in Article 701 may occupy the same dedicated room(s) as emergency systems.

700.12 General Requirements.

Change the fourth paragraph of 700.12 to read as follows:

Equipment for sources of power as described in 700.12(A) through 700.12(E) shall meet the following additional requirements in any occupancy(s) of 300 or more persons or in buildings above 17 m (55 ft) in height. This equipment shall be installed in spaces fully protected by approved automatic fire suppression systems (sprinklers, carbon dioxide systems and so forth) or in spaces protected by a fire-rated assembly listed to achieve a minimum fire rating of one-hour.

Add a new Subsection (B)(7) to Article 700.12 to read as follows:

- (7) The emergency generator shall not be located more than 17 m (55 ft) above the lowest level of fire department vehicle access. When the generator set is located inside a building it shall be located in a room dedicated to the Emergency Power Supply System. This room shall be separate from the interior of the building by a minimum of two-hour resistive construction or shall be in room(s) fully protected by approved automatic fire suppression systems. Unless otherwise required by Building Codes openings for generator cooling and exhaust shall not be required to be fire-resistive construction.

When a generator set is located within 1.5 m (5 ft) of a building it shall be separated from the building with a rated barrier wall equal to the highest fire rating within the building that has no openings. It shall be isolated within an enclosure and protected from physical damage.

When a generator set is located more than 1.5 m (5 ft) of a building it shall be isolated within an enclosure and protected from physical damage.

700.16 Emergency Illumination.

Add the following to the end of the first sentence of Article 700.16 to read as follows:

Electrical rooms, fire control rooms, fire pump rooms, PBX rooms, public restrooms and generator rooms shall require emergency illumination.

Exception: A single user restroom shall not require emergency illumination.

Notes

SN NEC Am 2006.doc

AGENDA SUMMARY PAGE
CITY COUNCIL MEETING OF: JANUARY 3, 2007

DEPARTMENT: CITY ATTORNEY

DIRECTOR: BRADFORD R. JERBIC

☐ Consent ☒ Discussion

SUBJECT:

RECOMMENDING COMMITTEE: BILL ELIGIBLE FOR ADOPTION AT A LATER MEETING:

Bill No. 2006-73 – Adopts the 2006 Edition of the Southern Nevada Pool Code. Proposed by: Paul K. Wilkins, Director of Building and Safety

Fiscal Impact



No Impact



Augmentation Required



Budget Funds Available

Amount:

Funding Source:

Dept./Division:

PURPOSE/BACKGROUND:

This bill should be submitted to a Recommending Committee for review, hearing and recommendation to the City Council for final action.

RECOMMENDATION:

ADOPTION at 1/17/2007 City Council meeting pursuant to the 1/2/2007 Recommending Committee.

First Reading – 12/20/2006; First Publication – 1/5/2007

BACKUP DOCUMENTATION:

Bill No. 2006-73

Minutes:

Recommendation noted.

1/17/2007 Council Agenda

1 **BILL NO. 2006-73**

2 **ORDINANCE NO. _____**

3 AN ORDINANCE TO ADOPT BY REFERENCE THE 2006 EDITION OF THE SOUTHERN
4 NEVADA POOL CODE, AND TO PROVIDE FOR OTHER RELATED MATTERS.

5 Proposed by: Paul K. Wilkins, Director of Building and Safety Summary: Adopts the 2006 Edition of the
6 Southern Nevada Pool Code.

7 THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN
8 AS FOLLOWS:

9 SECTION 1: Title 16, Chapter 30, Section 10, of the Municipal Code of the City of
10 Las Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

11 **16.30.010:** That certain document entitled ["2003 Southern Nevada Pool Code,"] "2006 Southern
12 Nevada Pool Code," three copies of which are on file in the Office of the City Clerk, is adopted by
13 reference and made a part of this Code, to the same effect as if set out herein in full.

14 SECTION 2: Except as set forth in Section 3 of this Ordinance, the 2006 Southern
15 Nevada Pool Code, a copy of which is attached to this Ordinance, shall supersede and replace that
16 certain document entitled "City of Las Vegas Swimming Pool/Spa Code, 1992 Edition," and
17 subsequent amendments thereto.

18 SECTION 3: Except as otherwise specifically provided in the 2006 Southern Nevada
19 Pool Code, the provisions of Article 1 of the City of Las Vegas Swimming Pool/Spa Code, 1992
20 Edition, supplemented as necessary by the provisions of the City's Administrative Code, shall govern
21 procedural and administrative matters related to the enforcement and application of the 2006 Southern
22 Nevada Pool Code.

23 SECTION 4: If any section, subsection, subdivision, paragraph, sentence, clause or
24 phrase in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or
25 ineffective by any court of competent jurisdiction, such decision shall not affect the validity or
26 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the
27 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
28 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,

1 invalid or ineffective.

2 SECTION 5: Whenever in this ordinance any act is prohibited or is made or declared
3 to be unlawful or an offense or a misdemeanor, or whenever in this ordinance the doing of any act is
4 required or the failure to do any act is made or declared to be unlawful or an offense or a
5 misdemeanor, the doing of such prohibited act or the failure to do any such required act shall
6 constitute a misdemeanor and upon conviction thereof, shall be punished by a fine of not more than
7 \$1,000.00 or by imprisonment for a term of not more than six months, or by any combination of such
8 fine and imprisonment. Any day of any violation of this ordinance shall constitute a separate offense.

9 SECTION 6: All ordinances or parts of ordinances or sections, subsections, phrases,
10 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
11 1983 Edition, in conflict herewith are hereby repealed.

12 PASSED, ADOPTED and APPROVED this ____ day of _____, 2007.

13 APPROVED:

14
15 By _____
16 OSCAR B. GOODMAN, Mayor

17 ATTEST:

18 BARBARA JO RONEMUS, City Clerk

19 APPROVED AS TO FORM:

20 Val Steef 12-7-06
21 Date

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2006, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2007, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as first introduced and adopted by the following vote:

8 VOTING "AYE": _____
9 VOTING "NAY": _____
10 ABSENT: _____

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APPROVED:

By _____
OSCAR B. GOODMAN, Mayor

ATTEST:

BARBARA JO RONEMUS, City Clerk

2006

SOUTHERN NEVADA

POOL CODE

Published: October 12, 2006

City of Boulder City
401 California Ave
Boulder City, NV 89005
(702) 293-9282

Clark County
4701 W Russell Rd.
Las Vegas, NV 89118
(702) 455-3000
Inspections 455-8040

City of Henderson
240 S. Water St
Henderson, NV 89015
(702) 267-3650
Inspections 267-3900

Pahrump Regional Planning District
1210 E. Basin
Suite 1
Pahrump, NV 89060
(775) 751-3773

City of Las Vegas
731 S. Fourth St
Las Vegas, NV 89155
(702) 229-6251
Inspections 229-2071

City of Mesquite
11 East 100 South
Mesquite, NV 89024
(702) 346-2835

City of North Las Vegas
2240 Civic Center Dr
North Las Vegas, NV 89030
(702) 633-1576

PREFACE

This document comprises the Southern Nevada Pool Code and was developed by the jurisdictions listed on the cover page as a document to be adopted by reference. These provisions are not code unless adopted and codified by governmental jurisdictions. These provisions are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternate has been approved and its use authorized by the building official. This document is available to be adopted as code by any jurisdiction without permission or approval from the jurisdictions listed on the cover page.

In addition to the requirements set forth in this document, public swimming pools, wading pools, spas and water features, designed for full or partial human submersion and open to the public must be constructed in compliance with the Southern Nevada Health District rules and regulations. In the event that conflicts between this document and those regulations occur, the more restrictive condition will apply.

For further information on public pools, please contact the **Southern Nevada Health District at 383-1266.**

SOUTHERN NEVADA POOL CODE

SECTION

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SCOPE

This code contains provisions considered necessary for the safety with regard to artificially constructed bodies of water.

100 DEFINITIONS, GENERAL: For the purpose of this code, certain terms, phrases, words and their derivatives shall be construed as specified in this chapter and elsewhere in this code where specific definitions are provided. Terms, phrases, and words used in the singular include the plural and the plural singular. Terms, phrases, and words used in the masculine include the feminine and the feminine masculine.

Where terms are not defined, they shall have their ordinarily accepted meanings within the context with which they are used. *Webster's Third New International Dictionary of the English Language, Unabridged*, copyright 1986, shall be considered as providing ordinarily accepted meanings.

ACCESSIBLE: When applied to a fixture, connection, appliance or equipment shall mean having access thereto, but which may require the removal of an access panel, door or similar obstruction without damaging the structure or finish.

ACCESSIBLE, READILY: When applied to a fixture, connection, appliance or equipment shall mean having direct access without the necessity to remove an access panel, door or similar obstruction.

ACCESS BARRIER: A fence, wall, building wall or combination thereof that completely encloses a pool, spa or water feature and obstructs access.

APPROVED: Approval by the Building Official as the result of investigation and tests conducted by the Building Official, or by reason of accepted principles or tests by recognized authorities, technical or scientific organizations.

GATE OR DOOR: A single movable panel that swings or hinges, rotates or slides used for entrance into or closing off an opening in the required barrier.

HEALTH DISTRICT: Southern Nevada Health District.

LISTED and LISTING: Equipment or materials included in a list published by an approved testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of current productions of listed equipment or materials. The published list shall state that the material or equipment complies with approved nationally recognized codes, standards or tests and has been tested or evaluated and found suitable for use in a specified manner.

MANMADE DECORATIVE WATER FEATURE: Any manmade stream, fountain, waterfall, or other water feature that does not meet the definition of a swimming pool and contains water that flows or that is sprayed into the air, constructed for decorative, scenic or landscape purposes. Such items shall not exceed eighteen (18") inches of maximum water level. The following bodies of water shall be exempt:

- (A) Manmade lakes as defined in local ordinance or administrative code.
- (B) Swimming pools or spas as regulated in this document.
- (C) Water features utilized in a family entertainment theme park as regulated in local ordinance or administrative code.
- (D) Water feature not greater than eighteen (18") inches of maximum water level, used in conjunction with and on the same property as a single-family residence, and available only to the family of the householder or their private guests.

MANUFACTURED: A pool, spa or water feature that is manufactured or constructed at another location, transported to the property, and placed and/or assembled at the property.

MAXIMUM WATER LEVEL: The highest level that water can reach before it spills out.

NORMAL OPERATING WATER LEVEL: The overflow point on overflow gutters or the midpoint in the throat of skimmers.

POOL: See "SWIMMING POOL."

POOL DEPTH: The distance between the lowest point of the pool floor and the maximum water level.

PRIVATE SWIMMING POOL OR SPA: All artificially constructed swimming pools or spas which are used in conjunction with and on the same property as a single-family residence, and available only to the family of the residence or their private guests.

PUBLIC POOL or SPA: Any swimming pool or spa, other than a private pool or spa, which is intended to be used for swimming or bathing, and is operated by an individual or a group regardless of whether a fee is charged for use.

SLIP RESISTANT: A surface that has been so treated or constructed as to significantly reduce the chance of a user slipping when wet.

SPA: An artificially constructed body of water, either portable or permanent, designed for recreation or therapeutic use that is not drained, cleaned or refilled for each individual user. It may include, but is not limited to: hydro-jet circulation, hot tubs, hot water, cold water, mineral baths, air induction bubbles, or any combination thereof. It shall not include therapeutic facilities used by or under the direct control of licensed medical personnel.

STAIR, RECESSED TREAD, LADDER: A means of entry and exit to and from the pool or spa that may be used in conjunction with each other.

- (A) **Stair:** A riser/tread or series of risers/treads extending down from the deck into the pool/spa.
- (B) **Recessed Tread:** A series of vertically spaced cavities in the pool or spa wall creating tread areas for step holes.
- (C) **Ladder:** A series of vertically separated treads or rungs connected by vertical rail members or independently fastened to an adjacent vertical wall.

STORABLE SWIMMING OR WADING POOL: Those that are constructed on or above the ground with nonmetallic, molded polymeric walls or inflatable fabric walls regardless of dimension. Such items are not subject to this code.

SWIMMING POOL: A permanently installed artificial body of water with a maximum water level greater than eighteen (18) inches in depth which includes all equipment necessary for its use.

WASTEWATER: Water from filter cleansing, draining of a pool or spa, or lowering of the water level in a pool or spa.

WATER FEATURE: See "MANMADE DECORATIVE WATER FEATURE."

WIDTH or LENGTH: The actual dimension taken at the maximum location from inner wall to inner wall at the normal operating water level of a pool or spa.

200 SITE WORK, SETBACKS AND CLEARANCES: Excavations shall be so constructed or protected that they do not endanger life or property. Temporary barricades shall be maintained in place and kept in good order until permanent barriers are installed. It shall be the responsibility of the contractor or owner to verify property line locations prior to excavation.

- (A) **Equipment Clearances:** All electrical equipment clearances shall comply with requirements specified per National Electrical Code and manufacturer's listing guidelines. A twenty-four inch (24") wide access path is required to all pool and existing mechanical equipment. Equipment shall be mounted on a permanent, secure wall, fence or other approved structure.
- (B) **Equipment:** The equipment pad shall not be in contact with any foundation system of a property line structure. Equipment shall be installed with adequate drainage. Equipment in vaults or pits shall have automatic means to drain water. Equipment shall be installed in accordance with the currently adopted Codes, listing requirements and the manufacturer's installation instructions.

300 ELECTRICAL INSTALLATION: All electrical installations, modifications, repairs or alterations of pools, spas and water features shall conform to the provisions of the currently adopted National Electrical Code and Local Amendments.

- (A) **Pool and Spa Lighting:** Pools and spas shall be equipped with lighting that illuminates the entire bottom and volume, and shall be an underwater or overhead type. Underwater lighting shall be a minimum of one-half (1/2) watt or equivalent lumens per square foot of water surface area. Overhead lights shall be a minimum of two (2) watts or equivalent lumens per square foot of water surface area. Any glass parts shall be protected from breakage. Optical fiber lighting used for pool and spa lighting shall be installed in accordance with their listing and labeling.
- (B) **Area Lighting of Public Pools and Spas:** Area lighting shall be provided to illuminate the surface areas of the pool deck and spa deck. The lights shall be a minimum of six-tenths (6/10) watt or equivalent lumens per square foot of deck area.
- (C) **Disconnecting Means:** Time clocks are not permitted as a means of disconnect for motors unless listed for the purpose or approved by the Building Official.
- (D) **Load Calculations:** Electrical load calculations will be required for any pool, spa, or combination that utilizes more than one pump motor. This is required to verify that the existing electrical system is adequate for the additional loads being added.
- (E) **Conductor Feeder, Overcurrent Protection & Grounding:** All pool panels shall have a minimum #10 AWG copper wire feeder or equal and a thirty ampere (30A) breaker with an insulated ground wire to the existing panel.

400 PLUMBING INSTALLATION: Plumbing installation, modification, repair or alteration of a pool, spa or water feature shall conform to the currently adopted Plumbing Code and the additional following requirements:

- (A) **Water Quality:** All water treatment, filtration and recirculation devices, and hydraulic lines and systems shall be approved by the Health District prior to permit issuance for a public pool or spa. Water features designed for full or partial human submersion open to the public shall be reviewed and approved by the Health District prior to permit issuance. Water quality in water features which do not come in contact with the public, and private pools and spas shall be maintained in such a manner that a nuisance is not created pursuant to NRS 40.140.
- (B) **Heating Equipment:** Heating equipment shall conform to the provisions of the currently adopted Mechanical, Plumbing and Electrical Codes. Installation of such equipment shall be according to the manufacturer's instructions and listing. Heating equipment shall be located on a minimum three (3") inch thick pad of concrete or other approved material. The top of the pad shall be a minimum of three inches above adjacent grade and shall be appropriately sized to accommodate all equipment. Equipment installed in alternate locations, such as vaults or pits, must be listed for the location or be approved by the Building Official approval. When pool or spa water heating equipment is installed with a full-way type shutoff valve between the outlet of the heater and the pool or spa, an approved pressure relief valve shall be installed on the discharge side of the water heating equipment.

Vents shall terminate with clearances as follows: Vents shall terminate as per the currently adopted Uniform Mechanical Code and per the manufacturers listing.

- (C) **Underground Installation:** Underground installation of plumbing lines to include water supply, drain, vacuum and circulating lines and gas piping systems shall be installed on a minimum three inch (3") base, a minimum one inch (1") side and four inch (4") cover of clean sand in place at time of inspection.
- (D) **Water Piping:** Swimming pools, spas, and water features shall use approved type "L" copper, approved PVC pipe of a minimum schedule 40 PVC meeting the NSF PW-14 Standard (or equal), or other approved materials. PVC pipe shall be bent using heat by thermostatically controlled equipment. All plastic pipe exposed to sunlight shall be protected with an approved tape wrapping or paint. Water piping shall be pressure tested at twenty (20) PSI for fifteen (15) minutes. For the purpose of this code the factory installed pressure gauge shall be adequate.

(E) **Gas Piping:** Natural gas piping systems shall conform to the provisions of the currently adopted Plumbing Code. All other approved systems shall be tested at sixty (60) PSI for thirty (30) minutes. Liquefied petroleum gas piping systems shall conform to the provisions of the National Fuel Gas Code, NFPA 54. Threaded ferrous metal gas pipe systems shall be pressure tested at ten (10) PSI for fifteen (15) minutes.

(F) **Water Supply:** Pools, spas, and water features shall have water directly supplied through a water supply inlet. The water supply inlet for public pools shall comply with Health District standards. The water supply inlet on private pools shall be protected by a one-inch (1") air gap or approved backflow protection device.

Exception: Private pools and spas may be provided with a water supply consisting of an approved back flow protection device (vacuum breaker) located on the discharge side of the last valve or a sill cock (hose bib) from which a water hose may be attached.

(G) **Wastewater:** Wastewater from pools, spas, and water features shall be discharged to the public sewer through a permanently installed waste line. Wastewater shall not be discharged to a septic tank.

The permanently installed waste line shall discharge through an indirect waste connection of the following type: an approved interceptor; a sand trap which is vented and provided with a clean-out on the discharge side; or a "P" trap of a minimum size of three inches (3").

Exception (1): If a public sewer service is not available, the Building Official may authorize the wastewater to be discharged above ground and used for irrigation purposes. The wastewater shall not be allowed to drain to adjacent properties or the public way. This authorization may be revoked if a hazardous, nuisance or unsanitary condition occurs.

Exception (2): For private pools, spas, and water features, a hose connection may be used as a waste line.

(H) **Entrapment Avoidance:** The suction inlet for pool and spa cleaning systems shall be protected against user entrapment by installation of an anti-vortex cover. A minimum of two suction inlets shall be provided in the suction system, each inlet shall be sized to the maximum pipe size used on the suction system. Separation of such inlets cover openings shall be a minimum of three feet (3') on the horizontal plane, or located on two different planes. (For example: one on the bottom and one on a vertical plane, one each on two separate walls, or one skimmer and one main drain on the same suction line). The suction outlets shall be plumbed so water is drawn

simultaneously without valves, through the inlets to a common line to the pump system.

- (I) **Filtering and Recirculation:** Pools, spas, and water features shall be equipped with a filtering and recirculation system. Equipment shall be mounted on a minimum three-inch (3") thick pad of concrete or other approved materials. The pad shall be a minimum of three inches (3") above adjacent grade and sized to accommodate all equipment. All equipment shall be listed by a nationally recognized testing agency for the appropriate use. The circulation system shall provide a complete turnover of water within the time frame specified below:

Public Pool	6 Hours
Private Pool	12 Hours
Public Spa	½ Hour
Private Spa	1 Hour
Water Feature	8 Hours

Filler, circulation systems, scum gutters and skimmers that are located in public pools, spas and water features shall conform to Health District regulations. Inlets for fresh or repurified water in all pools, spas, and water features shall be located to produce uniform circulation of water throughout the entire pool, spa or water feature.

- (J) **Over Sewer:** Swimming pools, in-ground spas, or water features shall not be constructed over a sewer, unless the sewer line is of cast iron material and prior approval from the Building Official is obtained.
- (K) **Septic Systems:** All Swimming pool and spa water filler and circulation piping within twenty-five feet (25') of a septic system shall conform to Health District regulations.

500 STRUCTURAL DESIGN AND INSTALLATION

- (A) **General:** Pools, spas, and water features shall be constructed of reinforced concrete conforming to the currently adopted Codes or as approved by the Building Official. If groundwater is present, a hydrostatic valve or other approved means shall be installed at the lowest point. Approved, listed manufactured pools, spas and water features shall be installed in accordance with manufacturer's installation instructions and their listing.
- (B) **Soils:** All areas of Southern Nevada shall have a geotechnical investigation report at completion of excavation or prior to permit application, unless specifically identified as outside a special geologic consideration zone as identified on the Clark County Soils Guidelines Map. Areas of Clark County not covered by the Clark County Soils Guidelines Map may be exempted

from submitting a geotechnical investigation report at the option of the Building Official. The geotechnical investigation report must be prepared by a registered design professional. The report shall be accompanied by appropriate substantiation including tests, sampling data, suitability for the intended project, and recommendations on treating the sub-grade soil and/or modifications to the swimming pool design. The pool contractor is responsible to provide the report to the Building Official and the registered design professional responsible for the swimming pool design. The registered design professional will determine if any modifications to the original design are required and will submit such changes to the Building Official for approval. All projects designed without a geotechnical investigation report shall comply with IBC Tables 1610.1 and 1804.2 and ACI 318, Section 4.3. The minimum default design values shall be based on an active pressure of 45 psf/ft, an at-rest pressure of 60 psf/ft, Class 5 material, and a severe sulfate exposure level. Additional loads due to sloping backfill and surcharges shall be addressed by the registered design professional. Swimming pools are not required to be designed for a seismic load due to the soil.

- (C) **Concrete and Steel Reinforcement:** Concrete and steel reinforcement of concrete pools, spas, and water features shall be designed by a licensed State of Nevada registered professional Engineer or Architect. The minimum design strength of the concrete shall be four thousand five hundred (4500 psi) pounds per square inch unless otherwise approved by the design engineer (special inspections [1701] will not be mandatory unless noted by the design professional.) The continuity of a bond beam shall not be interrupted for the installation of skimmers or similar apparatus. Alternate methods may be used when approved by the Building Official.

- (D) **Walls and Floors:** The materials used in pool, spa, and water feature wall and floor construction shall conform to the provisions of the currently adopted Building Code. Walls and floors shall be designed and constructed of non-absorbent material in a manner to be leak-proof and structurally sound under all the conditions of the site. The inner surface of the pool or spa shall be coved, rounded, or bull-nose at all joints, corners, angles of bases, walls, floors, or curbs. No sharp corners or projections shall be permitted.

- (E) **Entry/Egress:**

(Note: Commercial pools shall comply with the Southern Nevada Health District standards.)

- (1) **Pools:** Pools with a depth greater than two feet (2') at pool walls shall be provided with a means of Entry/Egress. Pools exceeding thirty feet (30') in width or length shall have egress provided on opposite ends of those sides greater than thirty feet (30'). A seat meeting the

requirements of Section 500 (F) (2) shall be considered as a second means of egress.

- (2) **Spas:** Spas with a depth greater than two feet (2') shall have an interior top step which complies with (4) (b) below. The distance from the top step to the bench shall comply with the (4) (b) on one side of the top step. Spas with a deck between twelve inches (12") and twenty-four inches (24") above grade that are entered by sitting on the rim deck and spinning into the spa shall not require exterior steps. Listed manufactured spas shall have entry and egress as per their listing.
- (3) **Water Features:** Water features and vanishing edge catch basins greater than twenty-four inches (24") in depth with walls that are inclined greater than forty-five (45°) degrees shall have a means of entry/egress.
- (4) **Entry/Egress Elements:** An entry/egress for a pool, spa or water feature shall be constructed to minimize hazards and consist of a ladder, stairs, or recessed treads or an alternate method approved by the Building Official. The ladder, stairs or recessed treads shall comply with the following requirements, respectively:
 - (a) **Ladder:** Ladders shall be of a corrosion resistant material and be provided with two handholds or handrails. Ladder treads shall have a uniform vertical spacing of seven-inch (7") minimum and twelve-inch (12") maximum, with a minimum width of eighteen inches (18"). Vertical spacing variation within each ladder shall not exceed one inch. Treads shall have a minimum horizontal depth of one and one-half inches (1 ½"). The top tread of the ladder shall be a maximum of twelve inches (12") below the coping, deck or exterior edge of the pool or spa.
 - (b) **Stairs/Steps:** Stairs/steps shall have a slip resistant surface and no sharp edges. Public pools shall have a maximum riser height of ten inches (10") with a minimum horizontal tread depth of twelve inches (12"). Riser height variation within each stair shall not exceed one inch (1"). The distance from the bottom of the pool to the bottom step shall not be considered a riser. Private pools, private and public spas and water features shall have a maximum riser height of twelve inches (12"), with a minimum horizontal tread depth of twelve inches (12"). Steps shall extend to a depth of forty-two inches (42") of water depth or within twelve inches (12") of a portion of the pool floor.

The distance from the bottom of the pool to the bottom step shall not be considered a riser.

- (c) **Recessed Treads:** Recessed treads shall be provided with a set of handrails or handholds to serve all treads and risers. Recessed treads shall have a uniform vertical spacing of seven inches (7") minimum and twelve inches (12") maximum. Recessed treads shall have a minimum depth of five inches (5") and a minimum width of twelve inches (12"). The uppermost tread shall be a maximum of twelve inches (12") below the coping, deck or exterior edge of the pool or spa.

- (F) **Deck, Seat or Handholds:** Pools and spas greater than three (3') feet in water depth shall be provided with a deck made of a slip resistant material or alternate method as approved by the Building Official. Man-made decorative water features and design features may interrupt the deck. In these cases seats or handholds may be used for safety and emergency provisions, and shall be a maximum of every four feet (4') around the perimeter of the pool or spa where deck interruptions occur. Decks shall be required at each required entry and egress point. This deck section shall meet the width requirements as stated below and shall be a minimum of four feet (4') in length. This decking may be up to twenty-four inches (24") below the maximum water level.

The deck, seat or handholds shall comply with the following requirements, respectively:

- (1) **Deck:** The deck shall be a minimum of thirty inches (30") wide and slope $\frac{1}{4}$ inch per foot away from pool, property lines and house footings. The deck shall be placed a maximum of twelve inches (12") above the normal operating water level to qualify as a handhold. Public pools and spas shall have a minimum deck width of four feet (4'). Decks shall be sloped to effectively drain to either deck drains or perimeter areas away from the pool or spa. Decks shall have a minimum of two inches (2") vertical clearance from weep screed. A drain feature allowing a two inch (2") vertical clearance along the weep screed shall be acceptable.

Decks shall comply with the National Electrical Code, article 680.26 and the Southern Nevada Amendments to the National Electrical Code.

- (2) **Seat:** An underwater seat, bench or swim-out utilized as a means of egress shall be a minimum of twelve inches (12") long, a minimum of twelve inches (12") wide and a maximum of twenty-four inches (24") below the water surface.

Exception: Spa seats.

(3) Handhold: A handhold shall consist of any of the following:

- (a)** A continuous coping, ledge or handhold shall be placed a maximum of twelve inches (12") above the water surface or no greater than six inches (6") below water level. A ledge shall have a minimum projection of three inches (3"). Individual handholds must be at least six inches (6") in length and one and one-half (1 ½") inches in depth. Attachment must be made by an approved listed waterproof epoxy. Vanishing edges sloping into the main body of water shall have a maximum wall thickness of fifteen inches (15") when used as a handhold.
- (b)** A permanently secured railing of one and one-quarter (1 ¼") inches to two inches (2") in diameter placed at a maximum of twelve inches (12") above the water surface and a maximum of six (6") inches below the water surface.
- (c)** Ladders, steps or recessed treads complying with Item (E) Entry/Egress as listed above.

- (G) Site Drainage:** Site drainage shall be provided to direct all perimeter deck drainage, general site and roof drainage away from the pool, spa and adjacent buildings and structures. Deck drains must terminate a minimum of twenty-four inches (24") from the foundation of any structure.
- (H) Wind Sensors:** Water features and fountains on commercial properties shall be equipped with an integral automatic wind sensor device calibrated to shut off airborne and moving water when wind velocity exceeds twenty miles per hour.
- (I) Diving Boards/Slides:** Pools equipped with diving boards or slides shall be engineered and designed to comply with published ANSI standards. Slides and diving boards shall be installed per manufacturer's listing.

600 SETBACKS AND CLEARANCES

- (A) Location:** In-ground pools, spas, and water features shall not be placed closer than five feet (5') to any building or structure and shall not encroach within public utility easements. An exception may be permitted when substantiation is provided by a Nevada Licensed Structural or Civil Engineer that no damage will occur to buildings, structures or adjacent properties and that no unsafe structural conditions will exist.

(B) **Overhead electrical conductor clearances:** The following parts of pools shall not be placed under existing service-drop conductors or any other open, overhead wiring; nor shall such wiring be installed above the following:

- (1) Pools and the area extending ten feet (10') horizontally from the inside of the walls of the pool;
- (2) Diving structures;
- (3) Observation stands, towers or platforms.

Exceptions (1): Structures listed in items (1), (2), and (3) above shall be permitted under supply lines or service drops where such installations provide the following clearances:

	Insulated supply or service drop cables or wiring, 0-750 volts to ground, supported on and cabled together with an effectively grounded bare messenger or effectively grounded neutral conductor	All other supply or service drop conductors	
		VOLTAGE TO GROUND	
		0-15 kV	Greater than 15 to 50 kV
A. Clearance in any direction to the water level, edge of water surface, base of diving platform, or permanently anchored raft	22.5 ft. (6.9 m)	25 ft. (7.5 m)	27 ft. (8.0 m)
B. Clearance in any direction to the diving platform or tower	14.5 ft. (4.4 m)	17 ft. (5.2 m)	18 ft. (5.5 m)
C. Horizontal limit of clearance measured from inside wall of the pool	This limit shall extend to the outer edge of the structures listed in (1) and (2) above but not less than 10 ft. (3.05 m).		

Figure NEC 680.8. Exception No. 1.

Exceptions (2): Utility-owned, operated, and maintained communications conductors, community antenna system coaxial cables complying with Article 820, and the supporting messengers shall be permitted at a height of not less than ten feet (10') above swimming and wading pools, diving structures, and observation stands, towers, or platforms.

(See Sections NEC 225.18 and 225.19 for clearances for conductors not covered by this section.)

- (C) **Additional Clearances:** All clearances must comply with the currently adopted edition of the National Electrical Code.

700 ACCESSIBILITY AND SAFETY

- (A) **Access barrier required:** Pools, spas and hot tubs shall be completely enclosed with access barriers.

Exceptions (1): Prefabricated swimming pools accessory to a Group R, Division 3 Occupancy in which the pool walls are entirely above the adjacent grade and the capacity does not exceed 5,000 gallons.

Exceptions (2): Spa or hot tub with an approved lockable cover in the closed position meeting the most recent addition of ASTM Standard F1346-91, or equal, requiring structural support capacity of two-hundred seventy-five (275) lbs.

- (B) **Access Barrier Construction Requirements:** Access barriers shall comply with the following:

- (1) The top of the barrier shall not be less than sixty (60") inches in height above adjacent grade measured from outside the enclosed area or eight feet (8') vertical, non-climbable, measured on the inside. The vertical clearance between grade and the bottom of the barrier shall be four inches (4") maximum. If pools are in adjacent yards the common barrier may be reduced to forty-eight inches (48") on either side.
- (2) Wrought iron fence with open guardrails shall have intermediate rails or an ornamental pattern such that a sphere four inches (4") in diameter cannot pass. Horizontal support members shall be spaced at least thirty-two inches (32") and shall comply with 700 (B) (1).
- (3) Mixed use of masonry and wrought iron walls shall comply with all of the following:
 - (a) Masonry or wrought iron portion of the wall shall be a minimum of thirty-two inches (32") in height.
 - (b) Wrought iron portion of the wall shall comply with 700 (B) (1) and (2) with a maximum of two horizontal members, one near the top of the masonry wall (maximum of four (4") inches

above top of wall) and one a minimum of sixty (60") above grade.

- (4) Chain link fences shall not exceed two and one-quarter (2 ¼") mesh size. The fence shall have top and bottom horizontal supports. The fence height must be a minimum seventy-two inches (72") and shall be constructed or not less than 11 gauge wire. When approved slats are installed, fence height may be reduced to sixty inches (60").
- (5) Public pools and spas shall comply with the Health Districts requirements.

- (C) **Gates or Doors:** All gates or doors eight feet (8') in width or less shall be self-closing and self-latching. Gates shall open outward. The self-latching device for gates shall be mounted inside the enclosed area and be designed to be inoperable from outside the enclosed area. Keyed lockset devices shall be mounted at a minimum of forty-eight inches (48") above grade. Manual catch latch devices shall not be less than six inches (6") nor more than twelve inches (12") below the top of the door or gate. The devices shall be inaccessible from outside the enclosed area for a distance of twenty inches (20") in all directions from the latch except that opening not greater than one-quarter inch (1/4") diameter shall be permitted. Access barrier gates not required to be self-closing and self-latching shall be equipped with protected self-latching, lockable hardware and shall remain locked at all times when not in use.

Exception: Electronic remote latches without manual devices and panic hardware where required shall not be subject to height restrictions.

Single access gates and doors integral to fences shall comply with the requirements of Section 700 (B) and have latching devices capable of keeping the door or gate securely closed and latched.

Double gates used to close an opening shall be permanently locked. If the double gates are the only access to the protected area, one gate shall be pinned and locked in the closed position and the adjoining gate must meet the requirements of (C) above.

Electric operated gates shall start to close within thirty seconds (30) of entry.

Key-operated, self-latching locks that are integral to the gate or door may be used as latching devices, provided they are permanently locked from the outside and comply with the above installation requirements.

- (D) **Private Pool and Spa Safety Requirements:** One of the following shall be used:

- (1) **Door Devices:** Self-closing and self-latching devices installed on all doors with direct access to the pool with the release mechanism located a minimum of fifty-four inches (54") above the floor.
- (2) **Alarm System:** Residential dwelling units that do not have a separate pool or spa enclosure barrier shall have an alarm permanently installed on all doors with direct access to the pool. The alarm shall be listed to meet UL standard 2017 for Residential Water Hazard Entrance Alarms. The alarm shall sound continuously for a minimum of thirty (30) seconds within seven (7) seconds after the door is opened, and be capable of providing minimum 85 dB when measured indoors at ten feet (10'). The alarm shall automatically reset under all conditions. The alarm shall be equipped with a manual means, such as a touch pad or switch, to temporarily deactivate the alarm for a single opening. The deactivation switch shall be located at least fifty-four inches (54") above the threshold of the door.
- (3) **Laser, Light Beam, or Infra-red Sensors:** A laser or light beam perimeter alarm that provides an active beam barrier around the total perimeter or isolates the pool or spa may be used. The laser or light beam must have an adjustable height capability and sound an alarm of at least eighty-five (85) dB both inside and outside of the home when the beam is crossed. The alarm must automatically reset after alarming. The alarm shall meet ASTM's Provisional Standard Specifications for Pool Alarms (PS 128-01) and be listed.
- (4) **Addition Barriers:** Addition barriers that isolate the dwelling from the pool a minimum forty-eight (48") inches in height through which a four inch (4") sphere will not pass. Any gate shall be self-closing and latching at the top of the barrier.
- (5) **Power Safety Covers:** Power safety covers meeting ASTM F1346-91.
- (6) **Other Means:** When approved by the Building Official, other means of protection may be acceptable provided the degree of protection afforded is not less than that afforded by any of the devices described above.
- (E) **Safety Glazing:** Glazing in walls and fences sixty inches (60") or less from the water's edge measured horizontally and less than sixty inches (60") measured vertically above grade shall be considered hazardous locations. In these locations, tempered glazing, laminated glass or Plexiglas shall be used.

- (F) **Barrier Timeliness.** All required access barrier elements shall be in place prior to:
- (1) Setting a manufactured pool, spa or water feature.
 - (2) The pre-plaster inspection of a conventionally constructed pool, spa or water feature.
 - (3) The filling with water of artificial bodies of water.
- (G) **Surveillance Substitute:** For resort hotels type facilities only: in lieu of access barriers required above for water features, swimming pools or spas a pool guard may be provided so that observation is maintained at all times or an alternate method submitted in writing and approved by the Building Official. Such submittal shall become a permanent part of the job record.
- (H) **Responsible Party:** The owner of the property upon which pools, spas or artificial bodies of water are located is responsible to establish and maintain access barriers. The owner or developer of land adjacent to an access barrier required by this section shall not reduce, degrade, or infringe on the access barrier's compliance with this code.
- (I) **Alternative Plans or Devices:** Written alternative plans or devices for access barriers shall be submitted to the Building Official. If approved by the Building Official, the owner remains responsible for establishing and maintaining such approved alternate methods.

AGENDA SUMMARY PAGE
CITY COUNCIL MEETING OF: JANUARY 3, 2007

DEPARTMENT: CITY ATTORNEY

DIRECTOR: BRADFORD R. JERBIC

☐ Consent ☒ Discussion

SUBJECT:

RECOMMENDING COMMITTEE: BILL ELIGIBLE FOR ADOPTION AT A LATER MEETING:

Bill No. 2006-74 – Adopts the 2006 Edition of the Uniform Mechanical Code, together with amendments thereto, as the City's Mechanical Code. Proposed by: Paul K. Wilkins, Director of Building and Safety

Fiscal Impact



No Impact



Augmentation Required



Budget Funds Available

Amount:

Funding Source:

Dept./Division:

PURPOSE/BACKGROUND:

This bill will adopt the 2006 Edition of the Uniform Mechanical Code, together with amendments agreed upon by local governments within the Southern Nevada area.

RECOMMENDATION:

ADOPTION at 1/17/2007 City Council meeting pursuant to the 1/2/2007 Recommending Committee.

First Reading – 12/20/2006; First Publication – 1/5/2007

BACKUP DOCUMENTATION:

Bill No. 2006-74

Minutes:

Recommendation noted.

1/17/2007 Council Agenda

1 **BILL NO. 2006-74**

2 **ORDINANCE NO. _____**

3 AN ORDINANCE TO ADOPT THE 2006 EDITION OF THE UNIFORM MECHANICAL CODE,
4 TOGETHER WITH AMENDMENTS THERETO, AS THE CITY'S MECHANICAL CODE, AND
TO PROVIDE FOR OTHER RELATED MATTERS.

5 Proposed by: Paul K. Wilkins, Director of
6 Building and Safety

Summary: Adopts the 2006 Edition of the
Uniform Mechanical Code, together with
amendments thereto, as the City's Mechanical
Code.

7
8 THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN
9 AS FOLLOWS:

10 SECTION 1: Title 16, Chapter 24, Section 10, of the Municipal Code of the City of
11 Las Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

12 **16.24.010:** Those certain documents, three copies of each being on file in the office of the City
13 Clerk, and designated as follows, are adopted by reference and made a part of this Code, to the same
14 effect as if set out herein in full:

15 (A) Uniform Mechanical Code, [2000] 2006 Edition, [including Appendix A and
16 Appendix B, Chapter 13,] designated as Part 1 of this Chapter; and

17 (B) A document entitled the ["Southern Nevada 2000 Mechanical Code
18 Amendments,"as modified herein,] Southern Nevada Amendments to the 2006 Uniform Mechanical
19 Code," adding to, deleting from and amending the Uniform Mechanical Code, [2000] 2006 Edition,
20 designated as Part 2 of this Chapter.

21 SECTION 2: The document entitled the "Southern Nevada Amendments to the 2006
22 Uniform Mechanical Code," which is attached hereto, is hereby modified as set forth in Section 3 of
23 this Ordinance.

24 SECTION 3: The amendment concerning Chapter 1-Administration is modified so
25 that it reads:

26 Chapter 1 - Administration is deleted in its entirety except Sections 101.0, 102.0 and 103.0.

27 SECTION 4: The Uniform Mechanical Code, 2000 Edition, and the Southern Nevada
28 2000 Mechanical Code Amendments are hereby repealed in their entirety.

SECTION 5: If any section, subsection, subdivision, paragraph, sentence, clause or phrase in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional, invalid or ineffective.

SECTION 6: Whenever in this ordinance any act is prohibited or is made or declared to be unlawful or an offense or a misdemeanor, or whenever in this ordinance the doing of any act is required or the failure to do any act is made or declared to be unlawful or an offense or a misdemeanor, the doing of such prohibited act or the failure to do any such required act shall constitute a misdemeanor and upon conviction thereof, shall be punished by a fine of not more than \$1,000.00 or by imprisonment for a term of not more than six months, or by any combination of such fine and imprisonment. Any day of any violation of this ordinance shall constitute a separate offense.

SECTION 7: All ordinances or parts of ordinances or sections, subsections, phrases, sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada, 1983 Edition, in conflict herewith are hereby repealed.

PASSED, ADOPTED and APPROVED this _____ day of _____, 2007.

APPROVED:

By OSCAR B. GOODMAN, Mayor

ATTEST:

BARBARA JO RONEMUS, City Clerk

APPROVED AS TO FORM:

Val Steed 12-7-06
Date

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2006, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2007, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as first introduced and adopted by the following vote:

8 VOTING "AYE": _____
9 VOTING "NAY": _____
10 ABSENT: _____

11
12 APPROVED:

13
14 By _____
15 OSCAR B. GOODMAN, Mayor

16 ATTEST:

17 BARBARA JO RONEMUS, City Clerk
18
19
20
21
22
23
24
25
26
27
28

Southern Nevada Amendments

To The

2006

Uniform Mechanical Code

Published: October 12, 2006

Clark County

4701 West Russell Rd.
Las Vegas, Nevada 89118
(702) 455-3000
Inspections 455-7410

City of Las Vegas

731 S. 4th Street
Las Vegas, Nevada 89155
(702) 229-6251

City of Henderson

240 Water Street
PO Box 95050
Henderson, NV. 89009-5050
(702) 267-3650
Inspections 267-3900

Boulder City

401 California Ave.
Boulder City, NV. 89005
(702) 293-9282

North Las Vegas

2240 Civic Center Dr.
North Las Vegas, NV 89030
(702) 633-1577
Inspections 633-1576

City of Mesquite

11 East 100 South
Mesquite, NV. 89024
(702) 346-2835

Pahrump Regional Planning District

1210 E. Basin Ave. St. 1
Pahrump, NV 89060
(775) 751-3773

PREFACE

This document comprises the Southern Nevada Mechanical Code Amendments to the 2006 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials. It was developed by the jurisdictions listed on the cover page as a document to be adopted by reference. These provisions are not code unless adopted and codified by governmental jurisdictions. These amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternate has been approved and its use authorized by the building official. This document is available to be adopted as code by any jurisdiction without permission or approval from the jurisdictions listed on the cover page.

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Chapter 1 - Administration

Delete Chapter 1 except for section 102.0 Purpose.

205 - Definitions - C

Add a new definition to be placed in alphabetical order to read as follows:

Combustible Construction - Combustible construction shall mean work within any building or structure classified as Type III, Type IV, or Type V as defined in the Building Code. Plastic piping is not permitted in Type I and Type II buildings.

217 - Definitions - O

Section 217.0 Occupancy Classification

Section 217-O- Occupancy Classification is amended in its entirety to read as follows:

OCCUPANCY CLASSIFICATION. When specific occupancies are referenced in this code, refer to the locally adopted building code for equivalent occupancy classifications.

304.6 LPG Appliances

Delete Section 304.6 in its entirety.

304.7 - Plastic Pipe Use

Add a new section 304.7 to read as follows:

304.7 Plastic Pipe Use. Plastic materials listed for use in mechanical equipment are acceptable as an alternate to other approved materials for use in installations in combustible construction only.

EXCEPTIONS:

- (1) Approved plastic control tubing of mechanical equipment may be used in buildings or structures of all construction classifications when installed in accordance with their listings.
- (2) When restricted by other sections of this code.

504.3.1 - Moisture Exhaust Ducts

Section 504.3.1 is amended by the addition of an exception, so that the section reads

as follows:

504.3.1 Moisture Exhaust Ducts. Moisture exhaust ducts shall terminate on the outside of the building and shall be equipped with a back-draft damper. Screens shall not be installed at the duct termination. Ducts for exhausting clothes dryers shall not be connected or installed with sheet metal screws or other fasteners which will obstruct the flow. Clothes dryer moisture exhaust ducts shall not be connected to a gas vent connector, gas vent or chimney and shall only serve clothes dryers. Clothes dryer moisture exhaust ducts shall not extend into or through ducts or plenums.

Exception: When exhaust ducts terminate on a roof, backdraft dampers are not required.

504.3.2.2 - Length Limitation

Section 504.3.2.2 is amended by the addition of an exception, so that the section reads as follows:

504.3.2.2 Length Limitation. Unless otherwise permitted or required by the dryer manufacturer's installation instructions and approved by the Authority Having Jurisdiction, domestic dryer moisture exhaust ducts shall not exceed a total combined horizontal and vertical length of fourteen (14) feet (4,263 mm), including two (2) 90 degree (1.57 rad) elbows. Two (2) feet (610 mm) shall be deducted for each 90 degree (1.57 rad) elbow in excess of two.

Exception: Lengths may be increased when justified by calculations prepared by a Nevada Licensed Mechanical Engineer.

510.7 Interior Installations

Add a subsection to 510.7 that reads as follows:

510.7.2.4 Unless specifically listed, the structural supports for a duct enclosure shall be outside the enclosure.

513.9 Review and Certification

Add a new section 513.9.3 to read as follows:

513.9.3 Performance Test. Upon completion and before final approval of the installation of a ventilation system serving commercial food heat-processing equipment, a performance test shall be performed to verify the rate of airflow and proper operation as specified in this chapter or manufacturer's listing. The permittee shall furnish the necessary test equipment and devices required to perform the tests and shall provide the jurisdiction with an accurate, completed, and signed test report. The report shall be on a form supplied by the jurisdiction or on a form containing

equivalent information. At the discretion of the building official, the performance test may be required to be witnessed by a Building Department representative, performed by an approved third party testing agency.

609.0 - Automatic Shutoffs

Section 609.0 is amended by the addition of a new paragraph following the exceptions to read as follows:

Upon completion and before final approval of the air-moving system provided with the required smoke detectors, a performance test shall be performed to verify compliance of detector installation to manufacturer's instructions and system compatibility as specified in this chapter. The permittee shall furnish the necessary test equipment and devices required to perform the tests and shall provide the jurisdiction with an accurate, completed, and signed test report. The report shall be on a form supplied by the jurisdiction or on a form containing equivalent information. At the discretion of the building official, the performance test may be required to be witnessed by a Building Department representative, performed by an approved third party testing agency.

802.6 - Gas Vents

Delete section 802.6.2(1) and replace with a new section 802.6.2(1) to read as follows:

(1) **Type B.** Type B gas vents with listed vent caps twelve (12) inches (305 mm) in size or smaller shall be permitted to be terminated in accordance with Figure 8-2, provided they are located at least four (4) feet (1219 mm) from a vertical wall or similar obstruction. All other Type B gas Vents shall terminate not less than two (2) feet (610 mm) above the highest point where they pass through the roof and at least two (2) feet (610 mm) higher than any portion of a building within ten (10) feet (3048 mm).

904.10 Equipment on Roofs

Add a new subsection 904.10.1.4 to read as follows:

904.10.1.4 The requirements of this section shall apply to air moving systems as defined by this code.

904.10.3 Access to Equipment on Roofs.

Add a new subsection 904.10.3.5 to read as follows:

904.10.3.5 Air moving systems located on a roof shall be accessible.

Exceptions:

1. Permanent exterior ladders providing roof access need not extend closer than eight (8) feet (2438 mm) to the finish grade.
2. A portable ladder may be used for access for a Group R Division 3 and 4 and U occupancies.
3. Permanent ladders for equipment access need not be provided at parapets or walls less than thirty (30) inches (762mm) in height. Permanent ladders providing roof access shall:
 - 3.1 Have side railings which extend at least thirty (30) inches (762mm) above the roof or parapet wall.
 - 3.2 Have landings less than eighteen (18) feet (5486mm) apart measured from the finished grade.
 - 3.3 Be at least fourteen (14) inches (356mm) in width.
 - 3.4 Have rungs not more than fourteen (14) inches (356mm) on center
 - 3.5 Have a minimum of six (6) inch (152mm) toe space.

Chapter 10 - Steam and Hot Water Boilers

Chapter 10 is deleted in its entirety and replaced with a new Chapter 10 to read as follows:

Chapter 10 - Boiler/Water Heaters

1001.0 - Scope/Applicability

For boilers and water heaters less than 120 gallon capacity, or a BTU input rating less than 200,000, or less than 160 pounds per square inch of pressure, see Chapter 5 of the Uniform Plumbing Code. For all other units, contact the Mechanical Section of the Nevada Division of Occupational Safety and Health, part of the Office of Business and Industrial Relations.

Table 11-1 Refrigerant Groups, Properties and Allowable Quantities

Table 11-1 is amended by adding footnote 13 applicable to the entire Table.

13 For occupancy Group I Division 1 and Division 2, the quantity of refrigerant in each system is limited to 50 percent of the respective amount listed in this table. Exceptions: Kitchens, laboratories and mortuaries.

Table 11-2 - Permissible Refrigeration Systems

Table 11-2 is amended so that the entry pertaining to Occupancy Group and Division I-1.1 reads as follows:

Occupancy Group And Division	High Probability System	Low Probability System	Machine Room
I-1.1	Group A1 only ³	Any	Any

Table 11-2 is further amended to add a new Footnote 3 to read as follows:

Footnote 3 - For occupancy Group I Division 1 and Division 2, the quantity of refrigerant in each system is limited to 50 percent of the respective amount listed in Table 11-1. Exceptions: Kitchens, laboratories and mortuaries.

1303.0 Definitions

Add a new subsection 1303.2.1 to Section 1303.2 Fuel Gas to read as follows:

1303.2.1 Dry Gas – A gas having a moisture and hydrocarbon dew point below any normal temperature to which the gas piping is exposed. Southern Nevada shall be considered a dry gas condition area unless specified by the local gas purveyor.

1309.6 Gas Meters

Add a new item (E) to section 309.6.2 to read as follows:

1309.6.2 Location

(E) All lots in mobile home parks and lots in recreational vehicle parks shall be served individually by the duly franchised gas serving utility supplying gas from the street main.

1311.1.6 Piping Underground Beneath Buildings

Delete section 1311.1.6 in its entirety and replace with a new section 1311.1.6 to read as follows:

1311.1.6 No gas piping shall be installed in or on the ground under any building or structure unless installed in gastight conduit, and all exposed gas piping shall be kept at least six (6) inches (152 mm) above grade or structure. The term "building or structure" shall include structures such as porches and steps, whether covered or uncovered, breezeways, roofed porte-cocheres, roofed patios, carports, covered walks, covered driveways, and similar structures or appurtenances. All gas piping under a slab shall be capable of being removed and replaced.

The conduit shall be of material approved for installation underground beneath buildings and not less than Schedule 40 pipe. The interior diameter of the conduit shall be not less than one-half (1/2) inch (15 mm) larger than the outside diameter of the gas piping.

The conduit shall extend to a point at least (12) inches (305 mm) beyond any area where it is required to be installed or to the outside wall of a building, and the outer ends shall not be sealed. Where the conduit terminates within a building, it shall be readily accessible and the space between the conduit and the gas piping shall be sealed to prevent leakage of gas into the building.

1314.4 Test Pressure

Delete section 1314.4 in its entirety and replace with a new section 1314.4 to read as follows:

1314.4 This inspection shall be made after all piping authorized by the permit has been installed and after all portions thereof which are to be covered or concealed are so concealed and before any fixtures, appliance, or shutoff valve has been attached thereto. This inspection shall include an air, CO₂ or nitrogen pressure test, at which time the gas piping shall stand a pressure of not less than ten (10) pounds per square inch (68.9 kPa) gauge pressure, or at the discretion of the Administrative Authority, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. Test pressures shall be held for a length of time satisfactory to the Administrative Authority, but in no case for less than fifteen (15) minutes, with no perceptible drop in pressure. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches (356 mm) water column pressure, the test pressure shall not be less than sixty (60) pounds per square inch (413.4 kPa) and shall be continued for a length of time satisfactory to the Administrative Authority, but in no case for less than thirty (30) minutes. These tests shall be made using air, CO₂, or nitrogen pressure only and shall be made in the presence of the Administrative Authority. All necessary apparatus for conducting tests shall be furnished by the permit holder. Test gauges used in conducting tests shall comply with Section 319.0, Test Gauges of the 2006 Uniform Plumbing Code.

1317.0 Required Gas Piping Size

Amend section 1317.0 to read as follows:

1317.1 Where the maximum demand does not exceed two hundred fifty (250) cubic feet per hour (2 L/sec.) and the maximum length of piping between the meter and the most distant outlet is not over two hundred fifty (250) feet (76,200 mm), the size of each section and each outlet of any system of gas piping shall be determined by means of Table 13-8 for steel pipe, or Table 13-15 for copper tubing systems, or Section 1309.4.3 (3) for CSST systems. Other systems within the range of Table 13-8 or 13-13 may be sized from that table or by means of the methods set forth in Section 1317.3.

1317.2 To determine the size of each section of pipe in any system within the range of Table 13-8, proceed as follows:

- (1) Measure the length of the pipe from the gas meter location to the most remote outlet on the system.
- (2) In Table 13-8 select the length in feet column and row showing that distance, or the next longer distance if the table does not give the exact length.
- (3) Starting at the most remote outlet, find in the row just selected the gas demand for that outlet. If the exact figure of demand is not shown, choose the next larger figure in the row.
- (4) At the top of this column will be found the correct size of pipe.
- (5) Using this same row, proceed in a similar manner for each section of pipe serving this outlet. For each section of pipe, determine the total gas demand supplied by that section. Where gas piping sections serve both heating and cooling equipment and the installation prevents both units from operating simultaneously, only the larger of the two demand loads needs be used in sizing these sections.
- (6) Size each section of branch piping not previously sized by measuring the distance from the gas meter location to the most remote outlet in that branch and follow the procedures of steps 2, 3, 4, and 5 above.

Note:

Size branch piping in the order of their distance from the meter location, beginning with the most distant outlet not previously sized.

1317.3 For conditions other than those covered by Section 1317.1, such as longer runs or greater gas demands, the size of each gas piping system shall be determined by standard engineering methods acceptable to the Authority Having Jurisdiction. Each such system shall be so designed that the total pressure drop between the meter or other point of supply and any outlet when full demand is being supplied to all outlets, will at no time exceed five tenths (0.5) inches (12.7 mm) water column pressure.

1317.4 Where the gas pressure may be higher than fourteen (14) inches (356 mm) or lower than six (6) inches (152 mm) of water column, or when diversity demand factors are used, the design, pipe, sizing, materials, location, and use of such systems first shall be approved by the Authority Having Jurisdiction. Piping systems designed for pressures higher than the serving gas supplier's standard delivery pressure shall have prior verification from the gas supplier of the availability of the design pressure. Systems using undiluted liquefied petroleum gas may be sized using Table 13-32 for steel pipe for eleven (11) inches (279 mm) of water column and in accordance with the provisions of Sections 1317.1 and 1317.2.

**Appendix A – Uniform Mechanical Code Standard 6-2
Standard for Metal Ducts**

Table 6-2-E-1- Duct Gage Selection For Galvanized Steel

Add a new appendix table 6-2-E-1 to read as follows:

TABLE 6-2-E-1 DUCT GAGE SELECTION FOR GALVANIZED STEEL ¹

Maximum 1" W.G. Static Positive and Negative		
Duct Diameter (inches)	Minimum Thickness Galvanized Iron (U.S. gauge/inches)	Minimum Thickness Aluminum (inches)
Less than 12	30/ .016	.016
12-16	28/ .019	.020
17-20 ²	26/ .022	.025

Footnotes:

1. Heating and Air Conditioning Units not exceeding 2000 cfm or one inch Water Gauge (WG) positive or negative pressure. Duct fittings shall be constructed of material not less than the gauge of the duct.
2. Duct work and fittings larger than twenty inches shall be constructed to the gauging requirements of Table 6-1-E in Appendix A of the Uniform Mechanical Code.

AGENDA SUMMARY PAGE
CITY COUNCIL MEETING OF: JANUARY 3, 2007

DEPARTMENT: CITY ATTORNEY

DIRECTOR: BRADFORD R. JERBIC

☐ Consent ☒ Discussion

SUBJECT:

RECOMMENDING COMMITTEE: BILL ELIGIBLE FOR ADOPTION AT A LATER MEETING:

Bill No. 2006-75 – Adopts the 2006 Edition of the Uniform Plumbing Code, together with amendments thereto, as the City's Plumbing Code. Proposed by: Paul K. Wilkins, Director of Building and Safety

Fiscal Impact



No Impact



Augmentation Required



Budget Funds Available

Amount:

Funding Source:

Dept./Division:

PURPOSE/BACKGROUND:

This bill will adopt the 2006 Edition of the Uniform Plumbing Code, together with amendments agreed upon by local governments within the Southern Nevada area.

RECOMMENDATION:

ADOPTION at 1/17/2007 City Council meeting pursuant to the 1/2/2007 Recommending Committee.

First Reading – 12/20/2006; First Publication – 1/5/2007

BACKUP DOCUMENTATION:

Bill No. 2006-75

Minutes:

Recommendation noted.

1/17/2007 Council Agenda

1 BILL NO. 2006-75

2 ORDINANCE NO. _____

3 AN ORDINANCE TO ADOPT THE 2006 EDITION OF THE UNIFORM PLUMBING CODE,
4 TOGETHER WITH AMENDMENTS THERETO, AND TO PROVIDE FOR OTHER RELATED MATTERS.

5 Proposed by: Paul K. Wilkins, Director of
6 Building and Safety

Summary: Adopts the 2006 Edition of the
Uniform Plumbing Code, together with
amendments thereto, as the City's Plumbing
Code.

7
8 THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN
9 AS FOLLOWS:

10 SECTION 1: Title 16, Chapter 28, Section 10, of the Municipal Code of the City of
11 Las Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

12 **16.28.010:** Those certain documents, three copies of each being on file in the Office of the City
13 Clerk, and designated as follows, are adopted by reference and made a part of this Code, to the same
14 effect as if set out herein in full:

15 (A) Uniform Plumbing Code, [2000] 2006 Edition, including its Standards and
16 Appendices, except as otherwise indicated, designated as Part 1 of this Chapter; and

17 (B) A document entitled [Southern Nevada 2000 Plumbing Code Amendments, as
18 modified herein,] "Southern Nevada Amendments to the 2006 Uniform Plumbing Code." adding to,
19 deleting from and amending the Uniform Plumbing Code, [2000] 2006 Edition, designated as Part 2
20 of this Chapter.

21 SECTION 2: The document entitled Southern Nevada Amendments to the 2006
22 Uniform Plumbing Code is attached hereto.

23 SECTION 3: The Uniform Plumbing Code, 2000 Edition, and the 2000 Southern
24 Nevada Plumbing Code Amendments, as amended, are hereby repealed in their entirety.

25 SECTION 4: If any section, subsection, subdivision, paragraph, sentence, clause or
26 phrase in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or
27 ineffective by any court of competent jurisdiction, such decision shall not affect the validity or
28 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the

1 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
2 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
3 subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,
4 invalid or ineffective.

5 SECTION 5: Whenever in this ordinance any act is prohibited or is made or declared
6 to be unlawful or an offense or a misdemeanor, or whenever in this ordinance the doing of any act is
7 required or the failure to do any act is made or declared to be unlawful or an offense or a
8 misdemeanor, the doing of such prohibited act or the failure to do any such required act shall
9 constitute a misdemeanor and upon conviction thereof, shall be punished by a fine of not more than
10 \$1,000.00 or by imprisonment for a term of not more than six months, or by any combination of such
11 fine and imprisonment. Any day of any violation of this ordinance shall constitute a separate offense.

12 SECTION 6: All ordinances or parts of ordinances or sections, subsections, phrases,
13 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
14 1983 Edition, in conflict herewith are hereby repealed.

15 PASSED, ADOPTED and APPROVED this ____ day of _____, 2007.

16 APPROVED:

17
18 By _____
19 OSCAR B. GOODMAN, Mayor

20 ATTEST:

21 BARBARA JO RONEMUS, City Clerk

22 APPROVED AS TO FORM:

23 Val Steep 12-7-06
24 Date

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2006, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2007, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as first introduced and adopted by the following vote:

8 VOTING "AYE": _____
9 VOTING "NAY": _____
10 ABSENT: _____

11
12 APPROVED:

13
14 By OSCAR B. GOODMAN, Mayor

15 ATTEST:
16
17 BARBARA JO RONEUMUS, City Clerk

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19
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27
28

Southern Nevada Amendments

To The

2006

Uniform Plumbing Code

Published: October 12, 2006

Clark County

4701 West Russell Rd.
Las Vegas, Nevada 89118
(702) 455-3000
Inspections 455-7410

City of Las Vegas

731 S. 4th Street
Las Vegas, Nevada 89155
(702) 229-6251

City of Henderson

240 Water Street
PO Box 95050
Henderson, NV. 89009-5050
(702) 267-3650
Inspections 267-3900

Boulder City

401 California Ave.
Boulder City, NV. 89005
(702) 293-9282

North Las Vegas

2240 Civic Center Dr.
North Las Vegas, NV 89030
(702) 633-1577
Inspections 633-1576

City of Mesquite

11 East 100 South
Mesquite, NV. 89024
(702) 346-2835

Pahrump Regional Planning District

1210 E. Basin Ave. St. 1
Pahrump, NV 89060
(775) 751-3773

Preface

This document comprises the Southern Nevada Plumbing Code Amendments to the 2006 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials. It was developed by the jurisdictions listed on the cover page as a document to be adopted by reference. These provisions are not code unless adopted and codified by governmental jurisdictions. These amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternate has been approved and its use authorized by the building official. This document is available to be adopted as code by any jurisdiction without permission or approval from the jurisdictions listed on the cover page.

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CHAPTER 1 - Administration

Delete Chapter 1, with the exception of sections 101.2 and 103.1.3

103.1.3 Licensing

Amend section 103.1.3 to read as follows:

103.1.3 Plumbing Licensing Provision. Every individual and contractor shall provide quality supervision while performing plumbing installation in Clark County, Nevada. The minimum job site requirements for an individual leading or directing the installation shall be a Southern Nevada licensed journeyman plumber.

A minimum of a journeyman plumbing license, issued in Clark County, shall be provided to any code official upon request.

205.0 - C

Add a new definition to section 205 to be placed in alphabetical order to read as follows:

Combustible Construction - Combustible construction shall mean work within any building or structure classified as Type III, Type IV, or Type V as defined in the Building Code. Plastic piping is not permitted in Type I and Type II buildings.

311.4 Single Stack Drainage Waste and Vent Systems

Amend section 311.4 to read as follows:

311.4 Except as hereinafter provided in Sections 908.0, 909.0 and 910.0, no vent pipe shall be used as a soil or waste pipe, nor shall any soil or waste pipe be used as a vent.

Exception: Single stack DWV systems may be used provided they are designed by a Nevada registered Mechanical Engineer and approved by the Building Official.

402.7 Timing Devices

Add a new subsection 402.7 to read as follows:

402.7 A toilet or urinal which employs a timing device or other mechanism to flush periodically or which continually flushes shall not be installed.

412.0 Minimum Number of Required Fixtures

[Delete section 412.0 in its entirety. (Refer to the building code for number of fixture requirements.)]

Section 412.0 is amended in its entirety to read:

412.0 Minimum Number of Required Fixtures. Refer to the building code for number of fixture requirements.

Table 4-1 Minimum Plumbing Facilities

Delete Table 4-1 in its entirety. (Note: Refer to the building code for minimum plumbing facility requirements.)

509.3 Access to Equipment on Roofs

Add a new subsection 509.3.5 to read as follows:

509.3.5 All Plumbing appliances located on a roof shall have access to in accordance with Section 904.10 of the 2006 Uniform Mechanical Code.

510.6.2 (1) Venting Requirements - Type B

Amend section 510.6.2 (1) to read as follows:

Type B. Type B gas vents with listed vent caps twelve (12) inches (305 mm) in size or smaller shall be permitted to be terminated in accordance with Table 5-3, provided they are located at least four (4) feet (1219 mm) from a vertical wall or similar obstruction. All other Type B gas Vents shall terminate not less than two (2) feet (610 mm) above the highest point where they pass through the roof and at least two (2) feet (610 mm) higher than any portion of a building within ten (10) feet (3048 mm)

603.4.12 Potable Water Supply To Carbonators

Amend section 603.4.12 to read as follows:

603.4.12 Potable Water Supply To Carbonators. Potable water supply to carbonators shall be protected by a listed reduced pressure principle backflow preventer as approved by the administrative authority.

604.0 Materials

Add a new subsection to read as follows:

604.1.1 Plastic piping shall be limited to buildings defined as combustible construction by this code.

608.5 Relief Valves

Amend section 608.5 to read as follows:

608.5 Relief Valves. Relief valves located inside a building shall be provided with a drain, not smaller than the relief valve outlet, of galvanized steel, hard-drawn copper piping and fittings, CPVC, flexible corrugated connectors complying with 604.12, or listed relief valve drain tube with fittings that will not reduce the internal bore of the pipe or tubing (straight lengths as opposed to coils) and shall extend from the valve to the outside of the building with the end of the pipe not more than two (2) feet (610 mm) nor less than six (6) inches (152 mm) above the ground or the flood level of the area receiving the discharge and pointing downward. Such drains may terminate at other approved locations. No part of such drain pipe shall be trapped or subject to freezing. The terminal end of the drain pipe shall not be threaded.

701.0 Materials

Add a subsection 701.1.2.1 to read as follows:

701.1.2.1 Materials. Plastic piping used for drainage waste and vent systems shall be limited to buildings defined as combustible construction by this code.

704.3 Fixture Connections

Amend Section 704.3 to read as follows:

704.3 Fixture Connections. Pot sinks, scullery sinks, dishwashing sinks, silverware sinks, commercial dishwashing machines, and other similar fixtures shall be indirectly connected to the drainage system by means of an air gap.

707.11 Cleanouts

Add an exception to the end of section 707.11 so that the section reads as follows:

707.11 Cleanouts. Cleanout fittings shall be not less in size than those given in Table 7-6.

Exception: Where a 2-1/2" (inch) cleanout is required, a 2" (inch) cleanout may be used for horizontal branch waste lines in single-family dwellings.

710.1 Drainage of Fixtures Located Below the Next Upstream Manhole or Below the Main Sewer Level.

Section 710.1 is amended to read as follows:

710.1 Drainage of Fixtures Located Below the Next Upstream Manhole or Below the Main Sewer Level. Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover

of the public or private sewer serving such drainage piping shall be protected from backflow of sewage by installing an approved type backwater valve. Other than single family dwellings, fixtures above such elevation shall not discharge through the backwater valve.

801.2.2 Food and Beverage Handling Establishments.

Amend section 801.2.2 to read as follows:

801.2.2 For walk-in coolers, floor drains may be connected to a separate drainage line discharging into an outside receptor. The flood level rim of the receptor shall be a minimum of six (6) inches (152 mm) lower than the lowest floor drain. Such floor drains shall be trapped and individually vented. Cleanouts shall be provided at every ninety (90) degree (1.6 rad) turn and shall be accessibly located. Such waste shall discharge through an airgap into a trapped and vented receptor, except that full-size airgap is required where the indirect waste pipe may be under vacuum.

801.2.4 Floor Sinks

Add a new section 801.2.4 to read as follows:

801.2.4 Floor Sinks. Floor sinks shall be installed flush with the finished floor and shall be accessible for cleaning.

804.1 Indirect Waste Receptors

Amend section 804.1 to add a second paragraph to read as follows:

When any discharge piping other than the discharge from the wash machine is terminated into the washer box, a second port washer box shall be used. The second port shall be permanently connected to the vertical receptor standpipe via a wye branch fitting at time of rough plumbing. The wash machine shall discharge by an air break into the most vertical or primary receptor standpipe. All other discharge piping shall discharge into the second port via the following terminations; i.e. Water softener- air gap; T&P- air gap; Condensate- air break. The T&P discharge shall be taken to the exterior of the building unless structural conditions or manufacturers listed distances prevent this termination. Temperature and pressure relief lines may terminate to the following fixtures located in normally unoccupied areas: floor sink, or a floor drain.

903.0 Materials

Add a subsection 903.1.2.1 to read as follows:

903.1.2.1 Plastic piping used for drainage waste and vent systems shall be limited to buildings defined as combustible construction by this code.

CHAPTER 10 – Traps and Interceptors

Delete sections 1009.0 through 1017.0 in their entirety (except for Table 10-3 referenced therein) and add new sections 1009 through 1013.0 to read as follows:

1009.0 - Grease interceptors

(A) **General.** A grease interceptor shall be provided for proper handling of liquid wastes containing grease. A grease interceptor as described in these standards shall be installed in any business establishment with kitchen facilities including restaurants, cafes, lunch counters, cafeteria as, supermarkets, convenience stores, bakeries, bars and clubs, hotels, hospitals, sanitariums, factory or school kitchens, or any other commercial establishment where grease may be introduced into the sewer system.

Special consideration shall be given to every fish, fowl and animal slaughterhouse or establishment; every fish, fowl and meat packing or curing establishment; every soap factory, tallow rendering, fat rendering and hide curing establishment; or any other establishment from which considerable amounts of grease are likely to be discharged into the sewer system. Written application describing exact operation and anticipated volumes of grease shall be made to the sanitation authority to determine the standards for such systems.

(B) **Fixtures.** The waste discharge from fixtures and equipment which may contain grease from the businesses set out previously shall be drained through a grease interceptor or grease interceptors. Fixtures such as, but not limited to, the following are included: scullery sinks, pot and pan sinks, dishwashing machines, soup kettles and similar cooking equipment, trash compactors, floor drains in grease generating areas, and trash can wash areas.

(C) **Prohibited fixtures.** The waste lines from toilets, urinals, and other similar fixtures shall not drain through a grease interceptor.

(D) **Location.**

1. Grease interceptors shall be so installed and connected that they shall be at all times easily accessible for inspection, cleaning and removal of the intercepted grease.
2. Grease interceptors shall be placed as close as practical to the fixtures served.
3. Grease interceptors shall be located on the exterior of buildings unless specifically approved otherwise in writing by the health district.
4. Grease interceptors shall be so located as to be accessible for service without the use of ladders or the removal of bulky equipment.
5. Location of all grease interceptors shall be shown on the approved plans.

6. Each grease interceptor shall serve only one business establishment. Multiple business connections to a single interceptor are not permitted. Unless approved by the sanitation authority in writing.

(E) **Size.**

1. Grease interceptors shall be sized in accordance with Table 10-3. Interceptors shall not be more than one size larger than required in Table 10-3.

NOTE: For situations not covered by Table 10-3, a submittal showing the interceptor size and calculations shall be approved by the sanitation authority prior to building official plan approval. For business establishments other than commercial restaurants, a specific submittal shall be approved by the sanitation authority prior to building official plan approval. Such designs shall be prepared by a Nevada Registered Engineer.

2. All grease interceptors shall have a minimum of two compartments with a minimum of 3 inch diameter fittings designed for grease retention. The fittings shall be installed in the following manner: A 90° long sweep or sanitary tee shall be installed at the inlet, a sanitary tee on the inlet side of the interceptor baffle, and a sanitary tee installed at the outlet.

3. There shall be adequate access for cleaning all areas of the separator. A minimum of one access point into each compartment within the separator shall be provided. In addition, no access points shall be further apart than 10 feet regardless of the number of compartments. Separator covers shall be of gas-tight construction. Interceptor covers shall have a minimum opening dimension of twenty inches in diameter.

4. All waste shall enter the grease interceptor through the inlet pipe.

5. Grease interceptors shall be so designed that they will not become air bound. Each interceptor shall be properly vented with a relief vent located on the outlet side of the interceptor.

6. Cleanouts shall be installed in the drainage piping inlet and outlet side of each grease interceptor and the outlet side of each sample box.

7. Each fixture discharging into a grease interceptor shall be individually trapped and vented in an approved manner. An approved type grease interceptor may be used as a fixture trap for a single fixture when the horizontal distance between the fixture outlet and the grease interceptor does not exceed four feet (1.2 meters) and the vertical tailpipe or drain between the fixture outlet and the grease interceptor does not exceed two and one-half feet (0.8 meters).

8. No water jacketed grease trap or grease interceptor shall be approved or installed.

9. Each grease interceptor shall have an approved water seal of not less than two inches (50.8 millimeter) in depth or the diameter of its outlet whichever is greater.

10. When grease interceptors are located in areas of pedestrian or vehicle travel, the design of the interceptor shall be adequate to support the imposed load. Structural calculations to verify its adequacy may be required.

11. Design standards other than those listed above may be acceptable. Redwood baffles shall not be used for new or existing interceptors. Any alternate design shall be prepared by a Nevada Registered Engineer and submitted for review and approval by the sanitation authority and the building official.

12. A sample box shall be provided on the outlet side of each grease interceptor down stream of the required cleanout and vent.

(F) **Water Test.** A water test shall be applied to the level of the top of the interceptor inlet opening through the outlet opening or discharge side of the sample box. Interceptors shall show no leakage from section seams, pinholes or other imperfections. Any leakage below this level is cause for rejection.

1. **Backfill.** Interceptors shall not be backfilled until the inspection has been made to verify there are no leaks.

1010.0 - Sand/Oil Interceptors

(A) **Where Required.** An interceptor shall be provided for the proper handling of liquid wastes containing oil (of petroleum origin), sand, inert solids or any other similar substances.

NOTE: A sand/oil interceptor is not intended for the disposal of hazardous waste or as a backup system for accidental spills.

Interceptors as described in these standards shall be installed in, but not limited to, the following locations: car washes, motor vehicle, boat or airplane storage yards, gasoline and diesel service stations, repair garages or any other similar facility which may introduce sand and oil into the sewer system.

Submittal of a written application describing the exact facility operation and the types and anticipated volumes of waste to be generated, may be required by the building official.

(B) **Fixtures.** The waste discharge from fixtures and equipment which may contain sand, oil-based wastes, and inert solids shall drain only through an interceptor. This requirement includes, but is not limited to, the following: floor drains, floor sinks, special processing equipment, trench drains, and area drains.

(C) **Prohibited Fixtures.** The waste line from toilets, urinals, lavatories and other similar fixtures, which discharge domestic wastes only, shall not drain through the interceptor.

(D) **Location**

(1) Sand/oil interceptors shall be so installed and connected that they shall be at all times accessible for inspection, cleaning and removal of the intercepted waste.

(2) Sand/oil interceptors shall be placed as close as practical to the fixtures served.

(3) Sand/oil interceptors shall be located on the exterior of buildings unless specifically approved otherwise in writing by the sanitation authority.

(4) Sand/oil interceptors shall be located as to be accessible for service without the use of ladders or the removal of bulky equipment.

(5) Location of all sand/oil interceptors shall be shown on the approved plans.

(6) Each sand/oil interceptor shall serve only one business establishment. Multiple business connections to a single sand/ oil interceptor are not permitted unless approved by the sanitation authority in writing.

(E) **Size and Design.**

(1) All sand/oil interceptors shall be minimum of three hundred (300) gallons (40 cubic feet) of total liquid capacity with a minimum floating liquid capacity of 55 gallons.

(2) All sand/oil interceptors shall have a minimum of two compartments with a minimum of 3 inch diameter fittings designed for retention. The fittings shall be installed in the following manner: a 90° long sweep shall be installed at the interceptor inlet, a sanitary tee shall be installed on the inlet side of the interceptor baffle, and a sanitary tee installed at the outlet.

(3) There shall be adequate access for cleaning all areas of the separator. A minimum of one (1) access point into each compartment within the separator shall be provided. In addition, no access points shall be further apart than ten (10) feet regardless of number of compartments. Access

covers shall have a minimum opening dimension of twenty (20) inches in diameter. Separator covers shall be of gas-tight construction.

(4) The sand/oil interceptor shall be properly vented and designed to prevent it from becoming air bound in accordance with the Plumbing Code.

(5) Each business establishment for which a sand/oil interceptor is required shall be provided with an interceptor which shall serve that establishment only and no others. Separate owners or lessees within a large business or establishment shall require separate interceptors.

(6) Each sand/oil interceptor shall have a water seal of not less than six (6) inches.

(7) When separators are located in areas of foot or vehicle traffic, the design of the separator shall be adequate for the imposed load. Structural calculations performed by a Nevada Registered Engineer to verify adequacy may be required.

(8) Any private or public wash rack or slab used for cleaning machinery or machine parts, shall drain to a sand/oil separator, and shall be adequately protected against storm or surface water intrusion.

(9) Design standards other than those listed above may be acceptable. Redwood baffles shall not be used for new or existing interceptors. Any alternate design shall be prepared by a Nevada Registered Engineer and submitted for review and approval by the sanitation authority and the building official.

(10) Cleanouts shall be installed in the drainage piping inlet and outlet side of each sand/oil interceptor and the outlet side of each sample box.

(11) A sample box shall be provided on the outlet side of the interceptor down stream of the required cleanout and vent.

(F) **Water Test.** A water test shall be applied to the level of the top of the interceptor inlet opening through the outlet opening or discharge side of the sample box. Interceptors shall show no leakage from section seams, pinholes or other imperfections. Any leakage below this level is cause for rejection.

1. **Backfill.** Interceptors shall not be backfilled until the inspection has been made to verify there are no leaks.

1011.0 - Maintenance of interceptors.

(A) Grease and sand/oil interceptors shall be maintained in efficient operating condition by periodic removal of the accumulated grease or sand/oil. No

such collected grease, sand/oil, or any material collected from the interceptor shall be introduced into any drainage piping, public or private sewers. The materials removed from interceptors shall be handled and disposed of in a proper manner in accordance with published health district and sanitation authority requirements. Illegal dumping of waste into the sewer shall not be allowed.

- (B) Maintenance records for each installed interceptor shall be maintained on the premises at all times and presented to a duly authorized agent of the sanitation authority upon request.
- (C) The Authority Having Jurisdiction shall have the authority to mandate the installation of additional equipment or devices and enforce a maintenance program.

1012.0 - Abandoned interceptors. Abandoned interceptors shall be cleaned and filled as required by Section 722.0 of the Plumbing Code for abandoned sewers and sewage disposal facilities.

1013.0 Interceptor Requirements for Existing Buildings. If no interceptor is presently installed in a building for which a business requiring an interceptor is proposed, then one or more interceptors and building fixtures shall be installed in the building to meet these standards.

Before any existing business, which has a complying or non-complying interceptor, increases the size of its business, its load on the interceptor, or is transferred in ownership, the building fixtures and interceptor shall be brought into compliance with these standards as if for new construction.

1101.3 Material Uses

Add a subsection 1101.3.1 to read as follows:

1101.3.1 Plastic piping used for rainwater systems shall be limited to buildings defined as combustible construction by this code.

1101.5.1 Subsoil Drains

Amend section 1101.5.1 to read as follows:

1101.5.1 Where required by the geotechnical engineer or the building official, subsoil drains shall be provided around the perimeter of buildings having basements, cellars, or crawl spaces or floors below grade. Such subsoil drains may be positioned inside or outside of the footing, shall be of perforated, or open-jointed approved drain tile or pipe not less than three (3) inches (80 mm) in diameter, and shall be laid in gravel, slag, crushed rock, approved three-quarter (3/4) inch (19.1 mm) crushed recycled glass aggregate, or other approved porous material with a minimum of four (4) inches (102 mm) surrounding the pipe on all sides. Filter media shall be provided for exterior subsoil piping.

1101.9 Filling Stations and Motor Vehicle Washing Establishments.

Delete section 1101.9 in its entirety.

1101.10 Paved Areas

Delete section 1101.10 in its entirety.

1103.0 Traps on Storm Drains and Leaders

Delete section 1103 in its entirety.

1104.3 Combining Storm with Sanitary Drainage

Delete section 1104.3 in its entirety.

1203.0 Definitions

Add a new subsection 1203.2.1 to Section 1203.2 Fuel Gas to read as follows:

1203.2.1 Dry Gas – A gas having a moisture and hydrocarbon dew point below any normal temperature to which the gas piping is exposed. Southern Nevada shall be considered a dry gas condition area unless specified by the local gas purveyor.

1209.6 Gas Meters.

Add a new item (E) to subsection 1209.6.2 to read as follows:

1209.6.2 Location

- (E) All lots in mobile home parks and lots in recreational vehicle parks shall be served individually by the duly franchised gas serving utility supplying gas from the street main.

1211.1.6 Piping Underground Beneath Buildings

Delete section 1211.1.6 in its entirety and replace with a new section 1211.1.6 to read as follows:

1211.1.6 No gas piping shall be installed in or on the ground under any building or structure unless installed in gastight conduit, and all exposed gas piping shall be kept at least six (6) inches (152 mm) above grade or structure. The term "building or structure" shall include structures such as porches and steps, whether covered or uncovered, breezeways, roofed porte-cocheres, roofed patios, carports, covered walks, covered driveways, and similar structures or appurtenances. All gas piping under a slab shall be capable of being removed and replaced.

The conduit shall be of material approved for installation underground beneath buildings and not less than Schedule 40 pipe. The interior diameter of the conduit shall be not less than one-half (1/2) inch (15 mm) larger than the outside diameter of the gas piping.

The conduit shall extend to a point at least (12) inches (305 mm) beyond any area where it is required to be installed or to the outside wall of a building, and the outer ends shall not be sealed. Where the conduit terminates within a building, it shall be readily accessible and the space between the conduit and the gas piping shall be sealed to prevent leakage of gas into the building.

1214.3 Test Pressure

Delete section 1214.3 in its entirety and add a new section 1214.3 to read as follows:

1214.3 Final Piping Inspection

1214.3.1 This inspection shall be made after all piping authorized by the permit has been installed and after all portions thereof which are to be covered or concealed are so concealed and before any fixtures, appliance, or shutoff valve has been attached thereto. This inspection shall include an air, CO₂ or nitrogen pressure test, at which time the gas piping shall stand a pressure of not less than ten (10) pounds per square inch (68.9 kPa) gauge pressure, or at the discretion of the Administrative Authority, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. Test pressures shall be held for a length of time satisfactory to the Administrative Authority, but in no case for less than fifteen (15) minutes, with no perceptible drop in pressure. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches (356 mm) water column pressure, the test pressure shall not be less than sixty (60) pounds per square inch (413.4 kPa) and shall be continued for a length of time satisfactory to the Administrative Authority, but in no case for less than thirty (30) minutes. These tests shall be made using air, CO₂, or nitrogen pressure only and shall be made in the presence of the Administrative Authority. All necessary apparatus for conducting tests shall be furnished by the permit holder. Test gauges used in conducting tests shall comply with Section 319.0, Test Gauges.

1217.0 Required Gas Piping Size.

Amend section 1217.0 to read as follows:

1217.1 Where the maximum demand does not exceed two hundred fifty (250) cubic feet per hour (2 L/sec.) and the maximum length of piping between the meter and the most distant outlet is not over two hundred fifty (250) feet (76,200 mm), the size of each section and each outlet of any system of gas piping shall be determined by means of Table 12-8 for steel pipe, or Table 12-13 for copper tubing systems, or section 1209.4.3 (3) for CSST systems. Other Systems within

the range of Table 12-8 or 12-13 may be sized from that table or by means of the methods set forth in Section 1217.3.

1217.2 To determine the size of each section of pipe in any system within the range of Table 12-8, proceed as follows:

- (1) Measure the length of the pipe from the gas meter location to the most remote outlet on the system.
- (2) In Table 12-8 select the length in feet column and row showing that distance, or the next longer distance if the table does not give the exact length.
- (3) Starting at the most remote outlet, find in the row just selected the gas demand for that outlet. If the exact figure of demand is not shown, choose the next larger figure in the row.
- (4) At the top of this column will be found the correct size of pipe.
- (5) Using this same row, proceed in a similar manner for each section of pipe serving this outlet. For each section of pipe, determine the total gas demand supplied by that section. Where gas piping sections serve both heating and cooling equipment and the installation prevents both units from operating simultaneously, only the larger of the two demand loads needs be used in sizing these sections.
- (6) Size each section of branch piping not previously sized by measuring the distance from the gas meter location to the most remote outlet in that branch and follow the procedures of steps 2, 3, 4, and 5 above.

Note:

Size branch piping in the order of their distance from the meter location, beginning with the most distant outlet not previously sized.

1217.3 For conditions other than those covered by Section 1217.1, such as longer runs or greater gas demands, the size of each gas piping system shall be determined by standard engineering methods acceptable to the Authority Having Jurisdiction, and each such system shall be so designed that the total pressure drop between the meter or other point of supply and any outlet when full demand is being supplied to all outlets, will at no time exceed five tenths (0.5) inches (12.7 mm) water column pressure.

1217.4 Where the gas pressure may be higher than fourteen (14) inches (356 mm) or lower than six (6) inches (152 mm) of water column, or when diversity demand factors are used, the design, pipe, sizing, materials, location, and use of such systems first shall be approved by the Authority Having Jurisdiction. Piping systems designed for pressures higher than the serving gas supplier's standard delivery pressure shall have prior verification from the gas supplier of the availability of the design pressure. Systems using undiluted liquefied petroleum gas may be sized using Table 12-32 for steel pipe for eleven (11) inches (279 mm) of water column and in accordance with the provisions of Sections 1217.1 and 1217.2.

CHAPTER 13 - HEALTHCARE FACILITIES AND MEDICAL GAS AND VACCUM SYSTEMS

Delete Chapter 13 in its entirety

CHAPTER 15 - Firestop Protection

Delete Chapter 15 in its entirety

CHAPTER 16 – Gray Water Systems

Delete Chapter 16 Part 1 - Gray Water Systems in its entirety

CHAPTER 16 – Part 2 Reclaimed Water Systems

1613.0 Reclaimed Water Systems - General

Amend 1613.0 Reclaimed Water Systems – General, item (A) to read as follows:

(A) The provisions of the chapter shall apply to the installation, construction, alteration, and repair of reclaimed water systems intended to supply water closets, urinals, and trap primers for floor drains and floor sinks and collect gray water for other authorized systems by the Authority Having Jurisdiction. Use is limited to these fixtures that are located in non-residential buildings. Fixtures within residential buildings are excluded from the list of approved uses. The reclaimed water systems shall have no connection to any potable water system, with or without mechanical backflow prevention devices. If reclaimed water is utilized on the premises, all potable water supplies shall be provided with appropriate backflow protection, as required by the authority having jurisdiction. Except as otherwise provided for in this chapter, the provisions of this Code shall be applicable to reclaimed water system installations.

1614.0 Definitions.

Amend Section 1614.0 to read as follows:

1614.0 Definitions

Reclaimed water is water which, as a result of tertiary treatment of domestic wastewater by a public agency, is suitable for a direct beneficial use or a controlled use that would not otherwise occur. The level of treatment and quality of the reclaimed water shall be approved by the State of Nevada Department of Environmental Protection.

1622.0 Approved Uses of Reclaimed Water

Amend Section 1622.0 to read as follows:

1622.0 Approved Uses of Reclaimed Water.

Use of reclaimed water shall require approval of the Authority Having Jurisdiction and the officials designated by the State of Nevada Department of Environmental Protection.

Appendix F – Firefighter Breathing Air Replenishment Systems

Delete Appendix F in its entirety and refer to the Fire Code.

Appendix K – Private Sewage Disposal Systems

Delete Appendix K in its entirety.

Appendix L – Alternate Plumbing Systems

Delete sections L 6.0, L 7.0, and L 8.0 in their entirety.

AGENDA SUMMARY PAGE
CITY COUNCIL MEETING OF: JANUARY 3, 2007

DEPARTMENT: CITY ATTORNEY

DIRECTOR: BRADFORD R. JERBIC

☐ Consent ☒ Discussion

SUBJECT:

RECOMMENDING COMMITTEE: BILL ELIGIBLE FOR ADOPTION AT A LATER MEETING:

Bill No. 2006-76 – Adopts the 2006 Edition of the International Energy Conservation Code, along with amendments thereto. Proposed by: Paul K. Wilkins, Director of Building and Safety

Fiscal Impact



No Impact



Augmentation Required



Budget Funds Available

Amount:

Funding Source:

Dept./Division:

PURPOSE/BACKGROUND:

This bill will adopt the 2006 Edition of the International Energy Conservation Code, together with amendments agreed upon by local governments within the Southern Nevada area.

RECOMMENDATION:

ADOPTION at 1/17/2007 City Council meeting pursuant to the 1/2/2007 Recommending Committee.

First Reading – 12/20/2006; First Publication – 1/5/2007

BACKUP DOCUMENTATION:

Bill No. 2006-76

Minutes:

Recommendation noted.

1/17/2007 Council Agenda

1 BILL NO. 2006-76

2 ORDINANCE NO. _____

3 AN ORDINANCE TO ADOPT THE 2006 EDITION OF THE INTERNATIONAL ENERGY
4 CONSERVATION CODE, ALONG WITH AMENDMENTS THERETO, AND TO PROVIDE FOR
OTHER RELATED MATTERS.

5 Proposed by: Paul Wilkins, Director of Building
6 and Safety

Summary: Adopts the 2006 Edition of the
International Energy Conservation Code, along
with amendments thereto.

7 THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN
8 AS FOLLOWS:

9 SECTION 1: Title 16, Chapter 52, Section 10, of the Municipal Code of the City of
10 Las Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

11 **16.52.010:** Those certain documents, three copies of which are on file in the Office of the City
12 Clerk and are designated as follows, are adopted by reference as if set forth herein in full:

13 (A) The publication entitled ["International Energy Conservation Code, 2003
14 Edition,"] "International Energy Conservation Code, 2006 Edition," as published by the International
15 Code Council, as Part 1 of this Chapter; and

16 (B) The document entitled ["2003 Southern Nevada International Energy
17 Conservation Code Amendments,"] "Southern Nevada Amendments to the 2006 International Energy
18 Conservation Code," which adds to, deletes from and amends the ["International Energy Conservation
19 Code, 2003 Edition,"] "International Energy Conservation Code, 2003 Edition," as Part 2 of this
20 Chapter.

21 SECTION 2: The document entitled "Southern Nevada Amendments to the 2006
22 International Energy Conservation Code," referred to in Section 1 of this Ordinance, is attached
23 hereto.

24 SECTION 3: The documents entitled "International Energy Conservation Code, 2003
25 Edition" and "2003 Southern Nevada International Energy Conservation Code Amendments" are
26 hereby repealed.

27 SECTION 4: If any section, subsection, subdivision, paragraph, sentence, clause or
28 phrase in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or

1 ineffective by any court of competent jurisdiction, such decision shall not affect the validity or
2 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the
3 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
4 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
5 subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,
6 invalid or ineffective.

7 SECTION 5: Whenever in this ordinance any act is prohibited or is made or declared
8 to be unlawful or an offense or a misdemeanor, or whenever in this ordinance the doing of any act is
9 required or the failure to do any act is made or declared to be unlawful or an offense or a
10 misdemeanor, the doing of such prohibited act or the failure to do any such required act shall
11 constitute a misdemeanor and upon conviction thereof, shall be punished by a fine of not more than
12 \$1,000.00 or by imprisonment for a term of not more than six months, or by any combination of such
13 fine and imprisonment. Any day of any violation of this ordinance shall constitute a separate offense.

14 SECTION 6: All ordinances or parts of ordinances or sections, subsections, phrases,
15 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
16 1983 Edition, in conflict herewith are hereby repealed.

17 PASSED, ADOPTED and APPROVED this ____ day of _____, 2007.

18 APPROVED:

19
20 By _____
21 OSCAR B. GOODMAN, Mayor

22 ATTEST:

23 BARBARA JO RONEMUS, City Clerk

24 APPROVED AS TO FORM:

25 Val Stead 12-7-06
26 Date

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2006, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2007, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as first introduced and adopted by the following vote:

8 VOTING "AYE": _____
9 VOTING "NAY": _____
10 ABSENT: _____

11
12 APPROVED:

13
14 By _____
15 OSCAR B. GOODMAN, Mayor

16 ATTEST:

17 BARBARA JO RONEMUS, City Clerk
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Southern Nevada Amendments

To The

2006

International Energy Conservation Code

Published: October 12, 2006

Clark County 4701 W. Russell Road Las Vegas, NV 89118 (702) 455-3030 Inspections: 455-8040	City of Las Vegas 731 S. 4 th Street Las Vegas, NV 89101 (702) 229-6251 Inspections: 229-2071
Boulder City 401 California Ave. Boulder City, NV 89005 (702) 293-9282	City of Mesquite 10 East Mesquite Blvd. Mesquite, NV 89027 (702) 346-2835
North Las Vegas 2240 Civic Center Drive North Las Vegas, NV 89030 (702) 633-1577 Inspections: 633-1576	City of Henderson 240 Water Street Henderson, NV 89015 (702) 267-3600 Inspections: 267-3900
Pahrump Regional District 1210 E. Basin Suite 1 Pahrump, NV 89060 (775) 751-3773	<i>Reprint pages</i> 12-16

Preface

This document comprises the proposed Southern Nevada Amendments to the 2006 International Energy Conservation Code as published by the International Code Council (ICC). It was developed by the jurisdictions listed on the cover page, the Southern Nevada Home Builders Association (SNHBA), representatives of the building industry (both contractors and trade groups), representatives of private energy consulting groups, and consultants representing the State Energy Office and DOE as a document to be adopted by reference. These provisions are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternates have been approved and its use authorized by the building official. This document is available to be adopted as code by any jurisdiction without permission or approval from the jurisdictions listed on the cover page.

101.1 Title.

Section 101.1 is amended to read:

101.1 Title. This code shall be known as the Energy Conservation Code of Southern Nevada, and shall be cited as such. It is referenced to herein as "this code."

101.4.3 Additions, alterations, renovations or repairs.

Revise Sec. 101.4.3 to add Exceptions #5 and #6, so that the section reads as follows:

101.4.3 Additions, alterations, renovations or repairs. Additions, alterations, renovations or repairs to an existing building, building system or portion thereof shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with this code. Additions, alterations, renovations, or repairs shall not create an unsafe or hazardous condition of overload existing building systems.

Exception: The following need not comply provided the energy use of the building is not increased:

1. Storm windows installed over existing fenestration.
2. Glass only replacements in an existing sash and frame.
3. Existing ceiling, wall or floor cavities exposed during construction provided that these cavities are filled with insulation.
4. Construction where the existing roof, wall or floor cavity is not exposed.
5. Relocations of existing luminaries within an existing space.
6. Alterations that replace 50% or less of the luminaries within a space, provided that the total energy consumption of the new luminaries is at least 10% less than the total energy consumption of the luminaries being replaced. If this exception is taken, the design professional shall provide all necessary calculations and information on the plans to show justification.

101.5.2.1 Low Energy Buildings.

Section 101.5.2 is amended to read:

101.5.2 Low energy buildings. The following buildings, or portions thereof, separated from the remainder of the building by building thermal envelope assemblies complying with this code shall be exempt from the building thermal envelope provisions of this code:

1. Those with a peak design rate of energy usage less than 3.4 Btu's /h/ft² (10.7W/m²) or 1.0 watt/ft² (10.7W/m²) of floor area for space conditioning purposes.
2. Those that do not contain conditioned space.
3. Those spaces that employ evaporative cooling as the sole source of conditioning.
4. Spaces whose sole purpose is to house and protect from freezing risers and mechanisms directly related to the building fire suppression system.

107.3 Referenced Codes.

Add a new section 107.3 to read:

107.3 Referenced Codes. Where this code refers to other codes not adopted by the jurisdiction, the applicable code adopted by the jurisdiction shall govern.

202 General Definitions.

Add the following definition:

AIR BARRIER: An integral component of the thermal energy envelope comprised of approved solid opaque materials that supports in-contact insulating material on one side and is sealed to prevent any leakage of air through the building enclosure. The air barrier can be comprised of, but not limited to, the exterior siding, exterior lath and stucco, rigid insulation board, exterior sheathing and sub-sheathing, water proof substrate with tiles, masonry or stone veneers, roof sheathing and drywall between conditioned and unconditioned attic spaces.

Revise the definition of BUILDING THERMAL ENVELOPE to read as follows:

BUILDING THERMAL ENVELOPE: The basement walls, exterior walls, floor, roof and any other building element comprised of a solid air barrier and approved insulation components in substantial, direct contact with it, that encloses conditioned space and any exempt or unconditioned space.

Add the following definitions in alphabetical order:

CASINO RESORT-BACK OF HOUSE: Areas of a casino resort that are only accessible to authorized personnel and not to the general public and guests, such as employee and delivery entrances, employee lounges and dining areas, administrative offices and meeting rooms, maintenance areas, storage rooms, service corridors, etc.

CASINO RESORT-FRONT OF HOUSE: Areas of the casino resort that are physically accessible or visible to the general public and guests, such as the exterior facades, landscaping, entries, lobbies, guestroom corridors, porte cocheres, retail shops,

restaurants, theaters, gaming areas, guest conference and meeting rooms, other areas of entertainment, etc.

Delete the definition of **CONDITIONED SPACE** and replace it with the following definition:

CONDITIONED SPACE: For energy purposes, space within a building that is provided with heating and/or cooling equipment, un-insulated ducts or systems capable of maintaining, through design or heat loss/gain, 50° F (10°C) during the heating season and 85° (29° C) during the cooling season, or through openings that communicate directly with a conditioned space. For mechanical purposes, an area, room or space being heated or cooled by any equipment or appliance. Note: Spaces which utilize required supplemental heating for the sole purpose of protecting wet fire protection systems (freeze protection to 42° F) or whose sole source of conditioning is through evaporative cooling is **not** considered conditioned space for the purposes of this code.

Add the following definitions in alphabetical order:

DISPLAY KITCHEN: A substantially open cooking and food preparation facility, located in the front-of-house dining room/lounge area specifically for the purpose of entertaining patrons by demonstrating the function of food and drink preparation.

INSULATION -- THERMAL: A component of the thermal energy envelope comprised of any approved material installed in substantially direct contact to either side of the air barrier that provides measured thermal resistance (R-value) to heat flow from a conditioned space to which it bounds.

LIGHTING -- SPECIALIZED MEDICAL, DENTAL AND RESEARCH: Lighting, other than general room illumination lighting, that is supplied from specialized single-purpose fixtures that are essential for the performance of specific medical, dental, or research-related tasks or procedures, including low-level night-lights used in clinical applications.

LIGHTING -- TASK: Lighting provided to illuminate work areas wherein specific repetitive and/or ongoing tasks or operations are performed. To be considered task lighting, the fixture(s) providing the illumination must be either cord-and-plug connected or hard-wired apart from the fixtures specified for general lighting and be switched or dimmed locally. Tasks that commonly require additional illumination include drafting; graphic design; office duties such as filing and sorting mail; reading detailed photographs, carbon copies, handwritten documents, materials printed with less than 6-point type, maps, and telephone books; maintenance work; and industrial tasks such as cutting, crushing, sorting, or grading; manufacturing components; machining; difficult or exacting assembly; difficult or exacting inspection; welding; and crafting by means of engraving, carving, painting, stitching, cutting, pressing, knitting, polishing, or woodworking. Authorities having jurisdiction may approve additional qualifying tasks.

LIGHTING -- THEATRICAL AND SPECIAL EFFECTS: Theatrical lighting shall be any lighting used to directly or indirectly illuminate a stage or other performance area, including dance floors. Special effects lighting shall be lighting used within or as part of a visual feature in a themed or theatrical environment. Special effects lighting shall

include but not be limited to: strobe lights, automated luminaries (intelligent lighting), effects projectors, and ultraviolet (UV) fixtures. In order to qualify as theatrical or special effects lighting, the lighting must be separated from general illumination and be operated from a control system accessible only by authorized personnel.

MASS WALL: Walls constructed of concrete block, concrete, insulated concrete form (ICF), masonry cavity, brick (other than brick veneer), earth (adobe, compressed earth block, rammed earth), or solid timber logs.

SIGN: An interior or exterior lighted device used to impart way-finding, identifications or promotional information to the viewer. Signs include, but are not limited to, business identification, locations maps and directories, gaming boards, sports scoreboards, and slot carousel identifiers.

401.3 Certificate.

Section 401.3 is amended to read:

401.3 Certificate. A permanent certificate shall be posted in a conspicuous place on or in the home. The certificate shall be completed by the builder or registered design professional. The certificate shall list the predominate *R*-values of insulation installed on ceiling/roof, walls, foundation (slab, basement wall, crawlspace wall and/or floor) and ducts outside conditioned spaces; *U*-factors for fenestration; and the solar heat gain coefficient (SHGC) of fenestration. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the type and efficiency of heating, cooling and service water heating equipment.

402.4.1 Building Thermal Envelope.

Section 402.4.1 is amended to read:

402.4.1 Sealing of air barrier. The building air barrier shall be durably sealed to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. The following shall be caulked, gasketed, weatherstripped or otherwise sealed with an approved material:

1. All joints, seams, and penetrations in the air barrier.
2. Site-built windows, doors and skylights.
3. Openings between window and door assemblies and their respective jambs and framing.
4. Utility penetrations.
5. Other sources of infiltration through the air barrier.

403.2.1 Insulation.

Section 403.2.1 is amended to read:

403.2.1 Insulation. Supply and return ducts shall be insulated to a minimum of R-6. Ducts in floor trusses shall be insulated to a minimum of R-6.

Exception: Ducts or portions thereof located completely inside the building thermal envelope.

403.2.2 Sealing.

Section 403.2.2 is amended to read:

403.2.2 Sealing. All ducts, filter boxes, and building cavities used as ducts shall be sealed. Joints of duct systems shall be made substantially airtight by means of tapes, mastics, gasketing or other approved closure systems. Closure systems used with rigid fibrous glass ducts shall comply with UL 181A and shall be marked "181A-P" for pressure-sensitive tape, "181 A-M" for mastic or "181 A-H" for heat-sensitive tape. Closure systems used with flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked "181B-FX" for pressure-sensitive tape or "181 B-M" for mastic. Duct connections to flanges of air distribution system equipment or sheet metal fittings shall be mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked 181B-C. Crimp joints for round metal ducts shall have a contact lap of at least 1 ½ inches (38mm) and shall be mechanically fastened by means of at least three sheet-metal screws or rivets equally spaced around the joint.

403.4 Circulating Hot Water Systems.

Section 403.4 is deleted and replaced with the following:

403.4 Hot water systems. All service hot water heating systems shall meet the requirements of Section 403.4.1 or Section 403.4.2.

403.4.1 Non-circulating hot water systems. All service hot water piping installed in unconditioned spaces, including under-slab piping, shall be insulated to R-2.

403.4.2 Circulating hot water systems. All circulating service hot water piping, including under-slab piping, shall be insulated to at least R-2. Circulating hot water systems shall include an automatic or readily accessible manual switch that can turn off the hot water circulating pump when the system is not in use.

403.5 Mechanical Ventilation.

Section 403.5 is amended by adding an exception, so that the section reads as follows:

403.5 Mechanical ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

Exception: Where clothes dryer exhaust vents terminate at the roof, backdraft dampers are not required.

404.3 Performance-based Compliance.

Sec. 404.3 is deleted and replaced with the following:

404.3 Site energy: The different energy sources shall be compared on the basis of source energy used at the site where 1kWh=10,239 Btu.

404.6.1 Minimum Capabilities.

Section 404.6.1 is amended to read:

404.6.1 Minimum capabilities. Calculation procedures used to comply with this section shall be software tools capable of calculating the annual energy consumption of all building elements that differ between the standard reference design and the proposed design and shall include the following capabilities:

1. Computer generation of the standard reference design using only the input for the proposed design. The calculation procedure shall not allow the user to directly modify the building component characteristics of the standard reference design.
2. Calculation of whole-building (as a single zone) sizing for the heating and cooling equipment in the standard reference design residence shall be sized based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.
3. Calculations that account for the effects of indoor and outdoor temperatures and part-load ratios on the performance of heating, ventilating and air conditioning equipment based on climate and equipment sizing.
4. Printed code official inspection checklist listing each of the proposed design component characteristics from Table 404.5.2(1) determined by the analysis to provide compliance, along with their respective performance ratings (e.g. R-Value, U-Factor, SHGC, HSPF, AFUE, SEER, ER, etc.).

502.4.4 Outdoor Air Intakes and Exhaust Openings.

Section 502.4.4 is amended by adding exceptions 2-6, so that the section reads as follows:

502.4.4 Outdoor air intakes and exhaust openings. Stair and elevator shaft vents and other outdoor air intakes and exhaust openings integral to the building envelope shall be equipped with not less than a Class I motorized, leakage-rated damper with a maximum leakage rate of 4 cfm per square foot (6.8 L/s Cm²) at 1.0 inch water gauge (w.g.) (1250 Pa) when tested in accordance with AMCA 500D.

Exceptions:

1. Gravity (non-motorized) dampers are permitted to be used in buildings less than three stories in height above grade.
2. Supply and exhaust ducts or shafts integral to the smoke management system as required by Section 909 of the International Building Code.
3. Type I and Type II hoods in commercial kitchens and the make-up air units that are required for the operation of these fume hoods.
4. All vents used for conveying products of combustion.
5. Clothes dryer vents that terminate at the roof.
6. Explosion venting.

502.4.6 Vestibules.

Section 502.4.6 is amended by adding exception 7, so that the section reads as follows:

502.4.6 Vestibules. A door that separates conditioned space from the exterior shall be protected with an enclosed vestibule, with all doors opening into and out the vestibule equipped with self-closing devices. Vestibules shall be designed so that in passing through the vestibule it is not necessary for the interior and exterior doors to open at the same time.

Exceptions:

1. Buildings in Climate Zones 1 and 2 as indicated in Figure 301.1 and Table 301.1.
2. Doors not intended to be used as a building entrance door, such as doors to mechanical or electrical equipment rooms.
3. Doors opening directly from a sleeping unit or dwelling unit.
4. Doors that open directly from a space less than 3,000 square feet (298 m²) in area.
5. Revolving doors.

6. Doors used primarily to facilitate vehicular movement or material handling and adjacent personnel doors.
7. Doors in buildings with less than four stories above grade.

505.2.2.1 Light Reduction Controls.

Section 505.2.2.1 is amended to read:

505.2.2.1 Light reduction controls. Each area that is required to have a manual control shall also allow the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern by at least 50 percent. Lighting reduction shall be achieved by one of the following or other approved method:

1. Controlling all lamps or luminaires;
2. Dual switching of alternate rows of luminaires, alternate luminaires or alternate lamps;
3. Switching the middle lamp luminaires independently of the outer lamps;
4. Switching each luminaire or each lamp; or
5. Using a dimming control system to reduce load by at least 50 percent.

Exceptions:

1. Areas that have only one luminaire.
2. Areas that are controlled by an occupant-sensing device.
3. Corridors, storerooms, restrooms, public lobbies, or means of egress.
4. Sleeping unit (see Section 505.2.3).
5. Spaces that use less than 0.6 Watts per square foot (6.5 W/m^2).

505.2.2.2 Automatic Lighting Shutoff.

Section 505.2.2.2 is amended to read:

505.2.2.2 Automatic lighting shutoff. Single-occupancy buildings or single-tenant spaces larger than 5,000 square feet (465 m^2) shall be equipped with an automatic control device to shut off lighting in those areas. This automatic control device shall function on either:

1. A scheduled basis, using time-of-day, with an independent program schedule that controls the interior lighting in areas that do not exceed 25,000 square feet (2323 m²) and are not more than one floor; or
2. An occupant sensor that shall turn off the lighting within 30 minutes of an occupant leaving a space; or
3. A signal from another control or alarm system that indicates the area is unoccupied.

Exception: The following shall not require an automatic control device:

1. Sleeping units (see Section 505.2.3)
2. Lighting in spaces where patient care is directly provided.
3. Spaces where automatic shutoff would endanger occupant safety or security.
4. Buildings where the nature of the business activity operates 24 hours per day, as approved by the Building Official.

505.5.1 Total Connected Interior Lighting Power.

Section 505.5.1 is amended to read:

505.5.1 Total connected interior lighting power. The total connected interior lighting power (watts) shall be the sum of the watts of all interior lighting equipment as determined in accordance with Section 505.5.1.1 through 505.1.1.4.

Exceptions: The connected power associated with the following lighting equipment is not included in the calculating total connected lighting power.

1. Specialized medical, dental, and research lighting.
2. Professional and/or competition level sports playing area lighting.
3. Display lighting for exhibits in galleries, museums, monuments, and convention centers.
4. Sleeping unit lighting in hotels, motels, boarding houses or similar buildings.
5. Emergency lighting automatically off during normal building operation.
6. Casino Resort -- Front of House areas on properties classified as such by local jurisdictions.
7. Theatrical and special effects lighting.

8. Lighting for film, video or photography beyond general studio illumination.
9. Light Emitting Diode (LED) lighting sources.
10. Neon and cold cathode lighting sources.
11. Interior signage.
12. In a redundant, interlocked lighting system or in a system programmed to prevent simultaneous operation of more than one lighting system, the system using the least amount of power.
13. Lighting equipment available for purchase in a retail setting.
14. Task lighting.
15. Where specific lighting levels are required by state or local governmental criteria, the state or local code shall prevail. The total square footage of the area addressed in such codes shall be subtracted from the overall square footage of the space when utilized for energy calculations.
16. Display kitchen and bar areas.
17. Lighting that is integral to equipment or instrumentation and is installed by its manufacturer.

505.5.1.4 Line Voltage Lighting Track and Plug-In Busway.

Section 505.5.1.4 is amended to read:

Section 505.5.1.4 Line-voltage lighting track and plug-in busway. The wattage shall be the greater of the wattage of the luminaires determined in accordance with Sections 505.5.1.1 through 505.5.1.3 or 30 W/linear foot (98W/lin m). In track lighting equipped with a current limiting device, the wattage shall be the maximum rated power of the current limiting device.

Table 505.5.2 INTERIOR LIGHTING POWER ALLOWANCES.

Table 505.5.2 is deleted in its entirety and replaced with the following:

TABLE 505.5.2
INTERIOR LIGHTING POWER ALLOWANCES

LIGHTING POWER DENSITY	
Building Area Type ^a	(W/ft²)
Auditorium	1.8
Automotive Facility	0.9
Bank/Financial Institution ^c	1.5
Classroom/Lecture Hall	1.4
Convention Center ^c	1.3
Corridor, restroom, support area	0.9
Court House ^c	1.2
Dormitory	1.0
Exercise Center	1.0
Exhibit Hall	1.3
Grocery Store	1.6
Gymnasium Playing Surface	1.4
Healthcare-Clinic	1.0
Healthcare-Spa ^c	1.6
Hospital ^c	1.2
Hotel ^{b,c}	1.3
Industrial work	1.2
Kitchen	1.2
Library ^c	1.7
Lobby-hotel ^c	1.1
Lobby-other ^c	1.3
Mall, arcade, or atrium ^c	0.6
Motel	1.0
Motion Picture Theater ^{b,c}	1.2
Multi-Family	0.7
Museum ^c	1.1
Office ^c	1.1
Parking Garage	0.4
Penitentiary	1.0
Police/Fire Station	1.0
Post Office	1.1
Religious Worship ^{b,c}	2.4
Restaurant ^{b,c}	1.6
Retail Sales, wholesales, show room ^{b,c}	1.7
School/University	1.2
Sports Arena ^c	1.1
Storage, Industrial and Commercial	0.8
Theatre – Motion Picture	1.2
Theatre – Performance ^c	2.6

Town Hall	1.1
Transportation	1.0
Warehouse	0.8
Workshop	1.4
Other	1.0

For SI: 1 foot = 304.8 mm, 1 watt per square foot = W/0.0929 m².

- a. In cases where both a general building area type and a more specific building area type are listed, the more specific building area type shall apply.
- b. Where lighting equipment is specified to be installed to highlight specific merchandise or displays in addition to lighting equipment specified for general lighting and is switched or dimmed on circuits separate from the circuits for general lighting, the smaller of the actual wattage for the lighting equipment installed specifically for merchandise, or 21 W/ft times the length of the wall display, 1.6 W/ft² times the area of the specific display of the floor display, or 3.9 W/ft² times the actual case or shelf area for displaying and selling jewelry, china or silver, shall be added to the interior lighting power determined in accordance with this line item.
- c. Where lighting equipment is specified to be installed for decorative purposes in addition to lighting equipment specified for general lighting and is switched or dimmed on circuits separate from the circuits for general lighting, the smaller of the actual wattage of the decorative lighting equipment or 1.5 W/ft² times the area of the space that the decorative lighting equipment is in shall be added to the interior lighting power determined in accordance with this line item.

505.5.2 Interior Lighting Power.

Section 505.5.2 is amended, and a new Table 505.5.3 is added, to read as follows:

505.5.2 Interior lighting power. The total interior lighting power (watts) is the sum of all interior lighting powers for all areas in the building covered in this permit. The interior lighting power is the floor area for each building area type listed in Table 505.5.2 times the value from Table 505.5.2 for that area. For areas with high ceilings and lighting fixture mounting heights that exceed 12 feet, an adjustment factor is allowed by multiplying the LPD value from Table 505.5.2 with the adjustment factor in Table 505.5.3. For the purposes of this method, an "area" shall be defined as all contiguous spaces that accommodate or are associated with a single building area type as listed in Table 505.5.2. When this method is used to calculate the total interior lighting power for an entire building, each building area type shall be treated as a separate area.

**TABLE 505.5.3
ADJUSTMENTS FOR MOUNTING HEIGHTS ABOVE FLOOR**

Height (in feet) above the finished floor to the bottom of luminaire(s)	Multiply LPD by
12 or less	1.0
13	1.05
14	1.10
15	1.15
16	1.21
17	1.47
18	1.65
19	1.84
20 or more	2.04

505.6 Exterior Lighting. (Mandatory).

Revise section 505.6 to read as follows:

505.6 Exterior lighting. (Mandatory). When the power for the exterior lighting is supplied through the energy service to the building, all exterior lighting, other than low-voltage lighting shall have a source efficacy of at least 45 lumens per Watt. Fixtures employing lamps rated over 100 Watts shall either have a source efficacy of at least 60 lumens per Watt or be controlled by a motion sensor.

Exceptions:

1. Where approved because of historical, safety, signage or emergency considerations.
2. Light Emitting Diode (LED), neon, and cold cathode exterior lamp sources.
3. Casino Resort--Front of House areas on properties classified by the local jurisdiction as casino resorts.
4. Where specific lighting levels are required by state or local governmental criteria, the state or local code shall prevail. Areas affected by this exemption include, but are not limited to, ATM's and parking garage emergency lighting.
5. Theatrical and special effects lighting.

Delete sections 505.6.1 and 505.6.2

505.7 Electrical Energy Consumption. (Mandatory)

Section 505.7 is amended by adding an exception, so that the section reads as follows:

505.7 Electrical energy consumption. (Mandatory). In buildings having individual dwelling units, provisions shall be made to determine the electrical energy consumed by each tenant by separately metering individual dwelling units.

Exception: Dwelling units with a transient occupancy such as timeshares.

AGENDA SUMMARY PAGE
CITY COUNCIL MEETING OF: JANUARY 3, 2007

DEPARTMENT: CITY ATTORNEY

DIRECTOR: BRADFORD R. JERBIC

☐ Consent ☒ Discussion

SUBJECT:

RECOMMENDING COMMITTEE: BILL ELIGIBLE FOR ADOPTION AT A LATER MEETING:

Bill No. 2006-77 – Adopts the 2006 Editions of the International Building Code and the International Residential Code, together with amendments thereto. Proposed by: Paul K. Wilkins, Director of Building and Safety

Fiscal Impact



No Impact



Augmentation Required



Budget Funds Available

Amount:

Funding Source:

Dept./Division:

PURPOSE/BACKGROUND:

This bill will adopt the 2006 Editions of the International Building Code and the International Residential Code, together with amendments agreed upon by local governments within the Southern Nevada area.

RECOMMENDATION:

ADOPTION at 1/17/2007 City Council meeting as a First Amendment pursuant to the 1/2/2007 Recommending Committee.

First Reading – 12/20/2006; First Publication – 1/5/2007

BACKUP DOCUMENTATION:

Bill No. 2006-77

Minutes:

Recommendation noted.

1/17/2007 Council Agenda

BILL NO. 2006-77

ORDINANCE NO. _____

AN ORDINANCE TO ADOPT AS THE CITY'S BUILDING CODE THE 2006 EDITIONS OF THE INTERNATIONAL BUILDING CODE AND INTERNATIONAL RESIDENTIAL CODE, TOGETHER WITH AMENDMENTS THERETO, AND TO PROVIDE FOR OTHER RELATED MATTERS.

Proposed by: Paul K. Wilkins, Director of
Building and Safety

Summary: Adopts the 2006 Editions of the
International Building Code and the
International Residential Code, together with
amendments thereto.

THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN
AS FOLLOWS:

SECTION 1: Title 16, Chapter 4, Section 10, of the Municipal Code of the City of
Las Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

16.04.010: A building code is established and adopted for the City. The building code adopted
by this Section, to be known as the City's Building Code, shall consist of the following documents,
which are adopted by this reference and a copy of which shall be maintained on file in the Office of
the City Clerk:

(A) The publication entitled ["International Building Code, 2003 Edition,"]
"International Building Code, 2006 Edition," as modified herein, including all Appendices, [other than
Appendices A, B, D and G, which are not adopted.] except as otherwise specified. This publication,
as modified, is designated as Part 1 of this Chapter.

(B) The document entitled ["City of Las Vegas Amendments to the 2003
International Building Code," which amends, by adding to and deleting from, certain sections of the
International Building Code, 2003 Edition. If adopted by other local jurisdictions, the document may
also be known as the Southern Nevada Amendments to the 2003 International Building Code.]
Southern Nevada Amendments to the 2006 International Building Code, which amends, by adding to
and deleting from, certain sections of the International Building Code, 2006 Edition. This document
is adopted as Part 2 of this Chapter.

(C) The publication entitled the ["International Residential Code for One- and Two-
Family Dwellings, 2003 Edition" (also known as the "International Residential Code, 2003 Edition"),

1 as modified herein, including all chapters contained therein, with the exception of Chapters 12-42,
2 which are not adopted, and including all Appendices other than Appendices A-G, Appendices I-J, and
3 Appendix L, which are not adopted.] "International Residential Code for One- and Two-Family
4 Dwellings, 2006 Edition" (also known as the "International Residential Code, 2006 Edition"), as
5 modified herein, including all chapters and Appendices, except as otherwise specified. This
6 publication, as modified, is designated as Part 3 of this Chapter.

7 (D) The document entitled ["City of Las Vegas Amendments to the 2003
8 International Residential Code," which amends, by adding to and deleting from, certain sections of
9 the International Residential Code, 2003 Edition. If adopted by other local jurisdictions, the document
10 may also be known as the Southern Nevada Amendments to the 2003 International Residential Code.]
11 Southern Nevada Amendments to the 2006 International Residential Code, which amends, by adding
12 to and deleting from, certain sections of the International Residential Code, 2006 Edition. This
13 document is adopted as Part 4 of this Chapter.

14 SECTION 2: The document entitled "Southern Nevada Amendments to the 2006
15 International Building Code" referred to in Section 1 of this Ordinance, is hereby amended by adding
16 thereto a new Section 421 and a new Subsection 421.1, to read as follows:

17 **Section 421 Live/Work Units**

18 **421.1 Live/Work Units.** In accordance with Title 19 of the Las Vegas Municipal Code, live/work
19 units, as defined therein, are permitted in the Live/Work Overlay District. For purposes of addressing
20 fire and life safety issues raised by that type of occupancy, live/work units are permitted in accordance
21 with Title 19, subject to the following limitations:

- 22 a. The minimum floor area of a live/work unit shall be 750 square feet.
- 23 b. A maximum of 50 percent of the floor area of a live/work unit may be used or arranged
24 for residential purposes such as sleeping, kitchen, bathroom and closet area.
- 25 c. No interior wall separating the living portion from the work portion of a unit is required
26 if automatic fire alarm systems are installed throughout the building.
- 27 d. Each live/work unit shall be separated from other live/work units or other uses in the
28 building by a two-hour rated fire wall.

1 e. Access to live/work units shall be provided only from common access areas (halls or
2 corridors) and shall not be from other live/work units or other uses in the building.

3 f. Each live/work unit shall be fully sprinklered. Units of less than 1500 square feet may
4 use a NFPA 13R system. Units 1500 square feet or larger require a full NFPA 13 system.

5 g. An emergency mode of egress directly to the outside (other than through the work
6 portion) shall be provided from the sleeping portion of the live/work unit.

7 h. Live/work units shall not be used for storage of flammable liquids or hazardous
8 materials, welding or any open flame work.

9 i. Gas appliances, including gas stoves and water heaters shall be separated from the
10 sleeping areas per applicable codes.

11 SECTION 3: The documents entitled "Southern Nevada Amendments to the 2006
12 International Building Code" and "Southern Nevada Amendments to the 2006 International
13 Residential Code," referred to in Section 1 of this Ordinance, are attached hereto.

14 SECTION 4: The documents entitled "International Building Code, 2003 Edition,"
15 "International Residential Code, 2003 Edition," "City of Las Vegas Amendments to the 2003
16 International Building Code," and "City of Las Vegas Amendments to the 2003 International
17 Residential Code" are hereby repealed.

18 SECTION 5: If any section, subsection, subdivision, paragraph, sentence, clause or
19 phrase in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or
20 ineffective by any court of competent jurisdiction, such decision shall not affect the validity or
21 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the
22 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
23 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
24 subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,
25 invalid or ineffective.

26 SECTION 6: Whenever in this ordinance any act is prohibited or is made or declared
27 to be unlawful or an offense or a misdemeanor, or whenever in this ordinance the doing of any act is
28 required or the failure to do any act is made or declared to be unlawful or an offense or a

1 misdemeanor, the doing of such prohibited act or the failure to do any such required act shall
2 constitute a misdemeanor and upon conviction thereof, shall be punished by a fine of not more than
3 \$1,000.00 or by imprisonment for a term of not more than six months, or by any combination of such
4 fine and imprisonment. Any day of any violation of this ordinance shall constitute a separate offense.

5 SECTION 7: All ordinances or parts of ordinances or sections, subsections, phrases,
6 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
7 1983 Edition, in conflict herewith are hereby repealed.

8 PASSED, ADOPTED and APPROVED this ____ day of _____, 2007.

9 APPROVED:

10

11

By _____
OSCAR B. GOODMAN, Mayor

12

13

ATTEST:

14

BARBARA JO RONEMUS, City Clerk

15

APPROVED AS TO FORM:

16

Val Steep 12-7-06
Date

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1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2006, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2007, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as first introduced and adopted by the following vote:

8 VOTING "AYE": _____
9 VOTING "NAY": _____
10 ABSENT: _____

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APPROVED:

By _____
OSCAR B. GOODMAN, Mayor

ATTEST:

BARBARA JO RONEMUS, City Clerk

**SOUTHERN NEVADA
AMENDMENTS
TO THE
2006 INTERNATIONAL BUILDING CODE**

October 12, 2006

Clark County
4701 W. Russell Rd.
Las Vegas, Nevada 89118
(702) 455-3000
Inspections 455-8040

City of Las Vegas
731 S. 4th Street
Las Vegas, Nevada 89155
(702) 229-6251
Inspections 229-2071

City of North Las Vegas
2240 Civic Center Dr.
North Las Vegas, NV 89030
(702) 633-1577
Inspections 633-1576

Boulder City
401 California Ave.
Boulder City, NV. 89005
(702) 293-9282

City of Mesquite
10 East Mesquite Blvd.
Mesquite, NV, 89027
(702) 346-2835

City of Henderson
240 Water Street
Henderson, NV 89015
(702) 267-3650
Inspections 267-3900

Pahrump Regional Planning District
1210 E. Basin, Suite 1
Pahrump, NV 89060
(775) 751-3773

PREFACE

This document, prepared by four committees comprised of representative of Southern Nevada jurisdictions and public members, is the recommended amendments to the 2006 International Building Code (IBC) as published by the International Code Council (ICC). The recommended amendments contained herein are not code unless adopted and codified by governmental jurisdictions. These amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternates have been approved and their use authorized by the Building Official. This document may be copied and used in whole or in part without permission or approval from the organizations listed on the cover page.

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Section 202 Definitions.

Amend Section 202 to include the following definitions:

HIGH-RISE BUILDING. A building with an occupied floor located more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access.

INTERNATIONAL ELECTRICAL CODE. The Electrical Code as amended and adopted by the local jurisdiction.

INTERNATIONAL MECHANICAL CODE. The Mechanical Code as amended and adopted by the local jurisdiction.

INTERNATIONAL PLUMBING CODE. The Plumbing Code as amended and adopted by the local jurisdiction.

INTERNATIONAL FIRE CODE. The Fire Code as amended and adopted by the local jurisdiction.

Section 303.1 Assembly Group A.

Amend Section 303.1 Subsection A-2 to read as follows:

- A-2** Assembly uses intended for food and/or drink consumption including, but not limited to:
- Banquet halls
 - Night clubs
 - Restaurants
 - Taverns and bars
 - Casinos

Section 304.1 Business Group B.

Amend Section 304.1 to read as follows:

304.1 Business Group B. Business Group occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

- Airport traffic control towers
- Animal hospitals, kennels and pounds
- Banks
- Barber and beauty shops
- Car wash
- Civic administration
- Outpatient clinic and medical offices (where five or less patients in a tenant space are not capable of self preservation)

Dry cleaning and laundries; pick up and delivery stations and self service
Educational occupancies for students above the 12th grade
Electronic data processing
Laboratories; testing and research
Motor vehicle showrooms
Post offices
Print shops
Professional services (architects, attorneys, dentists, physicians, engineers, etc.)
Radio and television stations
Telephone exchanges
Training and skill development not within a school or academic program

Section 308.2 Group I-1.

Amend the first paragraph of Section 308.2 to read as follows, with remainder of section unchanged:

308.2 Group I-1. This occupancy shall include buildings, structures or parts thereof housing more than 16 persons who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

Section 308.3 Group I-2.

Amend Section 308.3 to read as follows:

308.3 Group I-2. This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing or custodial care of more than five persons who are not capable of self-preservation. This group shall include, but not be limited to the following:

- Hospitals
- Nursing homes (both intermediate care facilities and skilled nursing facilities)
- Mental hospitals
- Detoxification facilities

A medical treatment or health care facility such as the above with five or fewer patients shall be classified as a Group B occupancy.

A residential facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2.

Section 310.1 Residential Group R.

Amend Section 310.1 subsection R-2 to read as follows, with remainder of section unchanged:

R-2 Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:

- Apartment houses
- Boarding houses (not transient)
- Condominiums (nontransient)
- Convents
- Dormitories
- Fraternities and sororities
- Hotels (nontransient)
- Monasteries
- Motels (nontransient)
- Vacation timeshare properties

Congregate living facilities with 16 or fewer occupants are permitted to comply with the construction requirements for Group R-3.

Section 311.2 Moderate Hazard Storage, Group S-1.

Amend Section 311.2 to read as follows:

311.2 Moderate-hazard storage, Group S-1. Buildings occupied for storage uses which are not classified as Group S-2 including, but not limited to, storage of the following:

- Aerosols, Levels 2 and 3
- Aircraft repair hangar
- Bags; cloth, burlap and paper
- Bamboos and rattan
- Baskets
- Belting; canvas and leather
- Books and paper in rolls or packs
- Boots and shoes
- Buttons, including cloth covered, pearl or bone
- Cardboard and cardboard boxes
- Clothing, woolen wearing apparel
- Cordage
- Furniture
- Furs
- Glues, mucilage, pastes and size
- Grains
- Horns and combs, other than celluloid
- Leather
- Linoleum
- Lumber
- Self-Service Storage Facility
- Motor vehicle repair garages complying with the maximum allowable quantities of hazardous materials listed in Table 307.1(1) (see Section 406.6)
- Photo engraving

Resilient flooring
Silks
Soaps
Sugar
Tires, bulk storage of
Tobacco, cigars, cigarettes and snuff
Upholstery and mattresses
Wax candles

Section 403.1 Applicability (High-Rise Buildings).

Amend the first paragraph of Section 403.1 to read as follows, with the exception and items 1 through 5 unchanged:

403.1 Applicability. The provisions of this section shall apply to buildings with an occupied floor located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access.

Section 403.2 Automatic Sprinkler System (High-Rise Buildings).

Amend Section 403.2 to read as follows:

403.2 Automatic sprinkler system. Buildings and structures shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and a secondary water supply where required by Section 903.3.5.2.

Exception: An automatic sprinkler system shall not be required in open parking garages in accordance with Section 406.3.

Section 403.10.2 Standby Power Loads (High-Rise Buildings).

Amend Section 403.10.2 to read as follows:

403.10.2 Standby power loads. The following are classified as standby power loads:

1. Power and lighting for the fire command center required by Section 403.8;
2. Ventilation and automatic fire detection equipment for smokeproof enclosures; and
3. Smoke control systems.

Standby power shall be provided for elevators in accordance with Sections 1007.4 and 3003.

Section 403.11.1 Emergency Power Loads (High-Rise Buildings).

Amend Section 403.11.1 to read as follows:

403.11.1 Emergency power loads. The following are classified as emergency power loads:

1. Exit signs and means of egress illumination required by Chapter 10;

2. Elevator car lighting;
3. Emergency voice/alarm communication systems;
4. Automatic fire detection systems;
5. Fire alarm systems; and
6. Electrically powered fire pumps.

Section 403.12 Stairway Door Operation (High-Rise Buildings).

Amend Section 403.12 to read as follows, with Section 403.12.1 unchanged:

403.12 Stairway door operation. Stairway doors other than the exit discharge doors shall be permitted to be locked from stairway side. Stairway doors that are locked from the stairway side shall be unlocked simultaneously without unlatching upon any of the following: a signal from the fire command center; activation of a fire alarm signal in an area served by the stairway; or failure of the power supply.

Section 403.13 Smokeproof Exit Enclosures (High-Rise Buildings).

Amend Section 403.13 to read as follows:

403.13 Smokeproof exit enclosures. Every required stairway serving floors more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access shall comply with Sections 909.20 and 1020.1.7.

Section 403.15 Smoke Control.

Add new Section 403.15 to read as follows:

403.15 Smoke control. A smoke control system shall be provided in accordance with Section 909.

Section 404.1 General (Atriums).

Amend Section 404.1 to read as follows, with Section 404.1.1 remaining unchanged:

404.1 General. In other than Group H occupancies, and where permitted by Exception 5 in Section 707.2, floor openings meeting the requirements of this section are not required to be protected by a shaft enclosure.

Section 404.3 Automatic Sprinkler Protection (Atriums).

Amend Section 404.3 to read as follows, deleting exceptions #1 and #2:

404.3 Automatic sprinkler protection. An approved automatic sprinkler system shall be installed throughout the entire building.

Section 405.9.1 Standby Power Loads (Underground Buildings).

Amend Section 405.9.1 to read as follows:

405.9.2 Standby power loads. The following loads are classified as standby power loads:

1. Smoke control system.
2. Ventilation and automatic fire detection equipment for smokeproof enclosures.

Standby power shall be provided for elevators in accordance with Section 3003.

Section 405.10.1 Emergency Power Loads (Underground Buildings).

Amend Section 405.10.1 to read as follows:

405.10.1 Emergency power loads. The following loads are classified as emergency power loads:

1. Emergency voice/alarm communication systems.
2. Fire alarm systems.
3. Automatic fire detection systems.
4. Elevator car lighting.
5. Means of egress and exit sign illumination required by Chapter 10.
6. Electrically powered fire pumps.

Section 406.1 Private garages and carports.

Add exception after the last paragraph of Section 406.1.2 to read as follows:

Exception: Noncombustible carports may be of unlimited area when they are open on all sides, not over twelve feet (3658 mm) in height, and located a minimum of 5 feet (1524 mm) from any property line or assumed property line, measured from the roof edge.

Section 406.1 Private garages and carports.

Amend Section 406.1.4 by adding Items #4 and #5 to read as follows, with the remainder unchanged:

4. Noncombustible carports do not require exterior wall and opening protection when they are open on all sides, not over twelve feet (3658 mm) in height, and located a minimum of 5 feet (1524 mm) from any property line or assumed property line, as measured from the roof edge.
5. When a Group B, F, M, R, or S occupancy structure and a carport are located on the same property with a minimum separation of ten feet (3048 mm) between the structure and the carport, as measured from the roof edges, exterior wall and opening protection is not required for either structure.

Section 406.2.6.1 Floor Drains (Parking Garages).

Add new Section 406.2.6.1 to read as follows:

406.2.6.1 Floor drains. Where provided, floor drains installed in enclosed parking garages or repair garages shall drain to an approved sand/oil separator.

Section 406.4.2 Ventilation (Enclosed Parking Garages).

Amend Section 406.4.2 to read as follows:

406.4.2 Ventilation. A mechanical ventilation system shall be provided in enclosed parking garages.

Exception: A mechanical ventilation system shall not be required in an enclosed parking garage when openings complying with Section 406.3.3.1 are provided.

Section 406.4.2 Ventilation (Enclosed Parking Garages).

Add new Sections 406.4.2.1, 406.4.2.2, and 406.4.2.3 to read as follows:

406.4.2.1 Minimum ventilation. The mechanical ventilation system shall be capable of producing a ventilation rate of 0.75 cfm per square foot ($0.0038 \text{ m}^3/\text{s}\cdot\text{m}^2$) of floor area.

Exception: When approved by the Building Official, the mechanical ventilation system may be designed to exhaust a minimum of 14,000 cfm ($6.61 \text{ m}^3/\text{s}$) for each operating vehicle. Such system shall be based on the anticipated instantaneous movement rate of vehicles, but not less than 2.5 percent of the garage capacity, or one vehicle, whichever is greater.

406.4.2.2 Intermittent operation. The mechanical ventilation system shall not be required to operate continuously where approved automatic carbon monoxide sensing devices are provided to operate the system automatically to maintain a maximum average concentration of carbon monoxide of 50 parts per million during any eight-hour period, with a maximum concentration not greater than 200 parts per million for a period not exceeding one hour.

406.4.2.3 Occupied spaces accessory to public garages. Connecting offices, waiting rooms, ticket booths and similar uses that are accessory to a public garage shall be supplied with conditioned air and maintained at a positive pressure.

Section 406.6.3 Ventilation (Repair Garages).

Amend Section 406.6.3 to read as follows:

406.6.3 Ventilation. Repair garages shall be mechanically ventilated in accordance with Sections 406.6.3.1 and 406.6.3.2. The ventilation system shall be controlled at the entrance to the garage.

Section 406.6.3 Ventilation (Repair Garages).

Add new Sections 406.6.3.1 and 406.6.3.2 to read as follows:

406.6.3.1 Minimum ventilation. The mechanical ventilation system shall be capable of producing a ventilation rate of 1.5 cfm per square foot ($0.0076 \text{ m}^3/\text{s}\cdot\text{m}^2$) of floor area. Each engine repair stall shall be equipped with an exhaust pipe extension duct, extending to the outside of the building, which, if over 10 feet (3048 mm) in length, shall mechanically exhaust 300 cfm ($0.142 \text{ m}^3/\text{s}$).

406.6.3.2 Occupied spaces accessory to repair garages. Connecting offices, waiting rooms and similar uses that are accessory to a repair garage shall be supplied with conditioned air and maintained at a positive pressure.

Section 410.3.4 Proscenium Wall (Stages).

Amend Section 410.3.4 to read as follows:

410.3.4 Proscenium wall. Where the stage height is greater than 50 feet (15 240 mm), all portions of the stage shall be completely separated from the seating areas by a proscenium wall with not less than a 2-hour fire-resistance rating extending continuously from the foundation to the roof.

Exception: Where a stage is located in a building of Type I construction, the proscenium wall is permitted to extend continuously from the 2-hour fire-resistance-rated floor slab of the space containing the stage to the roof or floor deck above.

Section 410.3.5.1 Activation (Stage Proscenium Curtain).

Amend Section 410.3.5.1 to read as follows:

410.3.5.1 Activation. The curtain shall be activated by signal of water flow from any sprinkler system covering the stage as required by Section 410.6, by rate-of-rise heat detection installed in accordance with Section 907.10 operating at a rate of temperature rise of 15 to 20° F per minute (8 to 11° C per minute), and by an auxiliary manual control.

Section 410.6 Automatic Sprinkler System (Stages).

Amend Section 410.6 to read as follows, deleting Exceptions #1, #2, and #3:

410.6 Automatic sprinkler system. Stages shall be equipped with an automatic fire-extinguishing system in accordance with Chapter 9. Sprinklers shall be installed under the roof

and gridiron and under all catwalks and galleries over the stage. Sprinklers shall be installed in dressing rooms, performer lounges, shops and storerooms accessory to such stages.

Section 419.4 Visual Access.

Add Section 419.4 to read as follows:

419.4 Visual access. All front entrance doors of individual units in motels, hotels, apartment houses, condominiums, and vacation timeshare properties shall contain a means to provide occupants of the unit with visual access through the door.

Section 420.4 Design and Construction.

Amend Section 420.4 to read as follows, with Sections 420.4.1 through 420.4.2 remaining unchanged:

420.4 Design and construction. Hydrogen cutoff rooms shall be classified with respect to occupancy in accordance with Section 302.1 and separated from other areas of the building by not less than 1-hour fire barriers or as required by Section 508.2 or 508.3 as applicable. Rooms shall be provided with at least one automatic sprinkler to provide equipment and container cooling in case of fire.

Section 507.2 Non sprinklered, one story (Unlimited Area Buildings).

Amend Section 507.2 to read as follows:

507.2 Group F-2 or S-2, one story. The area of a one-story, Group F-2 or S-2 building shall not be limited when the building is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width and the building is provided with an automatic sprinkler system throughout when required by Section 903.2 or the Fire Code.

Section 507.3 Sprinklered, One Story (Unlimited Area Buildings).

Amend Section 507.3 to read as follows:

507.3 Sprinklered, one story. The area of a one-story, Group B, F, M or S building or a one-story Group A-4 building, of other than Type V construction, shall not be limited when the building is provided with an automatic sprinkler system throughout in accordance with Section 903.3.1.1 and is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width.

Exceptions:

1. Buildings and structures of Type I and II construction for rack storage facilities that do not have access by the public shall not be limited in height, provided that such buildings conform to the requirements of Sections 507.2 and 903.3.1.1 and NFPA 230.

2. Group A-1 and A-2 occupancies of other than Type V construction shall be permitted, provided:
 - 2.1 All assembly occupancies are separated from other spaces as required for separated uses in Section 508.3.3.4 with no reduction allowed in the fire-resistance rating of the separation based upon the installation of an automatic sprinkler system;
 - 2.2 Each Group A occupancy shall not exceed the maximum allowable area permitted in Section 503.1; and
 - 2.3 All required exits shall discharge directly to the exterior.

Section 603.1.2 Piping.

Amend Section 603.1.2 to read as follows:

603.1.2 Piping. The use of combustible piping materials shall be permitted when installed in accordance with the limitations of the *International Mechanical Code* and the *International Plumbing Code* and the following:

Sections 603.1.2 Piping.

Add Sections 603.1.2.1 through 603.1.2.5 to read as follows:

603.1.2.1 Equipment rooms. Combustible piping shall be permitted to be installed in an equipment room that is enclosed by 2-hour fire-resistance rated construction and protected throughout by automatic sprinklers. The combustible piping shall be permitted to be extended from the equipment room to other rooms provided the piping is encased in an approved, dedicated 2-hour fire-resistance rated assembly. Where such combustible piping penetrates a fire-resistance rated wall and/or floor/ceiling assembly, the penetration shall be protected by a through-penetration firestop system that is listed for the specific piping material and that has F and T ratings not less than the required fire-resistance rating of the penetrated assembly. The combustible piping shall not penetrate more than a single floor.

603.1.2.2 Chemical waste systems. Combustible piping shall be permitted to be installed for chemical waste and vent systems when the chemical waste would otherwise react with noncombustible piping. Combustible piping serving such systems shall be protected as required in Section 603.1.2.1.

603.1.2.3 Medical water systems. Combustible piping shall be permitted to be installed for purified water systems that are used in conjunction with medical treatment systems, such as dialysis. Combustible piping serving such systems shall be protected as required in Section 603.1.2.1.

603.1.2.4 Bars and soda fountains. Combustible distribution/process piping serving bars and soda fountains shall be permitted to be installed below a fire-resistance rated slab-on-grade or sleeved through a fire-resistance rated floor/ceiling assembly.

603.1.2.5 Fire sprinkler systems. CPVC piping that is specifically listed and labeled for fire protection use shall be permitted to be installed for fire sprinkler system piping provided that it is installed in accordance with its listing, the manufacturer's installation requirements, and the *International Building Code*.

Table 704.8 Maximum area of exterior wall openings.

Amend Table 704.8 as follows, all footnotes remain unchanged:

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS ^a FIRE SEPARATION DISTANCE (feet)								
CLASSIFICATION OF OPENINGS								
	0 to 3 ^{f, j}	Greater than 3 to 5 ^{c, g}	Greater than 5 to 10 ^{c, e, g, h}	Greater than 10 to 15 ^{d, e, g}	Greater than 15 to 20 ^{d, g}	Greater than 20 to 25 ^{d, g}	Greater than 25 to 30 ^{d, g}	Greater than 30
Unprotected	Not Permitted	Not Permitted ^c	10% ⁱ	15% ⁱ	25% ⁱ	45% ⁱ	70% ⁱ	No Limit ^b
Protected	Not Permitted	Not Permitted ^c	25%	45%	75%	No Limit ^b	No Limit ^b	No Limit ^b

Footnotes remain unchanged.

Section 707.2 Shaft enclosure required.

Amend Exception #8 of Section 707.2 to read as follows:

8. A shaft enclosure is not required for automobile ramps, or exhaust or supply ducts that are dedicated to the parking garage ventilation system and are separated from other building shafts by not less than 2-hour fire-resistance-rated construction, in open and enclosed parking garages constructed in accordance with Sections 406.3 and 406.4, respectively.

Section 709.4 Continuity.

Amend Section 709.4 to read as follows:

709.4 Continuity. Smoke barriers shall form an effective membrane continuous from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, deck or slab above, including continuity through concealed spaces, such as those found above suspended ceilings, and including interstitial structural and mechanical spaces. The supporting construction shall be protected to afford the required fire-resistance rating of the wall or floor supported in buildings of other than Type IIB, IIIB, or VB construction.

Exception: Smoke-barrier walls are not required in interstitial spaces where such spaces are designed and constructed with ceilings that provide resistance to the passage of fire and smoke equivalent to that provided by the smoke-barrier walls.

Section 715.4.7 Door Closing.

Amend Section 715.4.7 to read as follows:

Section 715.4.7 Door closing. Fire doors in fire walls shall be automatic closing in accordance with this section. Fire doors in other than fire walls shall be self-closing or automatic-closing in accordance with this section.

Exceptions:

1. Fire doors located in common walls separating sleeping units in Group R-1, and between dwelling units of transient nature in Group R-2, shall be permitted without automatic- or self-closing devices.
2. The elevator car doors and the associated hoistway enclosure doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase 1 emergency recall operation.

Section 717.5 Combustible materials in concealed spaces in Type I or II construction.

Amend Section 717.5 to read as follows:

717.5 Combustible materials in concealed spaces in Type I or II construction. Combustible materials shall not be permitted in concealed spaces of buildings of Type I or II construction.

Exceptions:

1. Combustible materials in accordance with Section 603.
2. Class A interior finish materials classified in accordance with Section 803 where the concealed space is protected with fire sprinklers as required by the Fire Code when fire sprinklers are required in the building by another section in this code.
3. Combustible insulation and covering on pipe and tubing, installed in concealed spaces other than plenums, complying with Section 719.7.
4. CPVC fire sprinkler system piping listed and labeled for fire protection use. Piping shall have a peak optical density not greater than 0.50, an average optical density of not greater than 0.15, and a flame spread of not greater than 5 feet when tested in accordance with UL 1887.

Section 803.4.4 Materials.

Amend Exception 1 of Section 803.4.4 to read as follows, with the remainder of the section remaining unchanged:

Exceptions:

1. Non-combustible materials.

Section 806.1.2 Combustible decorative materials.

Amend Sections 806.1.2 to read as follows:

806.1.2 Combustible decorative materials. The permissible amount of decorative materials meeting the flame propagation performance criteria of NFPA 701 shall not exceed 10 percent of the specific wall or ceiling area to which it is attached.

Exceptions:

1. In auditoriums in Group A, the permissible amount of decorative material meeting the flame propagation performance criteria of NFPA 701 shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and where the material is installed in accordance with Section 803.4.
2. The amount of fabric partitions suspended from the ceiling and not supported by the floor in Group B and M occupancies shall not be limited.

Section 806.5 Interior trim.

Amend Sections 806.5 to read as follows:

806.5 Interior trim. Material, other than foam plastic used as interior trim shall have a minimum Class C flame spread and smoke-developed index when tested in accordance with ASTM E 84, as described in Section 803.1. combustible trim, excluding handrails and guardrails, shall not exceed 10 percent of the specific wall or ceiling area to which it is attached.

Section 903.2.2 Group E (Sprinkler Systems).

Amend Section 903.2.2 to read as follows:

903.2.2 Group E. An automatic sprinkler system shall be provided for Group E occupancies where one or more of the following conditions exists:

1. The Group E fire areas have an occupant load of 50 or more.
2. Any portion of the Group E fire areas is below the level of exit discharge.
3. Rooms used for kindergarten, first or second-grade pupils or for child care purposes, are located above or below the first story.
4. Daycare facilities when there is occupancy from 12:00 a.m. to 6:00 a.m.

Exception: An automatic sprinkler system is not required in any fire area or area below the level of exit discharge where every classroom throughout the building has at least one exterior exit door at ground level.

Section 903.2.5 Group I (Sprinkler Systems).

Amend Section 903.2.5 to read as follows, deleting the exception:

903.2.5 Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

Section 903.3.1.1 NFPA 13 Sprinkler Systems.

Amend Section 903.3.1.1 to read as follows:

903.3.1.1 NFPA 13 sprinkler systems. Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 except as provided in Section 903.3.1.1.1.

Section 903.3.1.1.1 Exempt Locations.

Amend Section 903.3.1.1.1 to read as follows:

Section 903.3.1.1.1 Exempt Locations. Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire extinguishing system, in accordance with Section 904. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.
3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling assemblies having a fire-resistance rating of not less than 2 hours.

Section 903.3.1.2 NFPA 13R Sprinkler Systems.

Amend Section 903.3.1.2 to read as follows, with Section 903.3.1.2.1 remaining unchanged:

903.3.1.2 NFPA 13R sprinkler systems. Where allowed in buildings of Group R-1 or R-2, up to and including two stories in height, automatic sprinklers systems are permitted to be installed throughout in accordance with NFPA 13R.

Section 903.3.5.2 Secondary Water Supply.

Amend Section 903.3.5.2 to read as follows:

903.3.5.2 Secondary water supply. A secondary on-site water supply equal to the hydraulically calculated sprinkler demand, including the hose stream requirement, but not less than 15,000 gallons, shall be provided for high-rise buildings. The secondary water supply shall have a duration of not less than 30 minutes as determined by the occupancy hazard classification in accordance with NFPA 13.

Exception: Existing buildings.

Section 903.4.1 Signals.

Amend exception #2 of Section 903.4.1 to read as follows:

2. Backflow prevention devices located at the municipal water supply connection are not required to be monitored when either locked in the open position, or are located within a underground vault or a protective enclosure (hot box) provided by the water purveyor.

Section 903.6 Fire Pump Rooms.

Add a new Section 903.6 to read as follows:

903.6 Fire pump rooms. Where fire pumps are required to provide the required sprinkler and/or standpipe system demand, the fire pumps shall be located in a dedicated room enclosed by fire barriers that have a fire-resistance rating of not less than 2 hours. Fire pump rooms shall be provided with permanent lighting and permanent means to maintain the temperature in the room above 40°F (5°C). All fire pump rooms shall be provided with a floor drain.

Section 905.3.1 Building Height.

Amend Section 905.3.1 to read as follows, including deleting all exceptions:

Section 905.3.1 Building Height. Approved Class I standpipe systems shall be installed throughout buildings where the floor level of the highest story is located more than 30 feet (9144mm) above the lowest level of the fire department vehicle access, or where the floor level of the lowest story is located more than 30 feet (9144mm) below the highest level of fire department vehicle access.

Section 907.2.7.1 Occupant notification.

Delete Section 907.2.7.1 without substitution.

Section 907.2.12 High-Rise Buildings (Fire Alarm).

Amend Section 907.2.12 to read as follows:

907.2.12 High-rise buildings. Buildings with a floor used for human occupancy located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access shall be provided with an automatic fire alarm system and an emergency voice/alarm communication system in accordance with Section 907.2.12.2.

Exceptions:

1. Airport traffic control towers in accordance with Sections 412 and 907.2.22.
2. Open parking garages in accordance with Section 406.3.
3. Low-hazard special occupancies in accordance with Section 503.1.1.

Section 907.2.12.1 Automatic Fire Detection (High-Rise Buildings).

Amend Section 907.2.12.1 to read as follows:

907.2.12.1 Automatic fire detection. Smoke detection shall be provided in accordance with this section. Smoke detectors shall be connected to an automatic fire alarm system. The activation of any detector required by this section shall operate the emergency voice/alarm communication system. Smoke detectors shall be located as follows:

1. In each room containing oil filled transformers, each room containing dry-type transformers with a rating in excess of 112.5 kVA, each telephone equipment or similar type electronics room, elevator machine rooms and in elevator lobbies.
2. In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m³/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.
3. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system. In Group R-1 and R-2 occupancies a listed smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m³/s) and serving not more than 10 air inlet openings.

Exception: Where mechanical and electrical rooms are provided with alternative protection in accordance with Section 903.1.1, smoke detectors shall also be provided in these rooms in accordance with this Section.

Section 907.2.12.3 Fire department communication system.

Amend Section 907.2.12.3 to read as follows, with the exception deleted:

Section 907.2.12.3 Fire department communication system. Approved fire department communication systems designed and installed in accordance with the Fire Code shall be provided for fire department use. It shall operate between a fire command center complying with Section 911 and elevators, elevator lobbies, emergency and standby power rooms, fire pump rooms, areas of refuge and inside enclosed exit stairways. The fire department communication device shall be provided at each floor level within the enclosed stairway.

Section 907.8.2 High-Rise Buildings (Fire Alarm).

Amend Section 907.8.2 to read as follows:

907.8.2 High-rise buildings. In buildings with a floor used for human occupancy that is located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access, a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:

1. Smoke detectors.
2. Sprinkler water-flow devices.
3. Manual fire alarm devices.
4. Other approved types of automatic fire detection devices or suppression systems.

Section 907.9.2 Audible alarms.

Section 907.9.2 is amended to read as follows.

907.9.2 Audible alarms. Audible alarm notification appliances shall be provided and shall sound a distinctive sound that is not to be used for any purpose other than that of a fire alarm. The audible alarm notification appliances shall provide a sound pressure level of 15 decibels (dBA) above the average ambient sound level or 5 dBA above the maximum sound level having a duration of at least 60 seconds, whichever is greater, in every occupied space within the building. The minimum sound pressure levels shall be: 80 dBA in occupancies in Groups R and I-1; 90 dBA in mechanical equipment rooms and 80 dBA in other occupancies. The maximum sound pressure level for audible alarm notification appliances shall be 120 dBA at the minimum hearing distance from the audible appliance. Where the average ambient noise is greater than 105 dBA, visible alarm notification appliances shall be provided in accordance with NFPA 72 and audible alarm notification appliances shall not be required.

Exception: Visible alarm notification appliances shall be allowed in lieu of audible alarm notification appliances in critical-care areas of Group I-2 occupancies.

Section 909.5.2 Opening Protection.

Add exception #6 to Section 909.5.2 to read as follows:

6. Passive smoke control systems shall be permitted to be self-closing in the following locations:
 - 6.1. Guest Rooms
 - 6.2. Individual dwelling units
 - 6.3. Mechanical rooms
 - 6.4. Elevator machine rooms
 - 6.5. Electrical rooms used exclusively for that purpose

- 6.6. Doors typically maintained in a closed position as approved by the building official.

Section 909.17 System Response Time.

Amend Section 909.17 to read:

909.17 System response time. Smoke-control system activation shall be initiated immediately after receipt of an appropriate automatic or manual activation command. Smoke control systems shall activate individual components (such as dampers and fans) in the sequence necessary to prevent physical damage to the fans, dampers, ducts and other equipment. For purposes of smoke control, the fire-fighter's smoke control panel response time shall be the same for automatic or manual smoke control action initiated from any other building control point. The total response time, including that necessary for detection, shut-down of operating equipment and smoke control system startup, shall allow for full operational mode to be achieved before the conditions in the space exceed the design smoke condition. Upon receipt of an alarm condition at the fire alarm control panel, fans, dampers and automatic doors shall have achieved their expected operating state and confirmation of proper operation shall be indicated at the smoke control panel within 60 seconds. Verification shall be reported in the required final report.

Section 909.18.8.3 Reports.

Amend Section 909.18.8.3 to read as follows, with Section 909.18.8.3.1 remaining unchanged:

[F] 909.18.8.3 Reports. A complete report of testing shall be prepared by the special inspector or special inspection agency. The report shall include identification of all devices by manufacturer, nameplate data, design values, measured values and identification tag or mark. The report shall be reviewed by the responsible registered design professional and, when satisfied that the design intent has been achieved, the responsible registered design professional shall seal, sign and date the report with a statement as follows:

I have reviewed this report and by personal knowledge and on-site observation certify that the smoke-control system is in substantial compliance with the design intent, and to the best of my understanding complies with requirements of the code.

Section 909.18.10 Alternative Testing Method.

Add a new Section 909.18.10 to read:

909.18.10 Alternative testing method. When required by the building official, theatrical smoke or other approved tracer gases shall be used during final acceptance testing to visually verify air movement.

Section 909.20 Smokeproof enclosure.

Amend Section 909.20 to read as follows, with Sections 909.20.1 through 909.20.3.3 remaining unchanged:

909.20 Smokeproof enclosures. Where required by Section 1020.1.7, a smokeproof enclosure shall be constructed in accordance with this section. A smokeproof enclosure shall consist of an enclosed interior exit stairway that conforms to Section 1020.1 and an open exterior balcony, ventilated vestibule, or pressurized stair and vestibule meeting the requirements of this section. Where access to the roof is required by the *International Fire Code*, such access shall be from the smokeproof enclosure where a smokeproof enclosure is required.

Section 909.20.4 Mechanical ventilation alternative.

Replace Sections 909.20.4 through 909.20.4.4 with the following new Sections 909.20.4 through 909.20.4.3, to read as follows:

909.20.4 Pressurized stair and vestibule alternative. The provisions of Sections 909.20.4.1 through 909.20.4.4 shall apply to smokeproof enclosures using a pressurized stair and pressurized entrance vestibule.

909.20.4.1 Vestibule doors. The door assembly from the building into the vestibule shall be a fire door assembly complying with Section 715.4. The door assembly from the vestibule to the stairway shall not have less than a 20-minute fire protection rating and meet the requirements for a smoke door assembly in accordance with Section 715.4.3. The door shall be installed in accordance with NFPA 105.

909.20.4.2 Pressure difference. The stair enclosure shall be pressurized to a minimum of 0.05 inch of water gage (12.44 Pa) positive pressure relative to the vestibule with all stairway doors closed under the maximum anticipated stack pressures. The vestibule with doors closed shall have a minimum of 0.05 inch of water gage (12.44 Pa) positive pressure relative to the fire floor. The pressure difference across doors shall not exceed 30 lbs (133-N) maximum force to begin opening the door.

909.20.4.3 Dampered relief opening. A controlled relief vent capable of discharging a minimum of 2,500 cfm (1180 L/s) of air at the design pressure difference shall be located in the upper portion of the pressurized exit enclosure.

Section 909.20.5 Stair pressurization alternative.

Delete Section 909.20.5 without replacement.

Section [F] Section 910.3.2.2 Sprinklered buildings.

Amend Section 910.3.2.2 to read as follows:

[F] Section 910.3.2.2 Sprinklered buildings. Where installed in buildings provided with an approved automatic sprinkler system, smoke and heat vents may operate automatically by

actuation of a heat-responsive device rated at a minimum of 350°F (177°C). Smoke and heat vents shall also be designed for manual operation.

Table 910.3 Requirements for Draft Curtains and Smoke and Heat Vents.

Amend Table 910.3 to read as follows:

**[F] TABLE 910.3
REQUIREMENTS FOR DRAFT CURTAINS AND SMOKE AND HEAT VENTS***

OCCUPANCY GROUP AND COMMODITY CLASSIFICATION	DESIGNATED STORAGE HEIGHT (FEET)	NON-SPRINKLERED					SPRINKLERED			
		MINIMUM DRAFT CURTAIN DEPTH (FEET)	MAXIMUM AREA FORMED BY DRAFT CURTAINS (SQUARE FEET)	VENT-AREA-TO-FLOOR-AREA RATIO ^c	MAXIMUM SPACING OF VENT CENTERS (FEET)	MAXIMUM DISTANCE TO VENTS FROM WALL OR DRAFT CURTAINS ^b (FEET)	DRAFT CURTAINS	VENT-AREA-TO-FLOOR-AREA RATIO ^c	MAXIMUM SPACING OF VENT CENTERS (FEET)	MAXIMUM DISTANCE TO VENTS FROM WALL ^a (FEET)
Group F-1 and S-1	-	0.2 X H ^a BUT ≥ 4	50,000	1:100	120	60	NOT PERMITTED	1:100	100	50
High-Piled Storage (see Section 910.2.3) I-IV (Option 1)	≤ 20	6	10,000	1:100	100	60				
	>20 ≤ 40	6	8,000	1:75	100	55				
High-Piled Storage (see Section 910.2.3) I-IV (Option 2)	≤ 20	4	3,000	1:75	100	55				
	>20 ≤ 40	4	3,000	1:50	100	50				
High-piled Storage (see Section 910.2.3) High hazard (Option 1)	≤ 20	6	6,000	1:50	100	50				
	>20 ≤ 30	6	6,000	1:40	90	45				
High-piled Storage (see Section 910.2.3) High hazard (Option 2)	≤ 20	4	4,000	1:50	100	50				
	>20 ≤ 30	4	2,000	1:30	75	40				

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m².

- Requirements for rack storage heights in excess of those indicated shall be in accordance with the Fire Code. For solid-piled storage heights in excess of those indicated, an approved engineering design shall be used.
- The distance specified is the maximum distance from any vent in a particular draft curtained area to walls or draft curtains which form the perimeter of the draft curtained area.
- Where draft curtains are not required, the vent-area-to-floor-area ration shall be calculated based on a minimum draft curtain depth of 6 feet (Option 1).
- "H" is the height of the vent, in feet, above the floor.

Section 911.1 Features (Fire Command Center).

Amend Section 911.1 to read as follows:

911.1 Features. Where required by other sections of this code, a fire command center for fire department operations shall be provided. The location and accessibility of the fire command center shall be approved by the fire department. The fire command center shall have an access door opening to the exterior of the building and be separated from the remainder of the building by not less than a 2-hour fire barrier constructed in accordance with Section 706 or horizontal assembly constructed in accordance with Section 711, or both. The room shall have a minimum size equal to 0.015 percent of the total building area of the facility served or 150 square feet (14 m²), whichever is greater, with a minimum dimension, in feet, of 0.8 times the square root of the room area (in square feet). A layout of the fire command center and all features required by the section to be contained therein shall be submitted to the fire department for approval prior to installation. The fire command center shall comply with NFPA 72 and shall contain the following features:

1. The emergency voice/alarm communication system unit.
2. The fire department communications unit.
3. Fire detection and alarm system annunciator unit.
4. Annunciator unit visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for air-handling systems.
6. The fire-fighter's control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking stairway doors simultaneously.
8. Sprinkler valve and water-flow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with direct access to the public telephone system.
11. Fire pump status indicators.
12. Current, approved building plans including the Master Exit Plans, approved fire protection system shop drawings, approved Smoke Control Diagrams, the approved Fire Protection Report, fire/emergency preplans for the facility, and manufacturer's operation manuals for all fire protection and life safety systems.
13. A minimum 3-feet by 7-feet worktable capable of holding building plans in an open position.
14. Generator supervision devices, manual start and transfer features.
15. Public address system, where specifically required by other sections of this code.
16. A minimum 3-feet by 4-feet dry-erase marker board, with dry erase marker and an eraser attached.
17. Separate shunt trip switches for normal and emergency power.

Section 1007.3 Exit stairways.

Add exception #6 to Section 1007.3 to read as follows:

6. Areas of refuge are not required at exit stairways in buildings or facilities that are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

Section 1007.4 Elevators.

Add exception #2 to Section 1007.4, so that the exceptions read as follows:

Exceptions:

1. Elevators are not required to be accessed from an area of refuge or horizontal exit in open parking garages.
2. Elevators are not required to be accessed from an area of refuge or horizontal exit in buildings or facilities that are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

Section 1008.1.4 Floor Elevation (Doors).

Add new Exception #6 to Section 1008.1.4 to read as follows, with the remainder of the section unchanged:

Exceptions:

6. A single step with a maximum height of 7 inches (178 mm) is permitted for doors serving building equipment rooms that are not normally occupied and are not required to be accessible by Chapter 11.

Section 1008.1.8.6 Delayed Egress Locks.

Amend Section 1008.1.8.6 to read as follows:

1008.1.8.6 Delayed egress locks. Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A, E and H occupancies in buildings which are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and an approved automatic smoke detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
2. The door unlock upon loss of power controlling the lock or lock mechanism.
3. The door locks shall have the capability of being unlocked by a signal from the fire command center.
4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for 1 second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only.
5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 SECONDS.
6. Emergency lighting shall be provided at the door.

Section 1008.1.8.7 Stairway Doors.

Amend Section 1008.1.8.7 to read as follows:

1008.1.8.7 Stairway doors. Interior stairway means of egress doors shall be operable from both sides without the use of a key or special knowledge or effort.

Exceptions:

1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.
2. This section shall not apply to doors arranged in accordance with Section 403.12.
3. In stairways serving buildings other than high-rise buildings, doors are permitted to be locked from the side opposite the egress side, provided they are openable from the egress side. Except for exit discharge doors, the stairway doors shall be automatically unlocked simultaneously without unlatching upon any of the following: a signal from the fire command center, if present, or a signal by emergency personnel from an approved location inside the building; activation of a fire alarm system or a fire sprinkler system in an area served by the stairway; or failure of the power supply.

Section 1008.3 Turnstiles.

Amend Section 1008.3 to read as follows:

1008.3 Turnstiles. Turnstiles or similar devices that restrict travel to one direction shall not be placed so as to obstruct any required means of egress.

Exception: Each turnstile or similar device shall be credited with no more than a 50-person capacity where all of the following provisions are met:

1. Each device shall turn free in the direction of egress travel when primary power is lost.
2. Such devices are not given credit for more than 50 percent of the required egress capacity.
3. Each device is not more than 39 inches (991 mm) high.
4. Each device has at least 16.5 inches (419 mm) clear width at and below a height of 39 inches (991 mm) and at least 22 inches (559 mm) clear width at heights above 39 inches (991 mm).
5. Buildings are protected throughout by an approved automatic sprinkler system or an approved automatic smoke detection system.
6. Activation of the building automatic sprinkler or fire detection system shall automatically unlock the turnstile. The turnstile shall remain unlocked until the fire protection system is reset.

Where located as part of an accessible route, turnstiles shall have at least 36 inches (914 mm) clear at and below a height of 34 inches (864 mm), at least 32 inches (813 mm) clear width between 34 inches (864 mm) and 80 inches (2032 mm) and shall consist of a mechanism other than a revolving device.

Section 1011.6 Low-Level Exit Signs.

Add Section 1011.6 to read as follows:

1011.6 Low-level exit signs. Where exit signs are required by Section 1011.1, additional approved low-level exit signs that are internally or externally illuminated shall be provided in all corridors serving guest rooms in Group R, Division 1 Occupancies. The bottom of each such

sign shall not be less than 6 inches (152 mm) nor more than 8 inches (203mm) above the floor level and shall indicate the path of exit travel. For exit and exit-access doors, the sign shall be on the door or adjacent to the door, with the closest edge of the sign within 4 inches (102 mm) of the doorframe.

Section 1015.1 Exit or exit access doors required.

Add exception #2 to Section 1015.1, so that the exceptions read as follows:

Exceptions:

1. Group I-2 occupancies shall comply with Section 1014.2.2.
2. In Groups R-2 and R-3 occupancies, one means of egress is permitted within and from individual dwelling units with a maximum occupant load of 20 where the dwelling unit is equipped throughout with an automatic sprinkler system in accordance with Sections 903.3.1.1 or 903.3.1.2.

Section 1015.2.2 Three or More Exits.

Amend Section 1015.2.2 to read as follows:

1015.2.2 Three or more exits or exit access doorways. Where access to three or more exits is required, at least two exit doors or exit access doorways shall be arranged in accordance with the provisions of Section 1015.2.1. Additional exits or exit access doorways shall be arranged a reasonable distance apart so that if one becomes blocked, the others will be available.

Section 1016.4 Exit Access Travel Distance.

Add Section 1016.4 to read as follows:

1016.4 Corridor Increases. The travel distances specified in Table 1016.1 may be increased up to an additional 100 feet (30 480 mm) provided that the last portion of exit access leading to the exit occurs within a minimum one-hour fire-resistance rated corridor. The length of such corridor shall not be less than the amount of increase taken, in feet (mm).

Section 1020.1.7 Smokeproof Enclosures.

Amend Section 1020.1.7 to read as follows, with Section 1017.1.7.1 remaining unchanged:

1020.1.7 Smokeproof Enclosures. In buildings required to comply with Section 403 or 405, each of the exits of a building that serves stories where the floor surface is located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access or more than 30 feet (9144 mm) below the level of exit discharge serving such floor levels shall be a smokeproof enclosure or pressurized stairway in accordance with Section 909.20. Pressurization shall occur automatically upon activation of an approved fire alarm system.

Section 1020.1.7.2 Enclosure Access.

Delete the exception from Section 1020.1.7.2 without replacement

Section 1023.2 Use in a Means of Egress (Exterior Exit Ramps/Stairways).

Amend Section 1023.2 to read as follows:

1023.2 Use in a means of egress. Exterior exit ramps and stairways shall not be used as an element of a required means of egress for Group I-2 occupancies. For occupancies in other than Group I-2, exterior exit ramps and stairways shall be permitted as an element of a required means of egress for buildings not exceeding six stories above grade plane or having occupied floors more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access.

Section 1025.6.2.3 Automatic Sprinklers (Smoke-Protected Seating).

Delete Exceptions #1, #2, and #3 from Section 1025.6.2.3 without replacement.

Section 1102.1 Definitions.

Amend Section 1102.1; "Self-Service Storage Facility" to read as follows:

SELF-SERVICE STORAGE FACILITY. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing property on a self-service basis.

Section 1203.1 General (Ventilation).

Amend Section 1203.1 to read as follows:

1203.1 General. Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with Section 1203.6 and the *International Mechanical Code*.

Section 1203.2 Attic Spaces.

Amend Section 1203.2 to read as follows:

1203.2 Attic spaces. Where determined necessary by the building official due to atmospheric or climatic conditions, enclosed attics and enclosed rafter space formed where ceiling are applied directly to the underside of roof framing member shall have cross ventilation openings protected against the entrance of rain and snow. Blocking and bridging shall be arranged so as not to interfere with the movement of air. A minimum of 1 inch (25 mm) of airspace shall be provided between the insulation and the roof sheathing. The net free ventilating area shall not be less than $\frac{1}{150}$ of the area of the space ventilated, with 50 percent of the required ventilating area provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet (914 mm)

above eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents.

Exception: The minimum required net free ventilating area shall be $\frac{1}{300}$ of the area of the space ventilated, provided a vapor retarder having a transmission rate not exceeding 1 perm in accordance with ASTM E 96 is installed on the warm side of the attic insulation and provided 50 percent of the required ventilating area provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet (914) above eave or cornice vents, with the balance of the required ventilation provided by eave or cornice vents.

Sections 1203.4.1.3, 1203.4.1.4, and 1203.4.1.5 – Ventilation Area Required.

Add Sections 1203.4.1.3, 1203.4.1.4, and 1203.4.1.5 to read as follows:

1203.4.1.3 Guest rooms and habitable rooms. Guest rooms and habitable rooms within a dwelling unit or congregate residence in R occupancies, when provided with natural ventilation by means of openable exterior openings, shall be provided with a minimum ventilation area of 5 square feet (0.46 m²).

1203.4.1.4 Bathrooms, water closets, laundry rooms and similar rooms in R occupancies. Bathrooms, water closet compartments, laundry rooms and similar rooms in R occupancies, when provided with natural ventilation by means of openable exterior openings, shall be provided with a minimum ventilation area of 1.5 square feet (0.14 m²).

1203.4.1.5 Toilet rooms. Toilet rooms, when provided with natural ventilation by means of openable exterior openings, shall be provided with a minimum ventilation area of 3 square feet (0.28 m²), or a vertical duct not less than 100 square inches (64 516 mm²) in area for the first water closet plus 50 square inches (32 258 mm²) of additional area for each additional water closet.

Section 1203.4.2.1 Bathrooms (Ventilation).

Delete Section 1203.4.2.1 without replacement.

Section 1203.6 Mechanical Ventilation.

Add Sections 1203.6 through 1203.6.5.2 to read as follows:

1203.6 Mechanical ventilation. Mechanically operated ventilation systems shall be in accordance with Sections 1203.6.1 through 1203.6.4.

1203.6.1 General. In all enclosed portions of Groups A, B, E, F, H, I, M and S Occupancies customarily occupied by human beings, when mechanically operated ventilation systems are provided in lieu of required exterior openings for natural ventilation, such system shall be capable of supplying a minimum of 15 cubic feet per minute (7 L/s) of outside air per occupant in all portions of the building during such time as the building is occupied. If the velocity of the

air at a register exceeds 10 feet per second (3 m/s), the register shall be placed more than 8 feet (2438 mm) above the floor directly beneath. Such exterior openings shall open directly onto a public way or a yard or court as set forth in Section 1206.

In toilet rooms, if mechanically operated systems are to be utilized for required ventilation, such systems shall be capable of providing a complete change of air every 15 minutes. Such mechanically operated exhaust systems shall be connected directly to the outside, and the point of discharge shall be at least 3 feet (914 mm) from any opening that allows air entry into occupied portions of the building.

1203.6.2 Groups B, F, M and S Occupancies. In all buildings classified as Groups B, F, M and S Occupancies or portions thereof where Class I, II or III-A liquids are used, a mechanically operated exhaust ventilation system shall be provided sufficient to produce a minimum of six air changes per hour. Such exhaust ventilation shall be taken from a point at or near the floor level.

1203.6.3 Group H Occupancies. All Group H Occupancies shall comply with the Fire Code, Mechanical Code and Section 415. In Group H, Division 5 Occupancies, mechanical exhaust ventilation shall be provided in accordance with 415.8.2.6, 415.8.4.3, 415.8.5.7, 415.8.10.2 and other appropriate Sections of this code. Rooms, areas or spaces of Group H Occupancies in which explosive, corrosive, combustible, flammable or highly toxic dusts, mists, fumes, vapors or gases are or may be emitted due to the processing, use, handling or storage of materials shall be mechanically ventilated as required by Section 4141.3, the Fire Code, and the Mechanical Code.

1203.6.4 Group R Occupancies. In Group R Occupancies, in lieu of required exterior openings for natural ventilation, a mechanically operated ventilation system may be provided. Such system shall be capable of providing two air changes per hour in guest rooms, dormitories, habitable rooms and in public corridors with a minimum of 15 cubic feet per minute (7 L/s) of outside air per occupant during such time as the building is occupied.

In lieu of required exterior openings for natural ventilation in bathrooms containing a bathtub, shower or combination thereof, laundry rooms, and similar rooms, a mechanically operated ventilation system capable of providing a minimum of five air changes per hour shall be provided. Such systems shall be connected directly to the outside, and the point of discharge shall be at least 3 feet (914 mm) from any opening that allows air entry into occupied portions of the building. Bathrooms that contain only a water closet, lavatory or combination thereof and similar rooms may be ventilated with an approved mechanical re-circulating fan or similar device designed to remove odors from the air.

1203.6.5 Motor Vehicle Related Occupancies.

1203.6.5.1 Repair garages. Ventilation in repair garages shall be in accordance with Section 406.6.3.

1203.6.5.2 Enclosed parking garages. Ventilation in enclosed parking garage shall be in accordance with Section 406.4.2.

Section 1603.1 General.

Add Exception #6 to Section 1603.1 to read as follows, with the remainder of the section unchanged:

6. Average dead loads for roofing material.

Table 1607.1 Minimum Uniformly Distributed Live Loads and Minimum Concentrated Live Loads.

Amend item #28 of Table 1607.1 to read as follows, and add footnote "m" to read as follows:

OCCUPANCY OR USE	UNIFORM (psf)	CONCENTRATED (lbs.)
28. Residential		
One- and two-family dwellings		
Uninhabitable attics without storage ^{i, m}	10	
Uninhabitable attics with limited storage ^{i, j, k, m}	20	
Habitable attics and sleeping areas	40	----
All other areas except balconies and decks	40	
Hotels and multiple-family dwellings		
Private rooms and corridors serving them	40	
Public rooms and corridors serving them	100	

- m. Attics, designed per uniform loads described for uninhabitable attics, are not required to be designed for the additional concentrated load of Item 32.

Section 1607.5 Partition loads.

Amend Section 1607.5 to read as follows:

1607.5 Partition loads. In office buildings and in other buildings where partition locations are subject to change, provisions for partition weight shall be made, whether or not partitions are shown on the construction documents, unless the specified live load exceeds 80 psf (3.83 kN/m²). The partition load shall not be less than a uniformly distributed live load of 20 psf (0.96 kN/m²).

Section 1610.1 Soil Lateral Loads.

Amend Section 1610.1 to read as follows, with the exception deleted:

1610.1 General. Basement, foundation and retaining walls shall be designed to resist lateral soil loads. When a geotechnical report is not required by the building official the design active pressure shall be 45 psf/ft and the at-rest pressure shall be 60 psf/ft. Basement walls and other walls in which horizontal movement is restricted at the top shall be designed for at-rest pressure, unless specified otherwise in a soil investigation report approved by the building official. Retaining walls free to move and rotate at the top are permitted to be designed for active

pressure. Design lateral pressure from surcharge loads shall be added to the lateral earth pressure load. Design lateral pressure shall be increased if soils with expansion potential are present at the site.

Section 1610.1.1 Basement, foundation and retaining walls in seismic design category D, E or F.

Add Section 1610.1.1 to read as follows:

1610.1.1 Basement, foundation and retaining walls in seismic design category D, E or F.

All basement, foundation, and retaining walls in seismic design categories D, E, or F shall be designed to resist the seismic load due to the lateral earth pressure based on the following equations.

For yielding walls: $\frac{3}{8} (k_H) (\text{backfill soil density}) (H)^2$ (Equation 16-35a)

For nonyielding walls: $(k_H) (\text{backfill soil density}) (H)^2$ (Equation 16-35b)

Where $k_H = S_{DS} / 2.5$

H = the height of the backfill behind the wall

The point of application of the resultant dynamic thrust is taken at a height of 0.6H above the base of the wall (i.e.; an inverted trapezoidal pressure distribution).

Section 1612.3 Establishment of Flood Hazard Areas.

Amend Section 1612.3 to read as follows:

1612.3 Establishment of flood hazard areas. To establish flood hazard areas, the governing body shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study for Clark County, Nevada and Incorporated Areas," dated September 27, 2002, as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.

Section 1613.1 Scope.

Amend Section 1613.1 to read as follows:

1613.1. Scope. Every structure, and portion thereof, including nonstructural components that are permanently attached to structures and their supports and attachments, shall be designed and constructed to resist the effects of earthquake motions in accordance with ASCE 7, excluding Chapter 14 and Appendix 11A. The seismic design category for a structure is permitted to be determined in accordance with Section 1612 or ASCE 7.

Exceptions:

1. The seismic-force-resisting system of wood-framed buildings that conform to the provisions of Section 2308 are not required to be analyzed as specified in this section.
2. Agricultural storage structures intended only for incidental human occupancy.
3. Structures that require special consideration of their response characteristics and environment that are not addressed by this code or ASCE 7 and for which other regulations provide seismic criteria, such as vehicular bridges, electrical transmission towers, hydraulic structures, buried utility lines and their appurtenances, and nuclear reactors.

Section 1613.5.1 Mapped acceleration parameters.

Amend Section 1613.5.1 to read as follows:

1613.5.1 Mapped acceleration parameters. The parameters S_S and S_1 shall be determined from the 0.2 and 1-second spectral response accelerations shown on Figures 1613.5(1) through 1613.5(14) or from the 0.2 and 1-second spectral response accelerations with 2% probability of exceedance in 50 years using the latest probabilistic maps or data made available by the United States Geological Survey. Where S_1 is less than or equal to 0.04 and S_S is less than or equal to 0.15, the structure is permitted to be assigned to Seismic Design Category A.

Section 1613.5.5 Site classification for seismic design.

Amend the last paragraph of the section 1613.5.5 to read as follows, with the remainder of the section unchanged:

The rock categories, Site Classes A and B, shall not be used if there is more than 10 feet (3048 mm) of soil between the rock surface (Classes A and B) and the bottom of the spread footing or mat foundation. This provision shall be required when a soil shear wave velocity, v_s , is less than 2,500 fps within 10 feet of foundation bottoms.

Section 1613.5.5.1 Steps for classifying a site.

Amend Section 1613.5.5.1 by adding step #4 to read as follows:

4. To classify a site as a site class A, B, or C per Table 1613.5.2 a minimum of one exploration to a depth of 100 feet is required per 40 acres or any portion thereof. The 100-foot exploration can be accomplished using any of the three methods outlined in Section 1613.5.5. A 100-foot exploration within 1,000 feet of the proposed site may be included in the total number of required explorations, but at least one 100-foot exploration must be located within the site boundaries. 100-foot exploration locations will be determined by the registered design professional but should be adequately spaced to classify the entire site. Additional 100-foot explorations may be required by the Building Official if soil conditions are variable across the site.

Unless the soil shear wave velocity test is utilized, one test, N_i or s_{ui} , must be performed at ten foot intervals for the entire 100-foot exploration. Each distinctly different soil layer must also be tested. The same test used for a distinct soil layer may also be used for the ten foot interval provided the test interval does not exceed ten feet.

Section 1704.1.2 Report Requirements.

Amend Section 1704.1.2 to read as follows:

1704.1.2 Report requirement. Special inspectors shall keep records of required special inspections. The special inspector shall furnish inspection reports to the building official, and to the registered design professional in responsible charge. Reports shall indicate that work inspected was done in conformance to approved construction documents. Discrepancies shall be brought to the immediate attention of the contractor for correction. If the discrepancies are not corrected, the discrepancies shall be brought to the attention of the building official and to the registered design professional in responsible charge in writing prior to the completion of that phase of the work. A final report documenting required special inspections and corrections of any discrepancies noted in the inspections shall be submitted to the building official prior to the final inspection.

Section 1704.4 Concrete Construction.

Amend Section 1704.4.4 to read as follows:

1704.4 Concrete construction. The special inspections and verifications for concrete construction shall be as required by this section and Table 1704.4.

Exception: Special inspections shall not be required for:

1. Isolated spread and/or continuous concrete footings supporting walls of buildings three stories or less in height that are fully supported on earth or rock where:
 - 1.1. The footings are designed in accordance with Table 1805.4.2; or
 - 1.2. The structural design of the footing is based on a specified compressive strength f'_c , no greater than 2,500 pounds per square inch (17.2 MPa), regardless of the compressive strength specified in the construction documents or used in the footing construction.
2. Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress in the concrete is less than 150 pounds per square inch (1.03 MPa).
3. Concrete patios, driveways and sidewalks, on grade.

Section 1704.5 Masonry Construction.

Amend Section 1704.5 to read as follows:

1704.5 Masonry construction. Masonry construction shall be inspected and evaluated in accordance with the requirement of Section 1704.5.1 through 1704.5.3, depending on the classification of the building or structure or nature of the occupancy as defined by this code.

Exception: Special inspections shall not be required for:

1. Empirically designed masonry, glass unit masonry or masonry veneer designed by Section 2109, 2110, or Chapter 14, respectively, or by Chapter 5, 7, or 6 of ACI 530/ASCE 5/TMWS 402, respectively, when they are part of structures classified as Occupancy Category I, II, or III in accordance with Section 1604.5.
2. Masonry fireplaces, masonry heaters or masonry chimneys installed or constructed in accordance with Section 2111, 2112, or 2113, respectively.
3. Masonry fences less than or equal to 8'-0" in height, retaining walls less than or equal to 6'-0" in height or combined masonry fences and retaining walls less than or equal to 14'-0" in overall height with the retaining wall portion less than or equal to 6'-0" in height and the fence portion less than or equal to 8'-0" in height provided that the walls are designed in accordance with Chapter 2 of ACI 530/ASCE 5/TMS 402 with allowable stresses for masonry reduced by one half. Wall heights shall be measured from the top of footing to top of wall.

Section 1704.7 Soils.

Amend Section 1704.7 by deleting the exception.

Table 1704.7 Required Verification And Inspection Of Soils.

Table 1704.7 is amended to read as follows:

**TABLE 1704.7
REQUIRED VERIFICATION AND INSPECTION OF SOILS**

Verification and Inspection Task	Continuous During Task Listed	Periodically During Task Listed
1. Verify materials below footings are adequate to achieve the design bearing capacity.	—	X
2. Verify excavations are extended to proper depth and have reached proper material.	—	X
3. Perform classification and testing of controlled fill materials.	—	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of controlled fill and other grading activities requiring special inspection, as follows:		
a. All soils not meeting the requirements of categories b, c, or d.	—	X
b. Soil-rock fill and/or moderately	—	X

expansive soils are encountered.		
c. High or critically expansive soils, hydrocollapsible soils, soluble soils, and/or soils requiring chemical or mechanical (geosynthetics) stabilization are encountered.	X	—
d. Construction or stabilization of cut or fill slopes exceeding 5 feet in height, or any site requiring that fill be placed on a natural slope, an existing cut slope, or an existing fill slope steeper than 5:1.	X	—
5. Prior to placement of controlled fill, observe subgrade and verify that site has been prepared properly.	—	X

Section 1704.15 Amusement and transportation systems special cases:

Add Section 1704.15 to read as follows:

1704.15 Amusement and transportation systems special cases. When testing or verification is required by the manufacturer or specified by the building official, the testing and verification shall occur during the initial installation, operational testing and annual renewal of the certificate of operation.

Section 1802.1 General.

Amend Section 1802.1 to read as follows:

General. Foundation and soils investigations shall be conducted in conformance with Sections 1802.2 through 1802.6. Where required by the building official, the classification and investigation of the soil shall be made by a registered design professional.

All projects exempt from a geotechnical report shall comply with Tables 1804.2 and ACI 318, Section 4.3. Design values shall be based on a Class 5 material and a severe sulfate exposure level may be selected as default values.

Section 1802.2 Where required.

Amend Section 1802.2 to read as follows, with Sections 1802.2.1 and 1802.2 remaining unchanged:

1802.2 Where required. The owner or applicant shall submit a foundation and soils investigation to the building official where required in Sections 1802.2.1 through 1802.2.7.

Geotechnical reports shall be prepared by a registered design professional. Recommendations included in the report and approved by the building official shall be incorporated in the

construction documents. Geotechnical reports shall be required for all projects that require new foundations.

Exceptions. At the option of the building official, the following projects may be exempted from having a geotechnical report:

- A.) Any structure, addition, or remodel associated with a single family residence with a footprint less than 600 square feet.
- B.) Single story commercial structures with a footprint less than 600 square feet.
- C.) Fences.
- D.) Site retaining walls less than 5 feet in retained height as measured from the top of the footing.
- E.) Mobile homes, trailers, modular buildings, and pre-engineered carports.
- F.) Signs less than 50 feet in height.

Section 1802.2.3 Ground-water table.

Delete the exception to Section 1802.2.3 without replacement.

Section 1802.3.2 Expansive soils.

Amend Section 1802.3.2 to read as follows:

1802.3.2 Expansive soils. Soils meeting all four of the following provisions shall be considered expansive, except that tests to show compliance with Items 1,2 and 3 shall not be required if the test prescribed in either Item 4 or Item 5 is conducted:

1. Plasticity Index (PI) of 15 or greater, determined in accordance with ASTM D 4318.
2. More than 10 percent of the soil particles pass a No. 200 sieve (75 mm), determined in accordance with ASTM D 422.
3. More than 10 percent of the soil particles are less than 5 micrometers in size, determined in accordance with ASTM D 422.
4. Expansion Index greater than 20, determined in accordance with ASTM D 4829.
5. Soils may be determined to be expansive or non-expansive by the preceding methods or the standard 60 pound swell test. When the standard 60 pound swell test is performed any soil with a swell greater than 4 percent shall be considered expansive. When soils are determined to be expansive special design consideration is required. In the event that expansive soil properties vary with depth the variation shall be included in the engineering analysis of the expansive soil effect on the structure. The foundation design and special inspection for grading/foundations shall be based upon results obtained from the standard 60 pound swell test. Refer to Section 1805.8 for additional requirements.

Section 1802.3.3 Standard 60 pound swell test.

Add Section 1802.3.3 to read as follows:

1802.3.3 Standard 60 pound swell test. The swell test samples may be remolded to the in-place density required for the particular soil type as called for in the Geotechnical Report or it may be an in-situ undisturbed sample. The test samples shall be one inch thick and laterally confined by placing them in a consolidometer retaining ring constructed in accordance with ASTM D-2435. The swell test sample shall be oven dried at 60° C, and the sample shall be dried a minimum of eight (8) hours. The test samples shall be inundated with water and kept in a saturated moisture condition until measurable swelling or vertical movement ceases. The swell test shall use a 60 pounds per square foot surcharge load. The balance of the swell test will be per ASTM D-2435. Swell test results shall be interpreted using Section 1805.8.

Section 1802.4.2 Minimum Exploration Requirements.

Add Section 1802.4.2 to read as follows:

1802.4.2 Minimum Exploration Requirements. The minimum exploration requirements are as follows:

1. For areas less than or equal to one acre, a minimum of two explorations.
2. For areas greater than one acre, but less than five acres, a minimum of one exploration for the first acre and one for each additional two acres, or portion thereof.
3. For areas greater than five acres, but less than twenty acres, a minimum of three explorations plus one additional exploration for each three acres above five.
4. For areas greater than twenty acres, a minimum of eight explorations plus one additional exploration for each five acres or fraction thereof above twenty.
5. Building additions of less than 2,000 square feet shall require a minimum of one exploration.
6. For signs, towers, and monopoles whose locations are known and only that area of the site is to be developed, a minimum of one exploration is required.
7. The minimum depth of the exploration shall be ten feet. Exploration depth shall be increased as necessary to evaluate the suitability of the material within the foundation's depth of influence as determined by the registered design professional. Should refusal be encountered the explorations can be terminated. However, at least three-fourths of the required explorations shall be to the minimum depth. The geotechnical report shall clearly state the criteria used to determine that refusal was met. When information regarding the final grades is made available, the registered design professional shall determine if the explorations originally documented in the geotechnical report meet the depth requirements.

Section 1802.6 Reports.

Amend Section 1802.6 to read as follows:

1802.6 Reports. The soil classification and design load-bearing capacity shall be shown on the construction document. Where required by the building official, a written report of the

investigation shall be submitted that shall include, but need not be limited to, the following information:

1. A plot showing the location of test borings and/or excavations. The plot shall be dimensioned and shall show the approximate location of all existing structures.
2. A complete record of the soil samples.
3. A record of the soil profile.
4. Depth of the water table, if encountered.
5. Recommendations for foundation type and design criteria, including but not limited to: bearing capacity of natural or compacted soil; provisions to mitigate the effects of expansive soils; mitigation of the effects of liquefaction, differential settlement, and varying soil strength; and the effects of adjacent loads. Provide provisions to mitigate the effects of collapsible soils, soluble soils, uncontrolled fill, chemical heave, and corrosive soils. Provide all test data.
6. Expected total and differential settlement. Provide all test data and supporting calculations when the allowable foundation bearing pressure exceeds 4,000 psf.
7. Pile and pier foundation information in accordance with Section 1808.2.2.
8. Special design and construction provisions for footings or foundations founded on expansive soils, as necessary.
9. Compacted fill material properties and testing in accordance with Section 1803.5. Provide provisions to mitigate the effects of collapsible soils, soluble soils, uncontrolled fill, chemical heave, and corrosive soils.
10. Soil classification by the Unified Soil Classification System. Backup data on tests performed in the soil classification shall be included.
11. Classify the expansion level of the soil and specify the minimum embedment depth per Table 1805.2.4.
12. Address, if applicable, the possible impacts on adjoining properties and mitigating measures to be undertaken.
13. Suitability of onsite soils for use as fill material.
14. Provide grading requirements for onsite and import soils (where applicable) including, but not limited to, swell, solubility, and sulfates.
15. Geotechnical design considerations for drainage structures, as applicable.
16. Trenching or other special procedures for determining fault and fissure(s) locations. The potential for differential movement across a fault and fissuring should be evaluated.
17. Procedures for mitigation for geological hazards.
18. Erosion control requirements, as applicable.
19. Anticipated structural loads and type of proposed structure.
20. When a post-tensioned slab-on-ground is recommended the geotechnical report must specify the all soil parameters as required by Section 1805.8.2.
21. All lateral earth pressures and seismic forces shall be reported in psf/ft and distributions expressed in graphical form. All resulting forces must have a recommendation on wall placement location.
22. Site class per Table 1613.5.5, including all test data and supporting calculations.
23. Call out the latitude and longitude in decimal degrees to four decimal places for the purpose of determining the site seismic acceleration (NAD_1983_State Plane_Nevada_East_FIPS_2701_Feet).

24. Specify the level of special inspection should not be less than specified in Table 1704.7.
25. All geotechnical reports must be current within the last 12 months. Any report older than 12 months must be accompanied by a wet sealed update letter addressing the current site conditions based on a recent site visit.

Section 1803.3 Site Grading Exception.

Amend Section 1803.3 to read as follows:

The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than one unit vertical in 20 units horizontal (5-percent slope) for a minimum distance of 10 feet (3048 mm) measured perpendicular to the face of the wall. If physical obstructions or lot lines prohibit 10 feet (3048mm) of horizontal distance, a 5-percent slope shall be provided to an approved alternative method of diverting water away from the foundation. Swales used for this purpose shall be sloped a minimum of 1 percent along the flow line where located within 10 feet (3048mm) of the building foundation. Impervious surfaces within 10 feet (3048mm) of the building foundation shall be sloped a minimum of 2 percent away from the building.

Exception: Where low expansive, low collapsible, low soluble soil conditions occur or where an exterior asphalt or concrete surface abuts a building, the slope of the ground away from the building foundation is permitted to be reduced to not less than one unit vertical in 48 units (2 percent slope).

Section 1803.5 Compacted fill material.

Add items #8 and #9 to Section 1803.5 to read as follows:

8. Flooding or jetting shall not be used to compact fill material that will support footings or foundation systems.
9. Placement procedure for oversized fill material. No rock or similar irreducible material with a maximum dimension greater than 12 inches shall be buried or placed in fills within five feet, measured vertically, from the bottom of the footing or lowest finished floor elevation, whichever is lower, within the building pad. Oversized fill material shall be placed so as to assure the filling of all voids with well-graded soil. Specific placement and inspection criteria shall be stated in the geotechnical report. Continuous special inspection will be required during placement of any oversized fill material.

Section 1803.5 Compacted fill material.

Amend exception of Section 1803.5 to read as follows:

Exception: When a geotechnical report is not required by the building official, all fill material shall be compacted to a minimum of 90 percent Modified Proctor in accordance with ASTM D1557.

Section 1805.1.1 Minimum Distances to Ground Faulting.

Add Section 1805.1.1 to read as follows:

1805.1.1 Minimum Distances to Ground Faulting.

1. The minimum set back for an occupied structure from a Holocene active fault shall be fifty (50) feet. The minimum set back for an Occupancy Category IV structure, an R3 occupancy or a multifamily building shall not be less than five (5) feet to any Quaternary active fault.
2. When the Geotechnical Report establishes that neither a fault nor a fault zone exists on the project, no fault zone set back requirements will be imposed.
3. If through exploration, the fault location is defined, the fault and/or the no build zone shall be clearly shown to scale on the grading, plot plan(s), and final map.
4. When the fault location is not fully defined by explorations but a no build zone of potential fault impact is established by the soils report, no portion of the foundation system shall be constructed within that zone. The no build zone shall be clearly shown to scale on the grading, plot plan(s), and final map.
5. For single lot, single family residences, the fault location may be approximated by historical research as indicated in the soils report. A no build zone of at least fifty (50) feet each side of the historically approximated fault edge shall be established. A no build zone shall be clearly shown to scale on the grading, plot plan(s), and final map.

Section 1805.2 Depth of footings.

Amend Section 1805.2 to read as follows, with Sections 1805.2.1 through 1805.2.3 remaining unchanged:

1805.2 Depth of footings. The minimum depth of footings below the undisturbed ground surface shall be 12 inches (305 mm). Where applicable, the depth of footings shall also conform to Sections 1805.2.1 through 1805.2.3. All excavations and the depth of any footing must be made below the lowest adjacent compacted subgrade to ensure full embedment of the footing into the compacted subgrade prior to concrete placement unless otherwise recommended in the approved geotechnical report.

Section 1805.2.4 Minimum Foundation Depth in Expansive Soils.

Add Section 1805.2.4 to read as follows:

1805.2.4 Minimum Foundation Depth in Expansive Soils. The minimum foundation depth requirements when placing foundations in expansive soil shall be per Table 1805.2.4.

Table 1805.2.4 Minimum Thickened Edge or Foundation Depth

Add Table 1805.2.4 to read as follows:

Table 1805.2.4 Minimum Thickened Edge or Foundation Depth ¹		
Expansion	Percent Swell under 60 psf Surcharge	Minimum Thickened Edge or Foundation Depth (inches)
Low	> 0 to <4	12
Moderate	≥ 4 to < 8	12
High	≥ 8 to < 12	18
Critical 12	≥ 12 to < 16	24
Critical 16	≥ 16 to < 20	30
Critical 20+	20 or greater	36

Footnote:

1. Thickened edge embedment depth shall be measured from the top of the lowest adjacent final compacted subgrade to the bottom of the footing.

Section 1805.5 Foundation walls.

Amend Section 1805.5 to read as follows, with Sections 1805.5.1 through 1805.2.1 remaining unchanged:

1805.5 Foundation walls. Concrete and masonry foundation walls shall be designed in accordance with Chapter 19 or 21, respectively. In Seismic Design Category A or B, foundation walls that are laterally supported at the top and bottom and within the parameters of Tables 1805.5(1) through 1805.5(5) are permitted to be designed and constructed in accordance with Sections 1805.5.1 through 1805.5.5.

Section 1805.5.2.2 Masonry Foundation Walls.

Amend Section 1805.5.2.2 to read as follows:

1805.5.2.2 Masonry Foundation Walls. Masonry foundation walls shall comply with the following:

1. Vertical reinforcement shall have a minimum yield strength of 60,000 psi (414 MPa).
2. The specified location of the reinforcement shall equal or exceed the effective depth distance, d , noted in Tables 1805.5(2), 1805.5(3), and 1805.5(4) and shall be measured from the face of the exterior (soil) side of the wall to the center of the vertical reinforcement. The reinforcement shall be placed within the tolerance specified in ACI 530.1/ASCE 6/TMS 402, Article 3.4 B7 of the specified location.
3. The portions of the wall below grade shall be solid grouted.
4. Grout shall comply with Section 2103.12.
5. Concrete masonry units shall comply with ASTM C90.

6. Clay masonry units shall comply with ASTM C652 for hollow brick, except compliance with ASTM C62 or ASTM C216 is permitted when solid masonry units are installed in accordance with Table 1805.5(1) for plain masonry.
7. Masonry units shall be installed with Type M or S mortar in accordance with Section 2103.8.
8. The unfactored axial load per linear foot of wall shall not exceed $1.2 tf'_m$ where t is the specified wall thickness in inches and f'_m is the specified compressive strength of the masonry in pounds per square inch.

Section 1805.8.2 Slab-On-Ground Foundations.

Amend Section 1805.8.2 to read as follows:

1805.8.2 Slab-on-ground foundations. Moments, shears, and deflections for use in determining slab-on-ground, mat or raft foundations on expansive soils shall be determined in accordance with *WRI/CRSI Design of Slab-on-Ground Foundation* or *PTI Standard Requirements of Analysis of Shallow Concrete Foundation on Expansive Soils*. Using the moments, shears and deflections determined above, nonprestressed slabs-on-ground, mat or raft foundations on expansive soils shall be designed in accordance with *WRI/CRSI Design of Slab-on-Ground Foundation* and post-tensioned slab-on-ground, mat or raft foundations on expansive soils shall be in accordance with *PTI Standard Requirements of Analysis of Shallow Concrete Foundation on Expansive Soils*. The criteria for determining the expansive nature of soils are given in Section 1802.3.2. The minimum design criteria for post-tensioned slabs are defined in Table 1805.8.2. It shall be permitted to analyze and design such slabs by other methods that account for soil-structure interaction, the deformed shape of the soil support, the plate or stiffened plate action of the slab as well as both center lift and edge lift conditions. Such alternate methods shall be rational and the basis for all aspect and parameters of the method shall be available for peer review.

Table 1805.8.2 Post Tension Slab Criteria.

Add Table 1805.8.2 to read:

**Table 1805.8.2
Post Tension Slab Criteria.**

Expansion	Percent Swell under 60 psf Surcharge	Design Values Ym (inches) for PT slabs	
		Edge Lift	Center Lift
Low	> 0 to <4	1/8 to 1/4	-----
Moderate	≥ 4 to < 8	1/4 to 1/2	1/8 to 3/8
High	≥ 8 to < 12	1/2 to 1	3/8 to 1
Critical 12	≥ 12 to < 16	See Note No. 11	
Critical 16	≥ 16 to < 20	See Note No. 11	
Critical 20+	20 or greater	See Note No. 11	

Footnotes:

1. This chart is intended to address expansive soil. The presence of collapsible soil or other geologic conditions may require different design criteria.
2. Foundations shall be designed to meet design criteria of PTI-2004. Both edge lift and center lift conditions need to be evaluated.
3. Edge moisture variation distance (Em) shall be a minimum of 2.5 feet for edge lift and 4.75 feet for center lift.
4. CA for prefabricated roof truss clear spans shall be 360 for center lift and 800 for edge lift.
5. Typical systems using stiffener beams may be equated to a flat slab of equivalent stiffness. Stiffening beams in ribbed foundations shall be as required by PTI-2004. Conventionally reinforced designs may also be used.
6. Modulus of elasticity of the soil (Es) shall be taken as 1000 psi unless tests indicate otherwise.
7. All concrete in the foundation system must be a minimum of 2500 psi and shall comply with IBC Section 1904.3. Lean concrete shall not be permitted in slabs or beams.
8. In addition to the slab stiffness requirements of PTI-2004, the calculated differential deflection of the foundation slab shall not exceed 1/2 inch for edge lift.
9. Perimeter loading of slab (P) shall be limited to dead load.
10. Expansion (swell) test shall be performed in accordance with SECTION 1802.3.3.
11. Specific recommendations from Geotechnical engineer required. Design value (Ym) shall be a minimum of 1 inch.
12. For soil conditions where a low swell potential is determined, a BRAB Type II may be used.

Section 1806 Retaining Walls.

Amend Section 1806.1 to read as follows:

1806.1 General. Retaining walls shall be designed to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against sliding and overturning when considering load combinations that do not include seismic or wind. Retaining walls shall be designed for a safety factor of 1.1 against sliding and overturning when considering load combinations that include seismic loads. Retaining walls shall be designed for a safety factor of 1.3 against sliding and overturning when considering load combinations that include wind loads.

Section 1910.2 Post Tension Slab Provisions.

Add section 1910.2 to read as follows:

1910.2 Post Tension Slab Provisions. Where post-tensioned slabs-on-ground are utilized, design shall be in accordance with PTI Design of Post-Tensioned Slabs-On-Ground, Third Edition. Design for expansive soils is specified in Section 1805.8.

Section 2305.3.11 Sill plate size and anchorage in Seismic Design Category D, E or F.

Amend Section 2305.3.11 to read as follows:

2305.3.11 Sill plate size and anchorage in Seismic Design Category D, E or F. Shear wall sill plates shall be anchored with anchor bolts with steel plate washers between the sill plate and nut or with approved anchor straps spaced to provide equivalent anchorage. Steel plate washers shall be a minimum of 0.229 inch by 3 inches by 3 inches (5.82mm by 76mm by 76mm) in size. The hole in the plate washer is permitted to be diagonally slotted with a width of up to 3/16 inch (4.76mm) larger than the bolt diameter and a slot length not to exceed 1 ¼ inches (44mm), provided a standard cut washer is placed between the plate washer and the nut. Sill plates resisting a design load greater than 490 plf (7154 N/m) using load and resistance factor design or 350 plf (5110 N/m) using allowable stress design shall not be less than a 3-inch (76mm) nominal member. Where a single 3-inch (76mm) nominal sill plates is used, 2-20d box end nails shall be substituted for 2-16d common end nails found in line 8 of Table 2304.9.1.

Exception: In shear walls where the design load is greater than 490 plf (7151 N/m) but less than 840 plf (12264 N/m) using load and resistance factor design or greater than 350 plf (5110 N/m) but less than 600 plf (8760 N/m) using allowable stress design, the sill plate is permitted to be a 2-inch (51mm) nominal member if the sill plate is anchored by two times the number of anchors required by design. Where bolts are installed, 0.229-inch by 3-inch by 3-inch (5.82mm by 76mm by 76mm) plate washers shall be used.

Section 2308.6 Foundation plates or sills.

Amend Section 2308.6 to read as follows:

2308.6 Foundation plates or sills. Foundations and footings shall be as specified in Chapter 18. Foundation plates or sills resting on concrete or masonry foundations shall comply with Section 2304.3.1. Foundation plates or sills shall be bolted or anchored to the foundations with not less than 1/2-inch-diameter (12.7mm) steel bolts or approved anchors spaced to provide equivalent anchorage as the steel bolts. Bolts shall be embedded at least 7 inches (178mm) into concrete or masonry, and spaced not more than 6 feet (1829mm) apart. There shall be a minimum of two bolts or anchor straps per piece with one bolt or anchor strap located not more than 12 inches (305mm) or less than 4 inches (102mm) from each end of each piece. A properly sized nut and washer shall be tightened on each bolt to the plate.

Exception: Where field conditions preclude the placement of the minimum anchors, a registered design professional may provide a design for alternative attachment in accordance with accepted engineering practice.

Section 2308.9.8 Pipes in walls.

Amend Section 2308.9.8 to read as follows:

2308.9.8 Pipes in walls. Stud partitions containing plumbing, heating or other pipes shall be so framed and the joists underneath so spaced as to give proper clearance for the piping. Where a partition containing such piping runs parallel to the floor joists, the joists underneath such partitions shall be doubled and spaced to permit the passage of such pipes and shall be bridged. Where plumbing, heating or other pipes are placed in or partly in a partition, necessitating the cutting of the soles or plates, a metal tie not less than 0.058 inch (1.47mm) (16 galvanized gage) and 1 ½ inches (38mm) wide shall be fastened to each plate across and to each side of the opening with not less than six 1 ½" x 0.148" minimum nails.

Section 2308.12.8 Steel plate washers.

Amend Section 2308.12.8 to read as follows:

2308.12.8 Sill plate anchorage. Sill plates shall be anchored with anchor bolts with steel plate washers between the foundation sill plate and the nut, or approved anchor straps. Over the full length of braced wall lines, such washers shall be a minimum of 0.229 inch by 3 inches by 3 inches (5.62mm by 76mm by 76mm) in size. The hole in the plate washer is permitted to be diagonally slotted with a width of up to 3/16 inch (4.76mm) larger than the bolt diameter and a slot length not to exceed 1 ¾ inches (44mm), provided a standard cut washer is placed between the plate washer and the nut. Standard cut washers shall be permitted for anchor bolts in wall lines not containing braced wall panels.

Section 2308.12.9 Anchorage in Seismic Design Category E.

Amend Section 2308.12.9 to read as follows:

2308.12.9 Sill plate anchorage in Seismic Design Category E. Steel bolts with a minimum nominal diameter of 5/8 inch (915.9mm) or approved foundation anchor straps spaced to provide equivalent anchorage shall be used in Seismic Design Category E.

Section 2604.2.3 Area limitation.

Amend Sections 2604.2.3 to read as follows:

2604.2.3 Area limitation. The interior trim shall not constitute more than 10 percent of the specific wall or ceiling area to which it is attached.

Section 2606.7.4 Fire suppression system.

Amend Sections 2606.7.4 to read as follows:

2606.7.4 Fire suppression system. In buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, plastic light-diffusing systems shall be protected both above and below unless the sprinkler system has been specifically approved for installation only above the light-diffusing system. Areas of light-diffusing systems that are protected in accordance with this section shall be limited to a maximum panel size of 10 feet by 10 feet. Adjacent panels shall be separated by at least 8 feet vertical or 4 feet horizontal.

Section 2606.7.5 Electrical lighting fixtures.

Amend Section 2606.7.5 to read as follows:

2606.7.5 Electrical lighting fixtures. Light-transmitting plastic panels and light-diffuser panels that are installed in approved electrical lighting fixtures shall comply with the requirements of Chapter 8 unless the light-transmitting plastic panels conform to the requirements of Section 2606.7.2. The area of approved light-transmitting plastic materials that are used in required exits or corridors shall not exceed the limitations listed in Sections 2606.7.3 and 2606.7.4 as applicable.

Section 2611 Light-transmitting plastic interior signs

Amend Section 2611.1 to read as follows:

2611.1 General. Light-transmitting plastic interior signs shall be limited as specified in Sections 2611.2 through 2611.5. Light-transmitting plastic interior signs shall also comply with Section 2606.

Exception: Light-transmitting plastic interior wall signs in covered mall buildings shall comply with Section 402.15.

Section 2611.2 Aggregate area.

Amend Section 2611.2 to read as follows:

2611.2 Aggregate area. The aggregate area of signs shall not exceed 20 percent of the wall area.

Exception: Hanging or base supported signs.

Section 2611.3 Separation.

Delete Section 2611.3 and replace with a new Section 2611.3 to read as follows:

2611.3 Separation. Signs shall be separated from each other by at least 4 feet horizontally or 8 feet vertically.

Section 2611.4 Maximum area.

Delete Section 2611.4 and replace with a new Section 2611.4 to read as follows:

2611.4 Maximum area. The aggregate area of all light-transmitting plastics in each individual sign shall not exceed 24 square feet (2.23 m²).

Exceptions:

1. Signs are permitted to exceed an aggregate area of 24 square feet of light-transmitting plastics, provided the sign meets all the following:
 - a. does not exceed a maximum dimension of 10 feet,
 - b. the light-transmitting plastic is a minimum CC1 material,
 - c. is listed and labeled in accordance with nationally recognized standards, and
 - d. is installed in a building fully protected by automatic sprinklers in accordance with Section 903.3.1.1.
2. Signs exceeding the 10 foot limitation of Exception 1 are permitted provided the sign meets all the following:
 - a. the height does not exceed 10 feet,
 - b. the length does not exceed 60 feet,
 - c. the area does not exceed 500 square feet,
 - d. the light-transmitting plastic is a minimum CC1 material,
 - e. is listed and labeled in accordance with nationally recognized standards,
 - f. the top of the sign is within 15 feet of ceiling sprinklers,
 - g. the space in which the sign is installed is protected with an automatic sprinkler system of at least Ordinary Hazard Group 2, and
 - h. a Fire Protection Report is provided to substantiate the preceding requirements are met.

Section 2611.5 Encasement.

Add Section 2611.5 to read as follows:

2611.5 Encasement. Edges and backs shall be fully encased in metal.

Exception: Hanging or base supported signs need only have the non-illuminated portions fully encased in metal.

Table 2902.1 Minimum Number of Required Plumbing Fixtures.

Amend Table 2902.1 by removing all references to the International Plumbing Code which have correlating code sections, add "casino" line at A-2 Occupancy, and add footnotes "e" and "f" to read as follows, with the remainder of Table being unchanged:

[P] TABLE 2902.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES ^a (See Sections 2902.2 and 2902.3)
--

NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (URINALS ^e)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAINS ^f	OTHER
				MALE	FEMALE	MALE	FEMALE			
1	Assembly (see Sections 2902.2, 2902.4 and 2902.4.1)	A-2 ^d	Casino	1:1-100	3:1-50	1:1-200				1 service sink
				2:101-200	4:51-100	2:201-400				
				3:201-400	6:101-200	3:401-750				
				-----	8:201-400					
				Over 400, add one fixture each additional 250 males, and one for each 150 females.		Over 750, add one fixture for each additional 500 persons.				

e. In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets in assembly and educational occupancies. Urinals shall not be substituted for more than 50 percent of the required water closets in all other occupancies. Trough urinals shall be prohibited.

f. Where water is served in restaurants and similar occupancies, drinking fountains shall not be required. In other occupancies, where drinking fountains are required, water coolers or bottled water dispensers shall be permitted to be substituted for not more than 50 percent of the required drinking fountains. Drinking fountains shall not be required in occupancies of 30 or less. Drinking fountains shall not be installed in toilet rooms.

Section 3002.4 Elevator Car to Accommodate Ambulance Stretcher.

Amend Section 3002.4 read as follows;

3002.4 Elevator car to accommodate ambulance stretcher. Where elevators are provided in buildings four or more stories above grade or four or more stories below grade plane, at least one elevator, and no less than the minimum number specified in Table 3002.4, shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate a 24-inch by 84-inch (610 mm by 1930 mm) ambulance stretcher in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than 3 inches (76 mm) high and shall be placed inside on both sides of the hoistway door frame.

Table 3002.4 Ambulance stretcher sized elevator cars.

Add Table 3002.4 to read as follows:

**TABLE 3002.4
AMBULANCE STRETCHER SIZED ELEVATOR CARS**

NUMBER OF BUILDING STORIES	NUMBER OF ELEVATOR CARS SIZED TO ACCOMMODATE AN AMBULANCE STRETCHER
1-30	1
31-60	2
61-90	3
91 and greater	4

Section 3003.1.3 Two or More Elevators.

Amend Section 3003.1.3 to read as follows:

3003.1.3 Two or more elevators. Where two or more elevators are controlled by a common operating system, all elevators shall automatically transfer to standby power within 60 seconds after failure of normal power where the standby power source is of sufficient capacity to operate all elevators at the same time. Where the standby power source is not of sufficient capacity to operate all elevators at the same time, all elevators shall transfer to standby power in sequence, return to the designated landing and disconnect from the standby power source. After all elevators have been returned to the designated level, at least one elevator, and all elevators installed in accordance with Section 3002.4, shall remain operable from the standby power source.

Section 3109.1 Swimming Pool Enclosures and Safety Devices.

Amend Section 3109.1 to read as follows:

3109.1 General. Swimming pools shall comply with the requirements of the Southern Nevada Pool Code.

Section 3109.2 Definitions through 3109.5.4 Pool cleaner fittings.

Delete Sections 3109.2 through 3109.5.4 without replacement.

Section 3110 Cabanas.

Add Sections 3110.1 through 3110.9 to read as follows:

SECTION 3110 CABANAS

3110.1 General. This section shall apply to cabanas on, or in close proximity to, buildings where the predominant building construction type would not otherwise allow cabanas to be constructed as membrane structures in accordance with Section 3102.3. Cabanas that are erected for a period of less than 180 days shall comply with the *International Fire Code*.

3110.2 Definitions. The following words and terms shall, for the purposes of this section, have the meanings shown herein:

CABANA. A structure used for temporary shelter, comfort and privacy of occupants located on, or in close proximity to, a building. Cabanas shall not be used for retail sales, bar service, food preparation, storage, or overnight sleeping.

CABANA GROUP. A group of individual cabanas that are not separated from each other as required within this section. The total area of the cabana group shall be used to determine code requirements for all cabanas contained within the cabana group.

3110.3 Design and Construction. Cabanas shall be designed and constructed to withstand wind or other lateral loads and live loads as required by Chapter 16 with due allowance for shape, open construction and similar features that relieve the pressures or loads. Structural members shall be protected to prevent deterioration.

3110.3.1 Frame. Cabanas shall be constructed of a rigid, noncombustible frame that is permanently mounted to the roof or deck on which it is located.

3110.3.2 Membrane Covering. The membrane covering of the cabana shall either be noncombustible in accordance with Section 703.4 or be tested by an approved agency and pass Test 2 of NFPA 701.

3110.3.3 Openness. Each cabana shall be provided with a minimum of one opening to an exterior egress route. Such opening shall provide a minimum unobstructed opening of 5 feet (1524 mm) wide by 7 feet (2134 mm) high.

3110.3.4 Height. The highest point of a cabana shall not exceed 20 feet (4572 mm).

3110.3.5 Area. The area of any single cabana or cabana group shall not exceed 500 square feet (46.45 m²).

Exception: The area of cabanas that are constructed entirely of noncombustible materials shall not exceed 1000 square feet (92.90 m²).

3110.4 Location. Cabanas shall be located to minimize the hazard to the building, other cabanas, and the means of egress.

3110.4.1 Separation between cabanas. Cabanas shall be separated from all other cabanas by a minimum distance of 10 feet (3048 mm), as measured at the nearest horizontal projection. Where cabanas do not meet this spacing, the cabanas shall be considered a cabana group, and the cabana group shall meet the requirements set forth herein.

3110.4.2 Separation between cabana groups. Cabana groups shall be separated from all other cabanas by a minimum distance of 10 feet (3048 mm), as measured at the nearest horizontal projection.

3110.4.3 Separation to building. Cabanas shall be a minimum of 10 feet (3048 mm) from any wall or building opening, and shall not be located beneath any horizontal projection of the main building.

3110.4.4 Obstruction to means of egress. Cabanas shall be located and spaced such that the required means of egress is not obstructed by the cabanas for the entire height of the cabanas.

3110.5 Automatic sprinkler system. Cabanas and cabana groups shall be protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Exception: An automatic sprinkler system shall not be required in cabanas or cabana groups that do not exceed 120 square feet (11.148 m²) in area.

3110.6 Cooking facilities. Cooking shall not be permitted within 20 feet (6096 mm) of a cabana or inside a cabana.

3110.7 Fuel-fired equipment. Fuel-fired equipment shall not be permitted within 20 feet (6096 mm) of a cabana or inside a cabana.

3110.8 Lighting. All lighting within or attached to cabanas shall be electric. Open flames for any purpose are prohibited within 20 feet (6096 mm) of a cabana or inside a cabana.

3110.9 Fire protection report. A fire protection report shall be submitted and shall address the type of construction of the main structure and the cabana(s), the size of the cabana(s), fire protection systems for the cabana(s), and the impact of the cabana(s) on the means of egress.

Section 3401.3 Compliance with Other Codes

Amend Section 3401.3 to read as follows:

3401.3 Compliance with other codes. Alterations, repairs, additions, and changes of occupancy to existing structures shall comply with the provisions for alterations, repairs, additions and changes to occupancy in the *International Fire Code*, *International Mechanical Code*, *International Plumbing Code*, *International Residential Code*, and *International Electrical Code*.

Appendices A, B, D, F, G and K.

Do not adopt Appendices A, B, D, F, G and K.

Appendices C, E, H, and I.

Adopt Appendices C, E, H, and I unchanged.

Appendix J Section J101 General.

Adopt Appendix J Section J101 through J101.2 unchanged.

Appendix J Section J102.1

Amend Subsection J102.1 by amending the initial paragraph to read as follows:

For the purposes of this appendix chapter and Chapters 18 and 19 of this code, the terms, phrases and words listed in this section and their derivatives shall have the indicated meanings.

Adopt and amend Section J102.1 to include the following definitions:

BUILDING PAD. The soil, cut or fill site, outlined by the area of the footprint of the building plus a minimum of 5 additional feet (1529 mm) to the exterior. This includes any type of foundation system for the structure.

FAULT. A fracture or zone of fracturing in geologic materials (soil or rock) along which there has been displacement of the sides relative to one another parallel to the fracture.

FAULT, HOLOCENE ACTIVE. A fault with recognized activity within Holocene time (within the past 11,000 years).

FAULT, QUATERNARY ACTIVE. A fault with recognized activity within Quaternary time (within the past 1.6 million years).

FAULT INACTIVE. A fault without recognized activity within Quaternary time (within the past 1.6 million years).

FINAL GRADING REPORT. A grading report stamped and signed by a registered design professional certifying that the building pad was constructed in conformance with the recommendations set forth in the geotechnical report. This report contains explicit information and data that verifies compliance with the geotechnical report of record including any approved supplements or addendums.

GEOTECHNICAL REPORT (SOILS REPORT). Data and engineering recommendations resulting from site exploration which evaluates the soil conditions and general site characteristics and suitability of the site for the proposed construction. A registered design professional shall prepare the report.

PAD CERTIFICATION REPORT. An interim grading report stamped and signed by a registered design professional certifying that the building pad currently is in conformance with the recommendations set forth in the geotechnical report of record.

PAD RECERTIFICATION REPORT. A report stamped and signed by a registered design professional certifying that the building pad currently is in conformance with the

recommendations set forth in the geotechnical report of record. This report contains explicit information and data that verifies compliance to the geotechnical report of record including any approved supplements or addendums.

REFUSAL. Refusal while advancing an exploration is recognized as a Standard Penetration blow count, as defined by ASTM 1586-99, exceeding 100 blows per full lineal foot.

SPECIAL GEOTECHNICAL CONSIDERATION AREA. A portion of Clark County where additional geotechnical investigation requirements may apply. These areas are identified on the most recent edition of the "Clark County Soil Guidelines Reference Map(s)" as published by Clark County.

Appendix J Section J103 Permits required.

Adopt Appendix J Section J103.1 through J103.2 unchanged.

Appendix J Section J103.3

Add Section J103.3 to read as follows:

J103.3 Hazards. Whenever the building official determines that any existing excavation or embankment or fill on private property has become a hazard to life and limb, or endangers property, or adversely affects the safety, use or stability of a public way, easement, or drainage channel, the owner of the property upon which the excavation or fill is located, or other person or agent in control of said property, upon receipt of notice in writing from the Building Official, shall within the period specified therein repair or eliminate such excavation or embankment to eliminate the hazard and to be in conformance with the requirements of this code.

Appendix J Section J104 Permit applications and submittals.

Adopt Appendix J Section J104.1 unchanged.

Appendix J Section J104.2 Grading Plan Requirements

Adopt and amend Section J104.2 to read as follows:

J104.2 Grading plan requirements. All grading plans shall be prepared, stamped, and signed by a registered design professional. The following items must be included on all grading plan submittals.

1. General vicinity of the proposed site.
2. Property limits and accurate contours of existing ground and details of terrain and area drainage.
3. Limiting dimensions, elevations or finish contours to be achieved by the grading, proposed drainage channels and related construction.
4. Location of any buildings or structures on the property where the work is to be performed and the location of any buildings or structures on land of adjacent

- owners that are within 100 feet of the property or that may be affected by the proposed grading operations.
5. Recommendations included in the geotechnical and the engineering geology report shall be incorporated in the grading plans or specifications as follows:
 - a. Locations and dimensions of all cut and fill slopes,
 - b. Locations of all cross sections presented in the geotechnical report,
 - c. Locations and sizes of all recommended remedial measures such as buttress fills, stability fills, deep foundation systems, reinforced earth, retaining walls, etc.,
 - d. Location and layout of proposed subdrainage system.
 6. A statement that the site shall be graded in accordance with the approved geotechnical report. This statement shall include the firm name that prepared the geotechnical report, the report number, and the date of the geotechnical report.
 7. Locations of other existing topographic features either natural or man-made such as streets, drainage structures, pavements, walls, mining pits, etc.
 8. The cut to fill transition line.
 9. Positive drainage away from the foundation per Section 1803.3.
 10. Details and cross sections at property lines, fence walls, retaining walls, berms, etc.
 11. Elevation datum and benchmarks (NAVD 88).
 12. Existing contours at least 100 feet beyond the property lines.
 13. Proposed finish contours or spot elevations at the property corners and at swale flow lines.
 14. Elevations of curbs or centerlines of roads or streets.
 15. Earthwork quantities in cubic yards.
 16. Finish floor elevations.
 17. Details and cross sections of typical fill slopes and cut slopes.
 18. Typical details of fill-over-natural slopes and fill-over-cut slopes where fill is to be placed on natural or cut slopes steeper than 5H:1V in accordance with Section J107.
 19. Setback dimensions of cut and fill slopes from site boundaries per Section J108.
 20. The placement of buildings and structures on and or adjacent to slopes steeper than 3H:1V (33.3% slope) shall be in accordance with Section 1805.3.
 21. Provide terracing in accordance with Section J109 for slopes steeper than 3H:1V (33.3% slope).
 22. Provide the locations and dimensions of all terrace drains for all slopes steeper than 3H:1V in accordance with Section J109.
 23. Registered design professional original seal (wet seal), signature and date or a Records stamp and signature stating, *"This is a true and exact copy of the original document on file in this office."*

Appendix J Section J104.3 Soils report.

Adopt Appendix J Section J104.3 through J104.4 unchanged.

Appendix J Section J105.1 Inspections.

Adopt and amend Section J105.1 to read as follows:

J105.1 General. Inspection of grading operations shall comply with the provisions of this section. The permittee shall be responsible for the work to be performed in accordance with the approved plans and specifications and in conformance with the provisions of this code. The permittee shall engage an approved agency, if required by the Building Official.

Appendix J Section J105.1.1 Inspections.

Add Sections J105.1.1 through J105.1.7 to read as follows:

J105.1.1 Completion of work and final reports. Report submittal shall be in compliance with Section 1704.1.2.

J105.1.2 Final Grading report. Upon completion of pad grading (or foundation construction) and prior to a footing or foundation inspection, a Final Grading report shall be provided by an approved agency. Grading (or foundation construction) shall be observed and tested by an approved agency. The approved agency shall prepare the report, signed by a registered design professional certifying that the grading and earthwork are complete and substantially comply with the requirements of the geotechnical report of record including any approved supplements or addenda. At the option of the Building Official, a Pad Certification report submitted in accordance with Section J105.1.3 may be accepted as an interim report prior to a footing or foundation inspection. A Final Grading report will then be required prior to receiving a Final Inspection.

The Final Grading Report itself will contain all applicable test data and analysis of the data. Specific project information is also required if there were any changes to the geotechnical report of record or unusual circumstances encountered during grading. The report shall also include the following information:

1. Compaction test results, requirements, locations, depth of backfill at test locations and names of technicians conducting the tests.
2. Moisture Density values and curves that include classifications for all soils used in the grading operation.
3. Description of structure or pad including the proposed use.
4. Grading plan showing approximate locations of tests, dates and depths of over-excavation observations, original contours and finish pad elevations.
5. Swell and solubility test requirements and results. This information shall be provided if required by the geotechnical report of record, elsewhere in the code, or if imported soils were utilized.
6. Type of foundation system applicable to work being certified (i.e. spread footings, strip footings, combination footings, drilled shafts etc.).
7. Import material used, source of import, and tests indicating compliance with the geotechnical report of record recommendations, and classification in relation to ACI 318 Section 4.3.

8. A statement describing the process of pad grading. Where applicable, this shall include, but not be limited to the minimum depth of over-excavation, blending operations, the use of import soils, nested aggregate, organics encountered, and removal of unsuitable soils.
9. The preceding requirements shall be presented for each pad or structure being certified.

The Final Grading report remains valid for a maximum of six months after the completion of grading. The six month period begins at the first test date of the final test of the final lift of the structural pad. Once expired, a Pad Recertification report is required.

J105.1.3 Pad Certification report. This letter/report is used as an interim document until a Final Grading report is completed (i.e., a Final Grading report for the entire project or a particular phase(s) of a project). The approved agency shall prepare this report signed by a registered design professional and certifying that the grading and earthwork are complete and substantially comply with the requirements of the geotechnical report of record including any approved supplements or addenda. Specific project information is also required if there were any changes to the geotechnical report of record or unusual circumstances encountered during grading.

This report shall include the following information for each pad or structure:

1. The first test date of the final test of the final lift.
2. Permit number and pad or structure description.
3. Classification of foundation soils in relation to ACI 318 Section 4.3.
4. Classification of foundation soil for expansive properties (i.e. non-expansive or results from standard 60 pounds per square foot swell test).
5. The name(s) of the approved special inspector(s) and any technicians that observed grading or foundation improvements.

This report remains valid for no longer than six months after the completion of grading. The six month period begins at the first test date of the final test of the final lift of the structural pad. Upon expiration, a Final Grading report and Pad Recertification report will be required.

J105.1.4 Pad Recertification report. This report is required when a Final Grading report or Pad Certification report has expired or if required by the Building Official. The approved agency shall prepare this report signed by a registered design professional certifying the current suitability of the pad(s). The condition of the pad(s) is discussed, tests performed and their results are presented and discussed, and any additional grading or reworking is discussed. The conclusions are stated and based upon the current condition of the pad(s) compared to completion at original grading and a statement that the current condition of the pad(s) substantially complies with the requirements of the geotechnical report of record including any approved supplements or addenda.

As a minimum, pad moisture data and standard sixty pounds per square foot swell test results, if applicable, are included in this report. The tests shall be conducted on a representative number of pads.

The report remains valid for no longer than six months after the latest test date. Once expired, the pad(s) recertification will require an evaluation by a registered design professional to confirm the applicability of current site conditions.

J105.1.5 Finished Floor Elevation Certificate. A Nevada Professional Land Surveyor shall certify the lowest habitable finished floor elevation to the elevation on the approved plans upon completion of the slab inspection and placement or the placement of the final construction form for the finished floor. All certifications required by this section shall be provided to and accepted by the Building Official prior to performance of any additional inspections. The minimum finished floor elevation shall comply with the approved plans and the allowable tolerance shall be minus (-) 0.0 feet to plus (+) 0.3 feet of the finished floor elevation detailed on the approved plans.

J105.1.6 Drainage Compliance Report. Upon completion of final grading, and prior to the final building inspection, a statement of compliance for drainage shall be provided by the registered design professional of record or the developer when approved by the building official.

This report shall state that site conditions at the time of final construction provide positive drainage in compliance with the approved drainage plan or the plot and grading plan.

When engineered drainage features, facilities, or structures are required by the approved plans, the registered design professional of record shall verify that installed and constructed elements are in compliance with the approved plans. This includes site detention, lot to lot drainage, and drainage conveyance devices.

J105.1.7 Notification of Noncompliance. If in the course of fulfilling their respective duties under this appendix, the registered design professional or the approved agency finds that the work is not being done in conformance with this appendix or the approved plans the discrepancies shall be immediately reported in writing to the contractor, the permittee, and to the Building Official.

Appendix J Section J105.2 Special Inspections.

Adopt and amend Section J105.2 to read as follows:

J105.2 Special Inspections. The special inspection requirements of Section 1704 shall apply to work performed under a grading permit where required by the building official.

Appendix J Section J106 Excavations.

Adopt Appendix J Section J106 through J111 unchanged.

Appendix L Fences, walls and retaining walls.

Add Appendix L to read as follows:

Appendix L Fences, walls and retaining walls.

L101 General

L101.1 General. It shall be unlawful for any person, contractor, firm or corporation to erect, install, construct or replace any fence, wall or retaining wall contrary to the provisions of this code.

L101.2 Applicable regulations. All regulations and requirements of the Building Code and any amendments, deletions and additions thereto shall apply to the erection, installation or construction of any fence, wall and/or retaining wall except that which may be inconsistent with this chapter.

L102.0 DEFINITIONS

L102.1 Definitions. For the purpose of this appendix chapter, certain terms are defined as follows:

CUT. See Excavation.

EXCAVATION. The removal of earth material by artificial means, also referred to as a cut.

FENCE. A structure of temporary or semi-permanent material such as wrought iron, wire, wood, screen, vinyl, plastic, etc... erected for purposes of enclosure, division of property or decoration.

FILL. The deposition of earth materials by artificial means.

RETAINING WALL. Any wall that is used to resist the lateral displacement of earth or any other material with a difference in elevation of the material from one side to the other exceeding 24 inches (610 mm) in height.

ROCKERY WALL. A system of stacked rocks constructed to retain soil.

WALL. A structure of stone, brick, masonry, concrete or other similar permanent material, raised to some height and erected for purposes of enclosure, division of property or decoration.

L103.0 PERMITS

L103.1 Permits required. No fence, wall or retaining wall regulated by this code shall be erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted or demolished unless a separate permit for each fence, wall or retaining wall is obtained from the Building Official.

L103.2 Separate permits required. A separate permit is required for each parcel of land upon which a fence, wall or retaining wall is to be located.

EXCEPTION: Only one permit is required for multiple fence(s), wall(s) and/or retaining wall(s) constructed along property lines in connection with the development of a subdivision, provided that a legal description of the property is submitted together with a dimensioned plot plan showing the exact location of the fence, wall and/or retaining wall and all other recorded lot and easement lines.

L103.3 Application for a fence, wall or retaining wall permit. To obtain a permit, the applicant shall first file an application on a form furnished by the jurisdiction for that purpose. The application shall include the following:

1. The name and address of the owner of the real property upon which the fence, wall and/or retaining wall is to be located.
2. The type of material to be used for construction of the fence, wall, and/or retaining wall.
3. The total length, height and square footage of each fence, wall and/or retaining wall.
4. The authorized agent to perform construction.
5. A dimensioned drawing that identifies the location of each fence, wall and/or retaining wall with respect to the property or lot lines, easements, streets, other rights-of-way. Existing construction and drainage features shall be clearly identified on the drawings.
6. The location of all light standards, gas and water meters, and fire hydrants.
7. Other information deemed pertinent by the Building Official.

L103.4 Drawings and specifications. Drawings and specifications required for retaining walls shall be prepared by a registered design professional. The design shall be in accordance with the applicable chapters of the IBC. Rockery walls shall be designed in accordance with the IBC and the Southern Nevada Building Officials Rockery Wall Construction Standards.

Drawings or specifications for fences and walls need not be submitted unless required by the Building Official. Drawings and specifications shall be submitted for retaining walls showing that the retaining wall is designed in accordance with this code.

L104.0 GENERAL REQUIREMENTS AND LIMITATIONS

L104.1 General. General requirements and limitations shall be as follows:

1. No fence, wall and/or retaining wall shall be placed within a right-of-way unless granted permission by the authority having jurisdiction.
2. The height and location of a fence, wall and/or retaining wall shall comply with all zoning ordinances and regulations of the authority having jurisdiction.
3. Fences, walls and/or retaining walls shall be constructed in accordance with published standards of the department or agency having authority of utility easements, when located within a utility easement for any light standard, gas meter, water meter, or fire hydrant.

4. Special inspection, if required, shall be in accordance with the IBC. Rockery walls shall require special inspection in accordance with the IBC and the Southern Nevada Building Officials Rockery Wall Construction Guidelines.

L104.2 Required inspections

1. All footings shall be inspected to verify location to property line, structures, and compliance to the approved plans and permit. Footings shall be excavated and cast against the earth.
2. Concrete foundations shall not be placed until footings have been inspected and approved by the Building Official.
3. No wall and/or retaining wall shall be grouted until the reinforcing required has been inspected and approved by the Building Official.
4. No retaining wall shall be backfilled until verification of the required dampproofing and drainage has been inspected and approved by the Building Official.

L104.3 Natural drainage. No permits shall be issued for fences, walls and/or retaining walls, which would block any natural flow path.

L104.4 Prohibited materials. Walls, fences and retaining walls shall not be constructed of materials which impose a direct safety hazard, such as pointed posts, stakes or pickets, components intended for electrocution, embedded glass, nails, barbed or razor type wire, or other sharp, cutting objects.

EXCEPTION: Manufactured barbed or razor wire may be used when its detailed use, location, and construction requirements are approved by the authority having jurisdiction.

L105.0 IMPLEMENTATION

L105.1 Implementation. The Building Official is empowered to formulate procedural guidelines to be used in implementing this chapter.

Southern Nevada Amendments

To The

2006

International Residential Code

Published: October 12, 2006

Clark County

4701 West Russell Road
Las Vegas, NV 89118
(702) 455-3000

City of Las Vegas

731 S. 4th Street
Las Vegas, NV 89101
(702) 229-6251

City of Henderson

240 Water Street
Henderson, NV 89015
(702) 267-3650

Boulder City

401 California Avenue
Boulder City, NV 89005
(702) 293-9282

North Las Vegas

2240 Civic Center Drive
North Las Vegas, NV 89030
(702) 633-1577

City of Mesquite

11 East 100 South
Mesquite, NV 89024
(702) 346-2835

Pahrump Regional Planning District

1210 E. Basin Ave. St. 1
Pahrump, NV 89060
(775) 751-3773

PREFACE

This document comprises the Southern Nevada Amendments to the 2006 International Residential Code as published by the International Code Council. The Amendments were developed by the jurisdictions listed on the cover page to be adopted by reference. These Amendments are not to be considered part of a local government's building code unless they have been adopted by that local government. These Amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternate has been approved and its use authorized by the building official. This document is available to be adopted by any jurisdiction without permission or approval from the jurisdictions listed on the cover page.

CHAPTER 1 ADMINISTRATION

Chapter 1 is deleted in its entirety except Section R101.

R101.1 Title

Section R101.1 is amended to read as follows:

R101.1 Title These provisions shall be known as the *Residential Code for One- and Two-family Dwellings* of the City of Las Vegas, City of North Las Vegas, City of Henderson, City of Boulder City, City of Mesquite, City of Pahrump and Clark County, and shall be cited as such and will be referred to herein as "this code."

R101.2 Scope

Section R101.2 is amended to read as follows:

The provisions of the *International Residential Code for One- and Two-family Dwellings*, shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal, and demolition of detached one- and two-family dwellings and townhouses not more than three stories above-grade in height with a separate means of egress and their accessory structures. Where this code refers to codes not adopted by the jurisdiction, the applicable code adopted by the jurisdiction shall govern.

R301.1.2 Construction systems

Section R301.1.2 is amended by adding a second paragraph to read as follows:

All structural plain (unreinforced) concrete, plain (unreinforced) masonry, and rubble stone masonry construction is prohibited. All tables, figures and references for these unreinforced systems shall be deleted.

Table R301.2(1) Climatic and Geographic Design Criteria

Table R301.2(1) is amended to read as follows:

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND SPEED ^d (mph)	SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			DESIGN DRY-BULB TEMP ^a	ICE BARRIER UNDER- LAYMENT REQUIRED ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
			Weathering ^a	Frost line depth ^b	Termite ^c					
0<2000' 5<3600' 10<4500'	90	D ₀	Negligible	1'<5000'	Moderate to heavy	Winter 27°F Summer 112°F	No	*	35 (*F-days)	66.3°F

SPRING MOUNTAIN RANGE

GROUND SNOW LOAD	WIND SPEED ^d (mph)	SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			DESIGN DRY-BULB TEMP ^a	ICE BARRIER UNDER- LAYMENT REQUIRED ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
			Weathering ^a	Frost line depth ^b	Termite ^c					
10<4500' 15<6000' IBC for Elevations >6000'	90	D ₀	Severe	1'<5000' 3'>5000'	Moderate to heavy	Winter 5°F Summer 92°F	Yes	*	734 (*F-days)	48.1°F

For SI: 1 pound per square foot = 0.0479 kN/m², 1 mile per hour = 0.447 m/s.

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weather column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C34, C55, C62, C73, C90, C129, C145, C216 or C652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind map [Figure R301.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. The temperature shall be permitted to reflect local climate or local weather experience as determined by the building official.
- f. The jurisdiction shall fill in this part of the table with the Seismic Design Category determined from Section R301.2.2.1.
- * g. September 27, 2002 * The Flood Insurance Study for Clark County, Nevada and Incorporated Areas, as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto.
- h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES". Otherwise, the jurisdiction shall fill in this part of the table with "NO".
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32° Fahrenheit)" at www.ncdc.noaa.gov/fpsf.htm.
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32° Fahrenheit)" at www.ncdc.noaa.gov/fpsf.htm.

R301.2.2 Seismic provisions

Section R301.2.2 is amended by deleting the Exception with no replacement.

R301.3 Story height

Section R301.3 items 1, 2, and 3 are amended to read as follows:

1. For wood wall framing, the laterally unsupported bearing wall stud height permitted by Table R602.3(5) plus a height of floor framing not to exceed 16 inches, except that a floor framing greater than 16 inches and not exceeding 24 inches, the braced wall length required by Table R602.10.1 shall be multiplied by 1.05.

Exception: For wood framed wall buildings with bracing in accordance with Table R602.10.1, the wall stud clear height used to determine the maximum permitted story height may be increased to 12 feet without requiring an engineered design for the building wind and seismic force resisting systems provided that the length of bracing required by Table R602.10.1 is increased by multiplying by a factor of 1.20. Wall studs are still subject to the requirements of this section.

2. For steel wall framing, a stud height of 10 feet, plus a height of floor framing not to exceed 16 inches. Where floor height is between 16 inches and 24 inches, the minimum percentage of full height structural sheathing shall be multiplied by 1.05.
3. For masonry walls, a maximum bearing wall clear height of 12 feet plus a height of floor framing not to exceed 24 inches.

Exception: An additional 8 feet is permitted for gable end walls.

Table R301.5 Minimum Uniformly Distributed Live Loads

Table R301.5 is amended by changing the live load figure for sleeping rooms as follows:

Sleeping rooms	40
----------------	----

Table R301.5 is further amended by adding footnote "j" to read as follows:

- j. Where it can be determined in designing floor that the actual live load will be greater than the value shown in Table R301.5, the actual live load shall be used in the design of such buildings or portions thereof. Special provisions shall be made for machine and apparatus loads.

R301.6 Roof load

Section R301.6 is amended by adding a second sentence, so that the section reads as follows:

R301.6 Roof load. The roof shall be designed for the live load indicated in Table R301.6 or the snow load indicated in Table R301.2(1), whichever is greater. Roof live loads in accordance with Section 1607.11 of the 2006 International Building Code may be used in place of the loads in Table R301.6.

R302.1 Exterior walls

Section R302.1 is amended by adding a second paragraph and a new exception 4.

To determine when protection is required by Table R302.1 the dimension shall be determined from the property line to the finish face of the wall, except where the foundation dimension from property line is 5 feet or greater the foundation dimension will be used for that wall only.

4. When the wall is at 5 feet or greater to the property line with no attic vents or gable end vents along that line a maximum of 12 inch unprotected eave overhang is permitted.

Table R302.1 Exterior Walls

Table R302.1 is amended by adding footnotes to the table to read as follows:

Table R302.1 – Exterior Walls

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	(Fire-resistance rated)	1 hour with exposure from both sides	0 Feet
	(Not fire-resistance rated)	0-Hours	5 Feet
Projections	(Fire-resistance rated)	1-Hour on the underside	2 Feet
	(Not fire-resistance rated)	0-Hours	5 Feet
Openings	Not Allowed	N/A	<3 Feet
	25% Maximum of Wall Area	0-Hours	3 Feet
	Unlimited	0-Hours	5 Feet
Penetrations	All	Comply with Section R317.3	<5 Feet
		None Required	5 Feet

N/A = Not Applicable

R305.1 Minimum height

Section R305.1 is amended by revising exception 4 to read as follows:

4. Bathrooms shall have a minimum ceiling height of 6 feet 8 inches (2036 mm) over the fixture and at the front clearance area for fixtures. A shower or tub equipped with a

shower head shall have a minimum ceiling height of 6 feet 8 inches (2036 mm) above a minimum area 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.

R307.1 Space required

Section R307.1 and Figure R307.1 are deleted in their entirety without replacement.

R307.2 Bathtub And Shower Spaces

Section R307.2 is renumbered to R307.1

R307.21 Bathtub and shower spaces. (Section remains unchanged)

R309.1 Opening protection

Section R309.1 is amended to read as follows:

R309.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors, each with a self-closer.

R401.3 Drainage

Section R401.3 is deleted in its entirety and replaced with a new Section R401.3 to read as follows:

R401.3 Drainage. The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than one unit vertical in 20 units horizontal (5-percent slope) for a minimum distance of 10 feet (3048 mm) measured perpendicular to the face of the wall. If physical obstructions or lot lines prohibit 10 feet (3048mm) of horizontal distance, a 5-percent slope shall be provided to an approved alternative method of diverting water away from the foundation. Swales used for this purpose shall be sloped a minimum of 1 percent along the flow line where located within 10 feet (3048mm) of the building foundation. Impervious surfaces within 10 feet (3048mm) of the building foundation shall be sloped a minimum of 2 percent away from the building.

Exception: Where low expansive, low collapsible, low soluble soil conditions occur or where an exterior asphalt or concrete surface abuts a building, the slope of the ground away from the building foundation is permitted to be reduced to not less than one unit vertical in 48 units (2-percent slope).

R401.4 Soil tests

Sections R401.4, R401.4.1, Table R401.4.1, and R401.4.2 are deleted in their entirety, and replaced with a new Section R401.4 to read as follows:

R401.4 Soil tests. All structures or additions shall have a soils reports complying with IBC chapter 18.

Exception: At the option of the building official, the following projects may be exempted from having a geotechnical report:

1. Any structure, addition, or remodel associated with a single family residence with a footprint less than 600 square feet.
2. Fences.
3. Site retaining walls less than 5 feet in retained height.
4. Patio covers, decks, canopies, and carports associated with a single family residence.

Where no soils report is required by the building official the design will be based on maximum bearing pressure of 1,500 psf and assumes a severe sulfate exposure level.

R403.1.3 Seismic reinforcing

Section R403.1.3 is amended by deleting the Exception with no replacement.

R403.1.6.1 Foundation anchorage in Seismic Design Categories C, D₀, D₁, and D₂

Section R403.1.6.1 is amended by adding the following Exception after item 1 to read as follows:

Exception: Foundation anchorage, spaced as required to provide equivalent anchorage to ½-inch-diameter (13 mm) anchor bolts and square plate washers conforming to section R602.11.1.

R406.2 Concrete and masonry foundation waterproofing

Section R406.2 is amended so that the introductory paragraph, before items 1-8, reads as follows:

R406.2 Concrete and masonry foundation waterproofing. When the approved geotechnical report indicates there is a high water table or other severe soil-water conditions are known to exist, exterior foundation walls that retain earth and enclose interior spaces and floors below grade shall be waterproofed from the top of the footing to the finished grade. Walls shall be waterproofed in accordance with one of the following:

R502.3.1 Sleeping areas and attic joists

Subsection R502.3.1 is deleted in its entirety without replacement.

R602.6.1 Drilling and notching of top plate

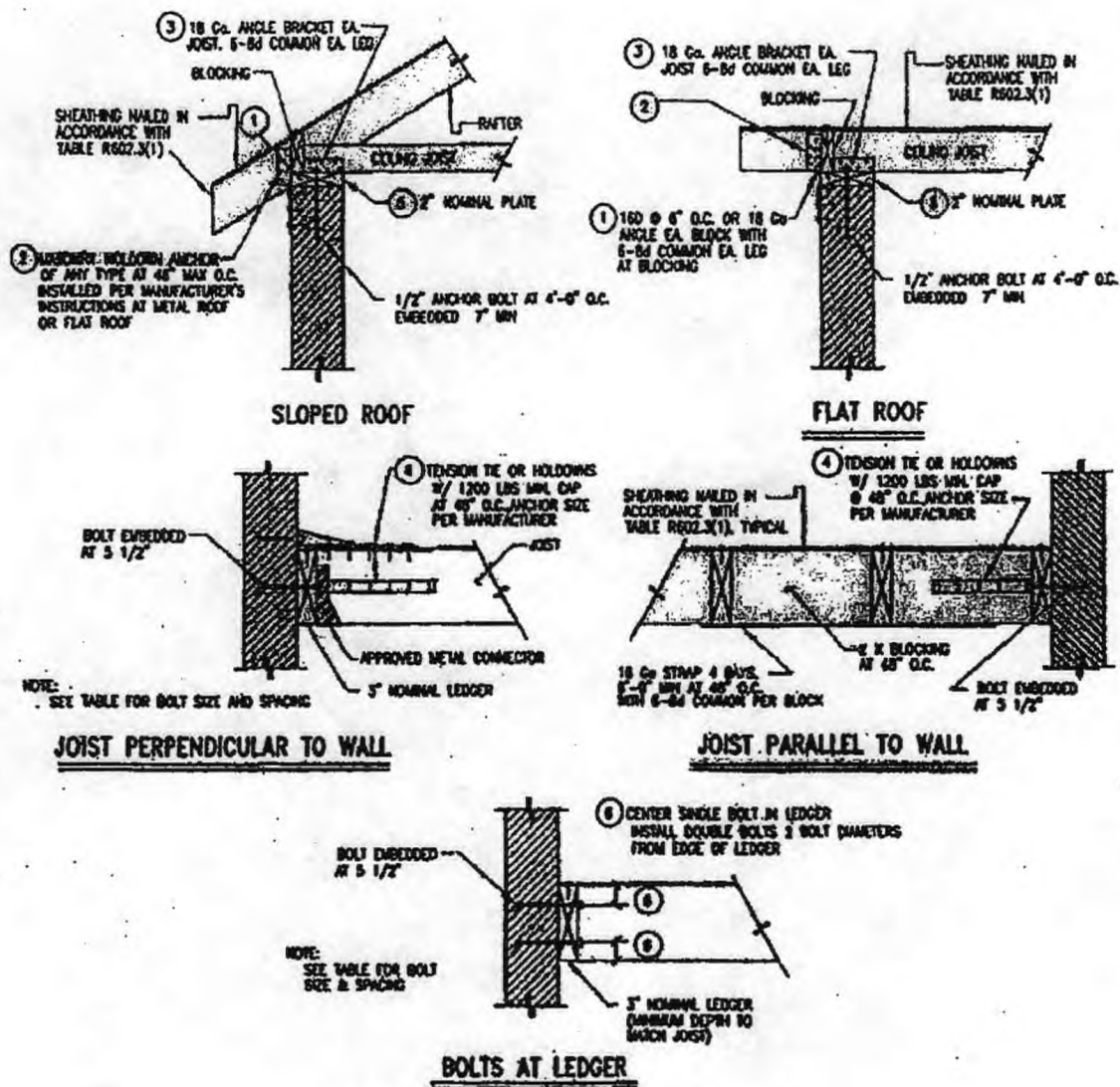
Section R602.6.1 is amended to read as follows:

R602.6.1 Drilling and notching of top plate. When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling or notching of the top plate by more than 50 percent of its width, a galvanized metal tie of not less than 0.054 inch thick (1.37mm)(16 ga) and 1½ inches (38mm) wide shall be fastened across and to the plate at each side of the opening with not less than eight 1½" x 0.148" nails at each side or equivalent. See Figure R602.6.1

Exception: When the entire side of the wall with the notch or cut is covered by wood structural panel sheathing.

FIGURE R606.11(1) ANCHORAGE REQUIREMENTS FOR MASONRY WALLS LOCATED IN SEISMIC DESIGN CATEGORY A, B OR C AND WHERE WIND LOADS ARE LESS THAN 30 PSF

Figure R606.11(1) is deleted and replaced with a new Figure R606.11(1) to read as follows:



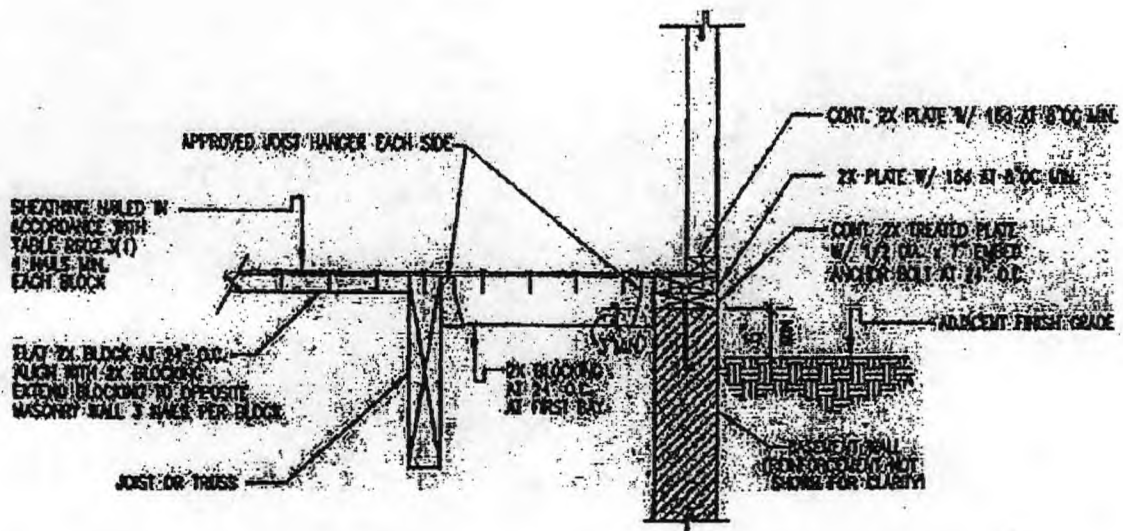
LEDGER BOLT SPACING AND SIZE¹

JOIST SPAN	JOIST PERPENDICULAR TO WALL		JOIST PARALLEL TO WALL	
	BOLT SIZE AND SPACING		BOLT SIZE AND SPACING	
	ROOF	FLOOR	ROOF	FLOOR
10 FT.	1/2" AT 2 FT. 0 IN. 3/4" AT 2 FT. 0 IN.	1/2" AT 1 FT. 4 IN. 3/4" AT 2 FT. 0 IN.	1/2" AT 2 FT. 0 IN.	1/2" AT 1 FT. 4 IN. 3/4" AT 2 FT. 0 IN.
10-15 FT.	(2) 1/2" AT 2 FT. 0 IN. 3/4" AT 2 FT. 0 IN.	(2) 1/2" AT 2 FT. 0 IN. 3/4" AT 1 FT. 4 IN.	3/4" AT 2 FT. 0 IN.	3/4" AT 2 FT. 0 IN.
15-20 FT.	(2) 1/2" AT 2 FT. 0 IN. 3/4" AT 1 FT. 4 IN.	(2) 1/2" AT 1 FT. 4 IN. (2) 3/4" AT 2 FT. 0 IN.	3/4" AT 2 FT. 0 IN.	3/4" AT 2 FT. 0 IN.

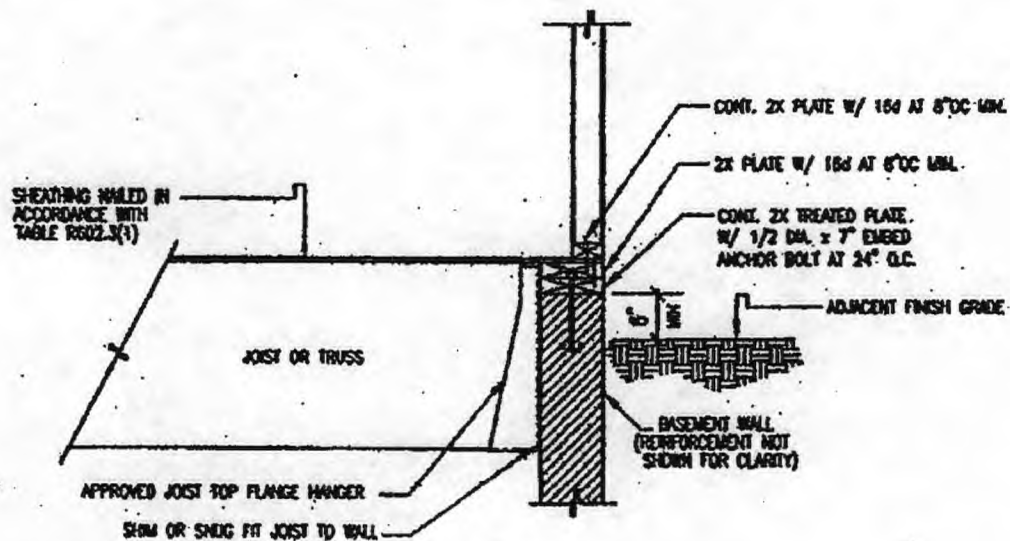
1. BOLTS SHALL BE INSTALLED WITH A METAL PLATE, METAL STRAP, OR WASHER NOT LESS THAN A STANDARD CUT WASHER BETWEEN THE WOOD AND THE BOLT HEAD AND BETWEEN THE WOOD AND THE NUT.

NOTE: WHERE BOLTS ARE LOCATED IN MASONRY, THE CELLS IN THE COURSES RECEIVING THE BOLT SHALL BE GROUTED SOLID.
FOR 1/2" = 25.4 MM, 1 FOOT = 304.8 MM, 1 POUND PER SQUARE FOOT = 0.04790 K/M²

FIGURE R606.11(1)



JOIST PARALLEL TO BASEMENT WALL



JOIST PERPENDICULAR TO BASEMENT WALL

NOTE: WHERE BOLTS ARE LOCATED IN HOLLOW MASONRY, THE CELLS IN THE COURSES RECEIVING THE BOLT SHALL BE GROUTED SOLID.
 FOR SE: 1 INCH = 25.4 MM, 1 FOOT = 304.8MM, 1 POUND PER SQUARE FOOT = 0.0479KN/M

FIGURE R606.11(1)
 ANCHORAGE REQUIREMENTS FOR MASONRY WALLS LOCATED IN SEISMIC DESIGN CATEGORY A, B OR C AND WHERE WIND LOADS ARE LESS THAN 30 PSI

R702.3.8 Water-resistant gypsum backing board

Section R702.3.8 is amended by adding an Exception to read as follows:

Exception: If sealing material is not specified by the manufacture, then a water-resistant flexible sealant meeting ASTM C920, Type S, Grade NS, class 25 material may be used.

R802.9 Framing of openings

Section R802.9 is amended to read as follows:

R802.9 Framing of openings. Openings in roof and ceiling framing shall be framed with header and trimmer joists. When the header joist span does not exceed 4 feet (1219 mm), the header joist may be a single member the same size as the ceiling joist or rafter. Single trimmer joists may be used to carry a single header joist that is located within 3 feet (914 mm) of the trimmer joist bearing. When the header joist span exceeds 4 feet (1219 mm), the trimmer joists and the header joist shall be doubled and of sufficient cross section to support the ceiling joists or rafter framing into the header. Approved hangers shall be used for the header joist to trimmer joist connections when the header joist span exceeds 6 feet (1829 mm). Tail joists over 12 feet (3658 mm) long shall be supported at the header by framing anchors.

R807.1 Attic access

Section R807.1 is amended so that the first paragraph reads as follows:

R807.1 Attic access. Buildings with combustible ceiling or roof construction shall have at least one attic access opening. Additional access openings shall be provided to attic areas that have electrical, plumbing, or mechanical fixtures or equipment that require access for periodic maintenance.

Exception: Access openings are not required for non-contiguous enclosed attic spaces that do not have plumbing, mechanical, or electrical components that require access for periodic maintenance.

R905.7 Wood shingles

Section R905.7 is amended to read as follows:

R905.7 Wood shingles. Not permitted.

R905.8 Wood shakes

Section R905.8 is amended to read as follows:

R905.8 Wood shakes. Not permitted.

R1007 Types Of Fireplaces

A new section R1007 is added to read as follows:

R1007 Types of fireplaces. No fireplace shall be constructed in any residential dwelling in Boulder City or the Las Vegas Valley Hydrographic Basin at an elevation of less than 4000 feet (1220 m) above sea level unless it is one of the following:

- a) A fireplace equipped with gas logs with a nationally recognized listing approved by the Building Official.
- b) A dedicated natural gas burning factory-built fireplace with a nationally recognized listing approved by the Building Official.
- c) A dedicated wood-burning factory-built enclosed fireplace or heater that conforms to the "Phase II Environmental Protection Agency, Standards of Performance for New Stationary Sources, New Residential Heaters" as prescribed in 40 CFR Part 60, Subpart AAA, as verified by a nationally recognized listing approved by the Building Official.
- d) A masonry fireplace that includes the installation of a wood-burning insert which meets the standards described in Paragraph c of this Subsection and which is installed in accordance with the manufacture's instructions, or
- e) A decorative electrical appliance with a nationally recognized listing approved by the Building Official.

R1008 Fireplace Requirements

A new section R1008 is added to read as follows:

R1008 Fireplace requirements. A gas or wood-burning fireplace installed within a dwelling unit shall comply with the following requirements:

- a) The fireplace opening shall be provided with solid doors such as glass, solid steel, or cast iron.
- b) If the fireplace is located in a sleeping room or an adjacent bathroom, then a permanent, unobstructed fresh air supply shall be provided directly from the exterior of the structure to the fire box.
- c) When gas is piped to the fireplace, a caution sign shall be installed that states "Caution: Damper must be permanently blocked open if gas is supplied to this fireplace." The letters on the sign shall be a minimum of 3/8 inches in height.

CHAPTERS 11 through 42.

Delete chapters 11 through 42 in their entirety.

Appendices A through G, I, J, L through Q.

Delete Appendices A through G, I, J, and L through Q in their entirety.

AGENDA SUMMARY PAGE
CITY COUNCIL MEETING OF: JANUARY 3, 2007

DEPARTMENT: CITY ATTORNEY

DIRECTOR: BRADFORD R. JERBIC

☐ Consent ☒ Discussion

SUBJECT:

RECOMMENDING COMMITTEE: BILL ELIGIBLE FOR ADOPTION AT A LATER MEETING:

Bill No. 2006-78 – Updates the City's Administrative Code, relating to the administration of the various building and technical codes. Proposed by: Paul K. Wilkins, Director of Building and Safety

Fiscal Impact



No Impact



Augmentation Required



Budget Funds Available

Amount:

Funding Source:

Dept./Division:

PURPOSE/BACKGROUND:

This bill will update the City's Administrative Code, which sets forth the administrative provisions that pertain to the City's various building and technical codes.

RECOMMENDATION:

ADOPTION at 1/17/2007 City Council meeting pursuant to the 1/2/2007 Recommending Committee.

First Reading – 12/20/2006; First Publication – 1/5/2007

BACKUP DOCUMENTATION:

Bill No. 2006-78

Minutes:

Recommendation noted.

1/17/2007 Council Agenda

1 **BILL NO. 2006-78**

2 **ORDINANCE NO. _____**

3 AN ORDINANCE TO REPEAL AND REPLACE THE DOCUMENT ENTITLED "A
4 SUPPLEMENTAL DOCUMENT AMENDING THE UNIFORM ADMINISTRATIVE CODE, 1997
5 EDITION," AS ADOPTED IN LVMC 16.02.010(B), AND TO PROVIDE FOR OTHER RELATED
6 MATTERS.

7
8 Proposed by: Paul K. Wilkins, Director of
9 Building and Safety

Summary: Updates the City's Administrative
Code, relating to the administration of the
various building and technical codes.

10 THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN
11 AS FOLLOWS:

12 SECTION 1: The document entitled "A Supplemental Document Amending the
13 Uniform Administrative Code, 1997 Edition," adopted in LVMC 16.02.010(B), is hereby repealed in
14 its entirety.

15 SECTION 2: The document entitled "A Supplemental Document Amending the
16 Uniform Administrative Code, 1997 Edition," which is attached hereto and incorporated by this
17 reference, is hereby adopted and incorporated in LVMC 16.02.010(B).

18 SECTION 3: If any section, subsection, subdivision, paragraph, sentence, clause or
19 phrase in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or
20 ineffective by any court of competent jurisdiction, such decision shall not affect the validity or
21 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the
22 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
23 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
24 subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,
25 invalid or ineffective.

26 SECTION 4: Whenever in this ordinance any act is prohibited or is made or declared
27 to be unlawful or an offense or a misdemeanor, or whenever in this ordinance the doing of any act is
28 required or the failure to do any act is made or declared to be unlawful or an offense or a
misdemeanor, the doing of such prohibited act or the failure to do any such required act shall
constitute a misdemeanor and upon conviction thereof, shall be punished by a fine of not more than

1 \$1,000.00 or by imprisonment for a term of not more than six months, or by any combination of such
2 fine and imprisonment. Any day of any violation of this ordinance shall constitute a separate offense.

3 SECTION 5: All ordinances or parts of ordinances or sections, subsections, phrases,
4 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
5 1983 Edition, in conflict herewith are hereby repealed.

6 PASSED, ADOPTED and APPROVED this _____ day of _____, 2007.

7 APPROVED:

8
9 By _____
10 OSCAR B. GOODMAN, Mayor

11 ATTEST:

12 BARBARA JO RONEMUS, City Clerk

13 APPROVED AS TO FORM:

14 Val Steed 12-1-06
15 Date

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2006, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2007, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as first introduced and adopted by the following vote:

8 VOTING "AYE": _____
9 VOTING "NAY": _____
10 ABSENT: _____
11

12 APPROVED:

13
14 By _____
15 OSCAR B. GOODMAN, Mayor

16 ATTEST:

17 BARBARA JO RONEMUS, City Clerk
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**A SUPPLEMENTAL DOCUMENT AMENDING
THE UNIFORM ADMINISTRATIVE CODE, 1997 EDITION**

SECTION 1: Except as otherwise indicated, all section and chapter references contained in this Supplemental Document are to the Uniform Administrative Code, 1997 Edition.

SECTION 2: Certain provisions of this code may be parallel or similar to provisions of the International Building Code, 2006 Edition; International Residential Code, 2006 Edition; the Uniform Plumbing Code, 2006 Edition; the Uniform Mechanical Code, 2006 Edition; the National Electrical Code, 2005 Edition; or other similar code adopted by the City. The provisions of this Code and the provisions of the other referenced codes shall be applied to the extent possible. The Building Official shall have the discretion, in the interest of convenience for the City or the public, to apply the provisions herein or corresponding administrative provisions in any of the above-referenced codes. In the event of any conflict in administrative provisions, the provisions of Section 104 of this Code shall govern, unless otherwise deemed appropriate by the Building Official. Unless otherwise specified, the term "Department" refers to the department of the City charged with the enforcement of the codes referred to in this Section, and the term "Director" refers to the director of that department.

SECTION 3: Section 102 is hereby amended by adding a new Subsection 102.9, reading as follows:

102.9 Professional Office Conversions. A professional office building with an area of 1500 square feet or less which is converted from a residential occupancy pursuant to a valid zoning approval and whose conversion involves only minor exterior remodeling as allowed by the Building Official without expansion of the existing building, is exempt from the requirements of the International Building Code for commercial buildings (other than those contained in Chapter 11 and Chapter 34 thereof). All conversions larger than 1500 square feet shall conform to the new constructions requirements for a B Occupancy.

SECTION 4: Section 202 is hereby amended by deleting Subsection 202.1 and 202.6 and substituting therefor a new Subsection 202.1 and 202.6 reading as follows:

202.1 General. The Building Official is hereby authorized and directed to enforce all the provisions of this code and the referenced technical codes. For such purposes, the Building Official shall have the powers of a law enforcement officer. The Building Official shall have the sole power and discretionary authority to render interpretations, to modify or to suspend portions of this code and the referenced technical codes, and to adopt and enforce additional rules and regulations supplemental to this code and the referenced technical codes as may be deemed necessary to clarify and apply the provisions of this code and the referenced technical codes.

202.6 Authority to Disconnect Utilities. The Building Official or his authorized representative shall have the authority to disconnect any utility service or energy supplied to the building, structure or building service equipment therein regulated by this Code or by the technical codes, in case of emergency, where such building, structure or equipment is hazardous to life or property. The Building Official shall whenever possible notify the serving utility, the owner and the occupant of the building, structure or building service equipment of the decision to disconnect prior to taking such action, and shall notify in writing such utility, owner and occupant of such disconnection immediately thereafter. Such disconnection is also authorized in cases where a building or structure has been constructed, remodeled, repaired, energized or occupied in violation of this Code or any of the technical codes; provided, however, that notice and an opportunity for informal hearing shall first be afforded the owner and occupant.

SECTION 5: Section 204 is hereby amended to add new Sections 204.3 and 204.4, reading as follows:

204.3 Administrative Hearing. Whenever an actual or potential violation of any of the technical codes or this Code is identified by staff of the Department, either at the plan review stage or during construction, and the permittee or permit applicant desires an administrative hearing of the conclusion or decision, based upon code interpretation or hardship, the permittee or applicant may obtain such review from the Building Official's Hearing Committee. The Committee shall consist of:

- The Director, a Deputy Director, or another designee.
- An Inspection Supervisor or the Supervisor's designee.
- The Plans Examination Supervisor or the Supervisor's designee.
- Additional inspectors or technical persons, at the Director's discretion.

An application for administrative hearing shall be filed on forms made available by the Building Official and must be filed no later than 4:30 p.m. on the day preceding the appeal meeting to be held that week. The application should contain sufficient information to enable the Committee to perform its review. A filing fee of one hundred dollars (\$100.00) will be charged for each hearing. The Committee will meet within eight (8) days after an application has been properly filed, with notice thereof to the applicant. The applicant may, but is not required to, attend the hearing. The decision of the Committee shall be made by the Director or his designee, after receiving input from other Committee members. An applicant who is aggrieved by the Committee's decision may appeal that decision in accordance with Sections 204.1 and 204.2.

204.4 Appeals to City Council.

1. Right of Appeal. In accordance with State law, any aggrieved party who alleges that there is an error in any decision made by the board of appeals pursuant to Subsections 204.1 and 204.2 may appeal that decision to the City Council.

2. Manner of Appeal. An appeal may be initiated by filing with the Building Official, within 20 days after the decision by the board of appeals, a written appeal containing:

a. A heading in the words: "Before the City Council of the City of Las Vegas";

b. A caption reading "Appeal of" followed by the names of all appellants participating in the appeal;

c. A brief statement setting forth the legal interest of each of the appellants in the building or land involvement in the decision;

d. A brief statement in ordinary and concise language of the specific aspects of the decision that are being challenged;

e. A brief statement in ordinary and concise language of the relief sought, such as that the decision should be reversed or modified; and

f. A statement setting forth the legal or equitable basis of the relief sought by the appellant.

3. Processing of Appeal. Upon receipt of any appeal filed pursuant to this Subsection, the Building Official shall present it at the next available regular or special meeting of the City Council for the setting of a hearing date.

4. Appeal Hearing Date. Upon receiving a written appeal, the City Council shall fix a date, time and place for the hearing of the appeal by the Council. The date shall be not less than 21 days nor more than 60 days from the date the appeal was filed with the Building Official. Written notice of the time and place of hearing shall be given at least 10 days prior to the date of the hearing to each appellant by the Building Official, either by causing a copy of the notice to be delivered to the appellant personally or by certified mailing postage prepaid, addressed to the appellant at the address shown on the appeal documents.

5. Waiver. Failure of any person to file an appeal in accordance with the above provisions shall constitute a waiver of the right to an administrative hearing and adjudication of the decision or order of the Building Official.

6. Issues Considered. Only these matters or issues specifically raised by the appellant in the written appeal shall be considered on the hearing of the appeal.

7. Vote. A majority vote of the City Council shall be necessary to reverse or modify any order or decision of the board of appeals.

SECTION 6: Section 301 is hereby amended by deleting Subsection 301.1 and substituting therefor a new Subsection 301.1 and a new Subsection 301.1.1, reading as follows:

301.1 Permits Required. Except as specified in Subsection 301.1.1 of this Section or in Section 26 of this Supplemental Document, no building, structure, building service equipment or onsite improvement regulated by this Code or any of the technical codes shall be erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted, or demolished unless a separate, appropriate permit for each building, structure, building service equipment or onsite improvement has first been obtained from the Building Official. If work is commenced before a necessary and appropriate permit for the work has been obtained, the Building Official is authorized to charge an additional fee in the amount of the building permit fee (i.e., a double fee).

301.1.1 Licensing Requirements. No building permits shall be issued for building work which is required to be performed by a licensed contractor under NRS Chapter 624 unless the applicant is appropriately licensed by the State of Nevada and is licensed to do business within the City. Whenever two or more trades (building, plumbing, mechanical, or electrical) are to perform work on a project, a general contractor must be retained for the project, unless this requirement is waived by the Building Official. A general contractor to whom a permit is issued shall be responsible for all work authorized for the project and shall post at the job site a list of all subcontractors doing work on the job with their names, their State subcontractor's license numbers and classifications and their City business license numbers. Mechanical, electrical and plumbing subcontractors shall register with the Department when all permits have been taken out by the general contractor. Contractor and subcontractors must meet all applicable qualifications and requirements described in the technical codes.

NOTE: Additional licensing requirements concerning plumbing work are contained in Sections 23 to 30, inclusive, of this Supplemental Document. Additional licensing requirements concerning mechanical work are contained in Sections 31 to 34, inclusive, of this Supplemental Document.

SECTION 7: Section 301 is hereby amended by deleting Subsection 301.2.1, including its constituent subdivisions and substituting therefor a new Subsection 301.2.1, reading as follows:

301.2.1 Work Exempt from Permit. A building permit shall not be required for the following:

1. Construction work on property owned by the United States or on property owned by any other governmental entity, to the extent exempted by State law.
2. Amusement devices and structures, including merry-go-rounds, ferris wheels, rotating conveyances, slides and similar devices, and any other accessory structure consisting of a cover or roof whose use is necessary for the operation of any such device or structure when such device or structure is used for less than 30 days. A storage building or detached structure that is not an integral part of an amusement device or structure does not qualify as an exempt accessory structure for purposes of this paragraph. The exemption contained in this paragraph likewise does not apply to any electrical, mechanical or plumbing work that is to be done in connection with amusement devices or structures that are to be used on a site.
3. Oil derricks.
4. Movable cases, counters and partitions that do not exceed 5 feet 9 inches in height and not containing electrical branch circuits.
5. Privately owned water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed two to one.
6. Platforms, walks and driveways not more than 30 inches above grade and not over any basement or story below, when built in conjunction with a building that is classified as a Group R, Division 3 one-family or two-family dwelling or a U Occupancy.
7. Painting, papering and similar finish work, except for trim and decorative work exceeding 0.5 pounds per square foot or 0.35 pounds per lineal foot in weight.
8. Temporary motion picture, television and theater stage sets and scenery.
9. Window awnings supported by an exterior wall of a Group R, Division 3 one-family or two-family dwelling, or a U Occupancy, when projecting not more than 54 inches.
10. Residential television or radio antennas whose height design does not exceed 10 feet above the height of the tallest structure on the property, and so located that the distance to the nearest property line is equal to or greater than the total height of the antenna mast.

11. Construction directly relating to the delivery of a utility service, built by a public utility company operating under the control of the Public Service Commission. This exemption applies only to buildings, structures, or service equipment that is directly used in utility generation or distribution and is installed on properly registered easements belonging to water, gas, power, telephone, or other utility companies governed under the State of Nevada Public Service Commission, another State agency, or a public franchise. This exemption does not apply to office buildings, grading, occupied support buildings and general site development.

12. Portable motors or other portable appliances energized by means of a cord or cable having an attachment plug end to be connected to an approved 120-volt receptacle, when that cord or cable is permitted by the Electrical Code.

13. The repair or replacement of fixed motors or fixed approved appliances of the same type and rating in the same location.

14. The installation, alteration or repair of electrical wiring, apparatus or equipment for the generation, transmission, distribution or metering of electrical energy or in the operation of signals or the transmission of intelligence by a public utility in the exercise of its function as a serving utility.

15. Any portable unit refrigerating system (cooling only) as defined in the Mechanical Code.

16. Any wall, including a retaining wall, that is not over two feet in height, measured from the low finished grade to the grade on the opposite side. This exemption does not apply to:

- a. Any wall that supports a surcharge;
- b. Any wall (including a patio wall) that retains flammable liquids; or
- c. Any wall of combined materials that exceeds 2 feet in height.

NOTE: Exemption from the permit requirements of this Code shall not be deemed to authorize any work to be done in violation of the provisions of the technical codes or any other City ordinances or regulations.

SECTION 8: Section 301 is hereby amended by adding thereto a new subsection, designated as Subsection 301.3, reading as follows:

301.3 Manufactured Housing, Travel Trailer and Recreational Vehicle Permits.

1. Manufactured Housing Installations (R-MH or R-MHP District). Manufactured Housing installations are under the jurisdiction of the Nevada State Department of Business and Industry. The units shall bear a seal from a recognized approval agency.

2. Travel Trailers or Recreational Vehicles (R-MH or R-MHP District). Travel trailers or recreational vehicles are under the jurisdiction of the Nevada State Department of Business and Industry.

3. Temporary Residential Use Pending Construction. Nothing in this Code or the technical codes shall be deemed to prohibit any owner of a lot or parcel of land from parking his own manufactured home or recreational vehicle thereon and living therein. Before placing or parking the manufactured home or recreational vehicle, the owner must:

a. Obtain a building permit for a permanent residence to be located on the same lot and for the owner's use;

b. Execute in the City's favor a surety bond or equivalent, in accordance with the provisions of Paragraph (4) below:

c. Obtain a permit for the temporary placement of the manufactured home or recreational vehicle; and

d. Provide the proper sanitary facilities in the manner required by the Clark County Health District.

The period of occupancy may not exceed one year after the permit for temporary placement is issued. Upon written request, the Building Official may grant a single extension of time of up to six months.

4. Surety for Removal. The surety bond required by this Subsection shall be in the amount of one thousand dollars (\$1,000.00), shall secure the removal of the manufactured home or recreational vehicle, and shall be conditioned upon the owner's maintaining in force a valid building permit during the entire time the manufactured home or recreational vehicle is in place. As an alternative to the surety bond, the owner may deposit the sum of one thousand dollars (\$1,000.00):

a. With the City Treasurer, to be refunded upon full compliance with this Subsection; or

b. With a financial institution, provided that the owner, the City and the financial institution have entered into a security agreement that is acceptable to the City Attorney. The arrangement described in this Subparagraph (b) is referred to below as cash-in-lieu-of-bond.

5. Temporary Placement for Contractor/Security Purposes.

Nothing in this Code or the technical codes shall be deemed to prohibit the temporary placement of a manufactured home or travel trailer for the use of a contractor engaged in construction work on the same parcel of land. In addition, a manufactured home or travel trailer may be temporarily placed upon any commercially zoned lot or parcel of land to be used for security purposes when approved by the Building Official. Any placement of a temporary manufactured home or travel trailer for the purpose of living there shall be subject to the requirements concerning installation, permitting, bonding, and time limits as set forth in Paragraphs (3) and (4) above. Any such manufactured home or travel trailer shall be properly installed and maintained in accordance with this Subsection.

6. Temporary Placement of Manufactured Building for Commercial Operation. Nothing in this Code or the technical codes shall be deemed to prohibit a commercial operation from temporarily operating within a manufactured building when the use has been approved by the City Council. In the event of Council approval, the duration of the temporary use shall be in accordance with this Subsection or as determined by the City Council. The period of occupancy may not exceed one year from the date of approval. The Building Official may, upon written request, grant a single six-month extension, provided that a valid building permit is in force at the time the extension is requested and the City Council has approved the extension. Any such manufactured home or travel trailer shall be properly installed and maintained in accordance with this Subsection.

7. Enforcement. Enforcement of the provisions of this Subsection 301.3 shall be in accordance with this Paragraph (7). Each reference in this Paragraph (7) to the term "manufactured home" includes a travel trailer or recreational vehicle.

a. Whenever the Building Official or his designee finds that a manufactured home has remained on the permit holder's property for a period in excess of the limits specified above, he may issue a written notice and order to comply to the principal and to any surety on the bond. Notice to the principal is sufficient if sent by certified mail, return receipt requested, to the address provided by the principal on the application for the permit. The notice and order shall state the estimated cost of removal, and provide that if the manufactured home is not removed within (30) days from the date of notice, the bond shall be forfeited.

b. Any permit holder or surety who believes that no violation described in Paragraph (7)(a) above has occurred may, within 15 days after the date of the notice and order, apply in writing to the Department for a hearing. The Department shall forthwith set a date for said hearing, with at least five days written notice to the requesting party. The hearing shall be conducted by the Building Official or his designee.

c. The compliance order shall be stayed from the date a timely hearing request is received by the Department until a decision is rendered by the

Department, and by the City Council in the event of a timely appeal of the Department's decision.

d. After the requested hearing, the Building Official may rescind, modify or affirm the order of compliance.

e. Within ten days after the date the Department's decision is rendered, the permit holder or surety may, if dissatisfied, appeal to the City Council by filing a written notice of appeal with the Department.

f. Upon receipt of an application from the person required to remove the manufactured home and an agreement by such person to comply with the order if allowed additional time, the Building Official or his designee may, at his discretion, grant an extension of time, not to exceed an additional one hundred and eighty (180) days, within which to remove the manufactured home. The Building Official or his designee's authority to extend time is limited to the removal of the manufactured home and shall not in any way affect the time to appeal the notice and order.

g. After receipt of a notice and order to comply, the surety must, within the time limits specified above, either cause the manufactured home to be removed or pay over to the Department the cost of removal after said manufactured home is removed by the Department. The Building Official or his designee may proceed by such mode as is deemed convenient to cause the manufactured home to be removed. The Building Official or his designee may, in accordance with City contracting procedures, hire a private contractor to remove manufactured home.

h. If a cash bond has been posted, notice of default as provided shall be given to the principal, and if the compliance is not obtained within the time limits specified, the Building Official or his designee may proceed without further notice to use the cash deposit or any portion of such deposit to cause the manufactured home to be removed, by contract or otherwise. The balance, if any, of such cash deposit shall, upon the completion of the work, be returned to the depositor or to his successors or assignee after deducting the cost of the work.

i. If cash-in-lieu of bond has been deposited, the notice of default shall be given to the principal, and if the compliance is not obtained within the thirty (30) days specified, the Building Official or his designee may withdraw the deposited funds and use them to cause the manufactured home to be removed by contract or otherwise. The balance, if any, shall upon the completion of the work, be returned to the depositor or to his successors or assignee after deducting the cost of the work.

j. In any instance where the Building Official or his designee has caused a manufactured home to be removed, such manufactured home may be placed in storage at any location within Clark County, Nevada, and all costs of that storage shall be borne by the owner of such mobile home upon reclaiming the

manufactured home. Upon the owner's failure to pay storage costs, such manufactured home may be sold in accordance with NRS Chapter 108.

k. Any costs in excess of the forfeited bond amounts shall be charged to the principal. Where the full amount due to the City is not paid by the principal within 60 days after the City has removed the manufactured home, the Building Official or his designee may request the City Attorney to commence appropriate legal proceedings to obtain payment.

8. Adoption of Guidelines. The Department may adopt procedural guidelines to be used in implementing this Subsection 301.3.

SECTION 9: Section 301 is hereby amended by adding thereto three new subsections, designated as Sections 301.4, 301.5 and 301.6, respectively, reading as follows:

301.4 Grading Permit-Acreage Limitations. In order to minimize the environmental impacts of large-scale grading, a grading permit shall authorize the grading of no more than 120 acres at a time. The Building Official may increase the acreage authorized for grading in the case of:

1. Golf course development; or
2. Other large-scale development, if the applicant or permittee demonstrates to the satisfaction of the Building Official that enhanced dust control mitigation measures are in place to ensure that the increase in grading activity will not adversely impact neighboring properties.

301.5 Moving of Buildings.

1. In order to move any building or structure to or from a location within the City, a moving permit must be obtained in advance. The application for a permit must describe the proposed new location for the building or structure. After a permit is issued, but before the building or structure is moved, the applicant must contact a Supervisor of Building Inspections to schedule field inspections of the building that is to be moved and the site from which it is being moved. Field inspections may include, without limitation, the following items:

- a. Visible structural integrity of the structure.
- b. Required or proposed means of egress.
- c. Electrical wiring and grounding.

d. Plumbing and gas line location, and compliance with applicable codes.

e. Site safety, including the capping of lines, disconnection of electrical power, filling of holes, and removal of other potential hazards.

The moving of buildings shall be subject to the requirements (and the prior approval, if applicable) of the Traffic Engineering Division of the Department of Public Works, the Nevada Department of Transportation, and any other agency having jurisdiction.

2. With regard to any structure proposed to be moved to a location within the City, whether it is proposed to be moved from another location within the City or from a location outside the City, the application for a moving permit shall be accompanied by an application for a building permit, including the submittal of plans of the type and extent that would be required for the initial erection of that structure and comply with current codes. The Department is authorized to require letters from design professions verifying structural integrity and compliance with the International Energy Code. The review and approval of those plans shall also include and be subject to review and verification by the Department of Planning and Development, and the Land Development Division that the proposed location of the building, whether permanent or temporary, is permissible and appropriate under applicable zoning and development regulations.

301.6 Demolition Permits. A separate permit is required for each building, address or suite at which demolition is to occur. Any sewer investigation permit which is required must be obtained prior to the issuance of a demolition permit.

SECTION 10: Section 302 is hereby amended by deleting Subsection 302.3 and substituting therefor a new Subsection 302.3, reading as follows:

302.3 Information on Plans and Specifications. Plans and specifications shall be drawn to scale upon substantial paper whose sheets will be of a uniform size not to exceed 42 x 30 inches in size. The plans and specifications shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and to show in detail that the work will conform to the provisions of the technical codes and all relevant laws, ordinances, rules and regulations.

SECTION 11: Section 303 is hereby amended by deleting Subsection 303.4 and substituting therefor a new subsection 303.4, reading as follows:

303.4 Expiration. Every permit issued by the Building Official with respect to work governed by the technical codes shall expire by limitation and become null and void if the building or work authorized by such permit is not commenced within 180 days from the date of such permit, as documented by an inspection, or if the building or work authorized by such permit is suspended or abandoned at any time after

the work is commenced for a period of 180 days, as documented by an inspection. Permits shall also expire when corrections which have been required by means of a notice to correct have not yet been completed within thirty (30) days after such inspection. Before such work can be recommenced, a new permit therefor shall first be obtained, and the fee therefor shall be one half the amount required for a new permit for such work, provided that no changes have been made or will be made in the original plans and specifications for such work, and provided further that such suspension or abandonment has not exceeded one year. In order to renew action on a permit after expiration, the permittee shall pay a new full permit fee and shall be subject to all development/impact fees current at the time of the new permit.

Any permittee holding an unexpired permit may apply for an extension of the time within which to commence work under that permit when the permittee is unable to commence work within the time required by this Section for good and satisfactory reasons. The Building Official may extend the time for action by the permittee for a period not exceeding 180 days upon written request by the permittee showing that circumstances beyond the control of the permittee have prevented action from being taken. The Building Official may extend a permit more than once.

SEC 12: Section 304 is hereby amended by deleting Subsection 304.1, 304.2, and 304.3, and substituting therefor new Subsections 304.1, 304.2, and 304.3, reading as follows:

304.1 General. Fees shall be assessed in accordance with the provisions of this Section and the fee schedules adopted in connection with this Supplemental Document. Political subdivisions which by law are exempt from the payment of building permit fees are not exempt from:

1. The plan review fees described in this Section 304:
2. Sewer connection fees; or
3. Any other development-related fee, except to the extent provided by law.

304.2 Permit Fees. The fee for each permit shall be provided in set forth in Table Nos. 3-A through 3D, as adopted in connection with this Supplemental Document and amended by the City Council from time to time.

The determination of value or valuation under this Code or any of the technical codes shall be made by the Building Official. The valuation to be used in establishing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued as well as all finish work, painting, roofing, electrical, plumbing, heating, air-conditioning, elevators, fire-extinguishing systems and other permanent equipment. In order for the Building Official to determine the valuation for purposes of establishing the building permit and building plan review

fees, the applicant must provide a total construction valuation for each project, including the builder's profit, if applicable. The valuation to be used by the Building Official shall be the greater of the declared valuation or the valuations as calculated from the Chart of Minimum Valuation Per Square Foot, which is attached to Table No. 3-A.

304.3 Plan Review Fees.

1. When the submission of plans or other data is required by Section 302, a plan review fee shall be paid at the time plans and specifications are submitted. The building plan review fee for buildings or structures shall be as set forth in Table No. 3-A, calculated at 65 percent of the building permit fee. An additional fee shall be charged for zoning requirement review.

2. No separate plan review fee shall be charged for repetitive permits for electrical, mechanical or plumbing work when all permits (building, electrical, mechanical, and plumbing) are sought on one application. When separate permits by trade area are requested, plan review fees for electrical, mechanical and plumbing work for each permit shall be as set forth in the Notes to Table No. 3A.

3. The plan review fee for grading work shall be as set forth in Table No. 3-B.

4. If two or more buildings (residential dwellings) are to be built from a single model building plan without substantial modifications, as determined by the Building Official, and the model building plan is submitted by any one building contractor while the Building Code under which the plans were approved by the Building Official are in effect, then:

a. The plan review fees for each model building plan shall be sixty-five percent (65%) of the aggregate building permit fees, plus \$50.00 for each additional exterior design elevation.

b. An additional issuance fee for each subsequent use of that model plan (tract house) shall be paid, in the amount of \$50.00.

5. Plan review for repetitive plans is valid for the period during which the Building Code under which plans were reviewed is in effect. Plans must be resubmitted within 6 months after the adoption of a more recent edition of the Building Code. Plan review fees shall be sixty-five percent (65%) of the building permit fee.

6. Plan review for non-repetitive plans is valid for 6 months after approval. Unless permits are issued within that period, plans must be re-reviewed under the then-current Building Code and new plan review fees paid.

7. The plan review fees described in this Subsection 304.3 are separate and in addition to the permit fees described in Subsection 304.2 of this Section.

8. Where plans are incomplete or are changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in Table No. 3-C.

9. Where a permit has been issued, and subsequently the builder, owner or representative requests a change in the plan which would require the preparation of new permit documentation, an additional fee shall be charged in the amount of \$50.00 for each new permit required.

SECTION 13: Section 304 is hereby amended by adding to Subsection 304.6 thereof a new paragraph, reading as follows:

Except with respect to fees erroneously collected, administrative issuance fees and zoning requirement review fees will not be refunded.

SECTION 14: Section 304 is hereby amended by adding thereto three new subsections, designated respectively as Subsections 304.7, 304.8 and 304.9, reading as follows:

304.7 Moving Permit Fees. For moving a building or structure, the fee shall be as set forth in Table No. 3-C.

304.8 Demolition and Related Permit Fees. The fee for any demolition permit and related sewer investigation permit, as set forth in Table No. 3-C, shall be paid at the time of issuance of the permit and prior to any demolition work being done by the permittee. The fee must be paid for each permit required by or described in Subsection 301.6.

304.9 Other Fees. See Table Nos. 3-C and 3-D.

SECTION 15: Section 305 is hereby amended by deleting Subsection 305.5 and substituting therefor a new Subsection 305.5, reading as follows:

305.5 Required Building Inspections. All work regulated by this Code and the technical codes must be inspected and approved before being covered or concealed, and finished work must be inspected and approved before occupancy. The sequence and types of required inspections will be indicated on the inspection report card. The absence of such indication shall not be deemed to waive any inspection requirement. The Building Official, upon notification, shall make inspections that may include, but are not limited to, the following, and shall either approve that portion of the construction as completed or shall notify the permit holder or his agent of construction that fails to comply with this Code or the technical codes:

1. **Foundation Inspection.** To be made after excavations for footing are complete and required reinforcing steel is in place. For concrete foundations, required forms shall be in place prior to inspection. All materials for the foundation shall be on the job, except when concrete is ready-mixed in accordance with approved nationally recognized standards, the concrete need not be on the job. When the foundation is to be constructed of approved treated wood, additional inspections may be required by the Building Official.

2. **Concrete slab or under-floor inspection.** To be made after in-slab or under-floor building service equipment, conduit, piping accessories and other ancillary equipment items are in place but before any concrete is placed or floor sheathing installed, including the subfloor.

3. **Frame inspection.** To be made after the floor, framing, fire blocking and bracing are in place and all pipes, chimneys and vents are complete and the rough electrical, plumbing, and heating wires, pipes, and ducts are approved.

4. **Lath and/or wallboard inspection.** To be made after lathing and wallboard, interior and exterior, is in place but before plaster is applied or before wallboard joists and fasteners are taped and finished.

5. **Final inspection.** To be made after finish grading and the building is completed and ready for occupancy.

SECTION 16: Section 306 is deleted in its entirety with no substitution.

SECTION 17: Section 307 is deleted in its entirety with no substitution.

SECTION 18: Section 308 is hereby amended by adding thereto two new subsections, designated as Subsections 308.3 and 308.4, respectively, reading as follows:

308.3 Construction Power. The Building Official may authorize temporary construction power, which is a privilege granted solely for convenience.

308.4 Revocation of Temporary Connection or Construction Power. Temporary connections of construction power may be revoked, upon written notice, for the use of temporary construction power for permanent occupancy, and may be revoked with or without notice for tampering with the electrical service panel in violation of the National Electrical Code and utility company requirements, or in the event work is suspended or abandoned as described in Subsection 303.4.

SECTION 19: Subsection 309.1 is hereby amended by deleting both the first paragraph thereof and the exception that follows and substituting for that paragraph and exception the following paragraph:

309.1 Use or Occupancy. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made, until the Building Official has approved the building or structure for occupancy, either by means of a Certificate of Occupancy or by the approval of a final inspection.

SECTION 20: Subsection 309.3 is hereby amended by adding thereto a new paragraph, reading as follows:

For purposes of enforcing this Code, existing buildings for which a Certificate of Occupancy has never been issued shall be deemed to have been issued a Certificate. Nothing in this paragraph, however, shall be construed to mean or imply that any such building complies with the requirements and provisions of the technical codes.

SECTION 21: Section 309 is hereby amended by adding thereto a new subsection, designated as Subsection 309.7, reading as follows:

309.7 Utilities. Upon revocation of a Certificate of Occupancy, the Building Official may order the disconnection or discontinuance of utility services upon at least three (3) days written notice to the owner and occupant.

SECTION 22: Table Nos. 3-A to 3-H, inclusive, are hereby deleted in their entirety, and new Table Nos. 3-A, 3-B, 3-C, and 3-D, which are attached hereto and incorporated by this reference, are adopted in lieu thereof.

PROVISIONS RELATING TO THE PLUMBING CODE

SECTION 23: In connection with the administration and enforcement of the Uniform Plumbing Code, 2006 Edition, the provisions which are set forth as Sections 24 to 30, inclusive, of this Supplemental Document are hereby adopted.

SECTION 24: GENERAL PROVISIONS.

A. It is unlawful for any person to conduct, carry or engage in the business of plumbing or act in the capacity of a plumbing contractor without first having obtained a license from the State of Nevada Contractor's Board to carry on the trade of plumbing.

B. It is unlawful for any person to conduct, carry on or engage in the business of installing, altering or repairing sewers or private sewage disposal systems without first having obtained a license from the State of Nevada Contractors Board to carry on the trade of plumbing.

C. The minimum job site requirement for an individual leading or directing the installation of plumbing shall be a Southern Nevada licensed journeyman plumber.

D. Contractors and their employees engaged in the construction of underground utility lines are exempt from provisions of this Chapter requiring a Certificate of Qualification, but such contractors must possess both valid State Contractor's License and a City business license to carry on the business of contracting, as distinct from engaging in the business of plumbing.

SECTION 25: DEFINITIONS AND QUALIFICATIONS OF CONTRACTORS AND PLUMBERS.

A. A Plumbing Contractor is a person who holds a license from the State of Nevada Contractors Board and a business license from the City to carry on the trade of plumbing.

B. A licensed Journeyman Plumber is a person who has successfully passed an examination issued by an approved agency in Clark County.

C. A Qualified Individual or QI is a person who has passed an appropriate examination(s) of the State of Nevada Contractors Board subsequent to July 1, 1985, and otherwise meets the qualifications of, and has been accepted by, the State of Nevada Contractors Board as a Qualified Individual in one or more of the subcategories of plumbing contracting (or as appropriate to the work to be permitted) after July 1, 1985.

D. Notwithstanding anything to the contrary in Sections 301 through 309 of this Code, as adopted by the City, the Building Official may authorize approved contractors to install, inspect and verify the proper installation of water heaters and water softeners, without the need to obtain a permit prior to the installation or to obtain an inspection of the work by the City following the installation. In such cases, the Building Official may issue permits for the installation of water heaters and water softeners after the work has been completed and charge an appropriate fee in connection therewith. Each installation must be properly verified, tagged and documented in accordance with procedures set forth by the Building Official. For the purposes of this Subsection, an "approved contractor" is one who:

1. Is properly licensed for the type of work to be performed;
2. Has successfully completed a course on the installation of water heaters and water softeners provided by the City; and
3. Has been approved by the City to participate in the program described in this Subsection.

SECTION 26: PERMITS; WORKSITE REQUIREMENTS

A. Permits may be issued to plumbing contractors having a State of Nevada Contractor's license and City business license for any plumbing or drainage work regulated by the Uniform Plumbing Code.

B. Permits may be issued to any properly licensed person to install, alter or enlarge irrigate systems, providing that required backflow prevention devices are installed to existing water lines.

C. Permits may be issued to licensed fire sprinkling contractors or licensed plumbing contractors for the installation of automatic fire extinguishing systems, provided that all work conforms to the requirements of the most recent edition of the National Board of Fire Underwriters Standard #13.

D. Permits may be issued to any person to do plumbing or drainage work regulated by the Uniform Plumbing Code in a single family dwelling used exclusively for living purposes, including the usual accessory buildings or quarters in connection with such buildings, provided that such person is the bona fide owner of such dwelling and accessory buildings or quarters, and the same are occupied or designated to be occupied by said owner.

E. A permit may be issued for the original installation of permanent and rental water softening equipment, provided the work done involves only minor changes in the existing water lines. Every application for a permit shall be accompanied by a sketch or drawing of the proposed installation. The person making the installation, at a minimum, must have successfully passed an examination given by an approved agency for a limited certificate of competency, permitting the holder to make minor changes in the present water system to install only permanent and rental water softening equipment. If the installation involves connecting to the drainage system, this work must be done by a certified plumber unless the building is provided with a drain connection suitable for the purpose of connecting a water softener. For purposes of this paragraph, "minor changes" in the water system shall be construed to mean that no more than one cut into the existing water lines will be required.

F. A permit may be issued to any general engineering contractor, or to any sewer, sewage disposal, drain and pipelaying contractor, pipeline contractor or industrial piping contractor licensed by the State of Nevada, for work within that contractor's respective specialty or specialties, for the construction and installation of sewer, water, or other underground utility lines on private or public property up to a point not less than five (5) feet from the building and, with respect to a manufactured home or recreational vehicle park, for installation of pipeline systems in accordance with approved plans.

G. A permit may be issued to any refrigeration or air conditioning contractor who holds both a valid State of Nevada Contractor's License, Classification

C-21 (a) or (b), and a valid business license issued by the City, to install gas piping which is directly related and necessary to the repair or replacement of a refrigeration, heating or air conditioning system, not exceeding 500,000 BTUH per permit (based on natural gas input). The permittee shall only use qualified workers who have met City requirements for installation of gas lines. The permittee shall not modify or alter any gas piping except for that gas piping allowed by this Subsection.

H. At least one licensed Journeyman Plumber must be on any job site while work is being performed.

I. Notwithstanding anything to the contrary in Sections 301 through 309 of this Code, as adopted by the City, the Building Official may authorize approved contractors to install, inspect and verify the proper installation of water heaters and water softeners, without the need to obtain a permit prior to the installation or to obtain an inspection of the work by the City following the installation. In such cases, the Building Official may issue permits for the installation of water heaters and water softeners after the work has been completed and charge an appropriate fee in connection therewith. Each installation must be properly verified, tagged and documented in accordance with procedures set forth by the Building Official. For purposes of this Subsection (I), an "approved contractor" is one who:

1. Is properly licensed for the type of work to be performed;
2. Has successfully completed a course on the installation of water heaters and water softeners provided by the City; and
3. Has been approved by the City to participate in the program described in this Subsection (I).

SECTION 27: PLAN/CALCULATION PREPARATION

When plans and calculations are not stamped with the seal of an architect or engineer who is responsible for the work, the plumbing contractor shall be responsible for design and conformance with this Code. The plumbing contractor shall provide on any plans a title block which includes the plumbing contractor's company and individual names and the State Contractor's License Number.

EXCEPTION: An owner-builder may prepare plans for the owner-builder's own home. An owner-builder shall provide a title block and sign the building plans.

SECTION 28: OCCUPANCY FEES FOR SEWER CONNECTION (See Chapter 14.04 of the Las Vegas Municipal Code for Schedule of Fees.)

Occupancy fees for sewer connection shall be due at the time of issuance of building permit or occupancy change. An application for occupancy change shall include the deposit for any additional fees that required to be paid. Credit for existing

sewer shall be applied to the new sewer fees based on previous type of occupancy and only when the new occupancy requires an additional fee. The Building Official may authorize the refunding of sewer connection fees which are erroneously paid or collected and in instances where construction is not performed. All applications for refunds must be filed in writing by the original permittee not later than 180 days after the date of payment. All refunds are subject to an administrative fee to cover the processing of permits and refund applications. The administrative fee shall be \$50.00, or twenty percent (20%) of the total connection fee, whichever is less.

SECTION 29: SEWER TRUNK EXTENSION AND OVERSIZING REFUNDING AGREEMENTS

A. Sewer trunk extensions and oversizing necessary to serve real property within the City which is incapable of being served by existing sewer trunks may be installed pursuant to refunding agreements, at the discretion of the Director of Public Works, in accordance with the following procedures:

1. An applicant for a "sewer extension" refunding agreement will file an application with the Department of Public Works, accompanied by an approved design of the proposed installation.

2. When a "sewer oversizing" refunding agreement is required, the Department of Public Works shall designate the sizing for the proposed trunk extension; the depth at which it shall be installed; the number, location and type of appurtenances to be included therein; and the location of the area from which the refund therefor will be derived. Two designs shall be prepared for the project, an oversizing design and a base design meeting the capacity needs of the development. Both designs shall have matching pipe crown elevations.

3. Upon receipt of approved design plans, the applicant shall submit to the Department of Public Works at least three (3) written bids (sealed) from licensed sewer contractors for the construction of the proposed sewer extension in accordance with the approved plans therefor; provided, however, that the Director of Public Works, at his discretion and upon good cause shown, may waive the requirement of those written bids.

4. Sewer refunding agreements are based on the lowest responsible bid. Oversizing costs are based on the lowest cost differential between the oversizing design bid and the base design bid. Reimbursable extension costs are based on the lowest bid minus the oversizing costs. Costs involving rock or hard material excavation shall not be included in the original refunding agreements. If the developer encounters rock or hard material excavation, the developer shall notify Off-site Inspection and Testing who will document the amount of hard material excavation encountered. The developer may request an amendment to the agreement based on the amount of hard material excavation encountered. As a prerequisite for City

consideration for payment for rock or hard material excavation, notification will be provided to the City prior to commencement of work.

5. Any sewer trunk extension and appurtenant installation under a refunding agreement shall conform to Design and Construction Standards for Wastewater Collection Systems then in force in the City, and shall be subject to the acceptance by the City prior to the use thereof.

6. Upon the completion of construction of any such sewer trunk extension, "as built" plans of said installation shall be filed with the Department of Public Works.

B. Recovery of extension costs shall apply only to that portion of the extended sewer trunk in excess of two hundred (200) feet from its connection to the existing sewer trunk (the "trunk extension subject to refunding") and terminating at the nearest point of the development. The amount recoverable thereunder shall be as specified in the agreement but not to exceed ninety-five (95%) of the amount, based on the lowest acceptable bid, actually expended by the applicant, after any appropriate adjustment in cost, in the construction of the trunk extension subject to refunding; provided, however, that the cost resulting from any oversizing of such extended sewer trunk at the request of the City shall be pursuant to separate agreement and shall be paid after the acceptance by the City of such extended sewer trunks, or as specified in the agreement.

C. Unless otherwise provided by agreement, refunds pursuant to each refunding agreement shall be made by the City on or before the anniversary date of the refunding agreement in each year on the basis of and shall be limited to \$125.00 for each sewer connection fee received during the preceding 12 months from properties adjacent to the limits of the extension agreement. The right to any refund thereunder shall expire on the tenth anniversary of the execution of such agreement. In no event shall the aggregate refund to be made under any such refunding agreement ever exceed ninety-five percent (95%) of the costs expended by the applicant in connection with the installation of the trunk extension subject to refunding.

D. Unless otherwise specified by agreement, refunds associated with sewer extensions and reimbursements associated with oversizing shall be made to the applicant.

SECTION 30: FEES. Fees related to plumbing permits and plumbing work shall be as set forth in Table Nos. 3-A and 3-C.

PROVISIONS RELATING TO THE MECHANICAL CODE

SECTION 31: In connection with the administration and enforcement of the Uniform Mechanical Code, 2006 Edition, the provisions which are set forth as Sections 32 to 34, inclusive, of this Supplemental Document are hereby adopted.

SECTION 32: LICENSING. Any person, firm or corporation engaged in the business of installing, repairing, servicing, maintaining or improving heating and air conditioning equipment or ductwork in the City shall first secure a State of Nevada Contractor's License and a City business license. Those licenses must be kept valid as long as the licensee is engaged in any business described in this section.

SECTION 33: QUALIFIED PERSONS.

A. It is unlawful for any person to install, alter, reconstruct, repair or maintain any heating, ventilating, air conditioning or refrigeration equipment or evaporative cooler or cooling tower as described in this Code, unless such person is a qualified person or a regular salaried employee of a qualified person, in which latter case the qualified person shall be responsible for all work done by such employee.

B. The term "qualified person" shall be deemed to mean a person, firm or corporation holding both a valid contractor's license issued by the State of Nevada and a valid City business license, or a person who qualifies under Subsection (C) of this Section.

C. Any permit required by this Code may be issued to any person doing any construction or work regulated by this Code in a single family dwelling used exclusively for living purposes, including usual accessory buildings and quarters in connection with such single family dwelling, provided that:

1. Such person is a bona fide owner of such dwelling, accessory building and quarters;

2. The same are occupied by or intended to be occupied by such owner;

3. For the installation of any equipment, such owner applies for and obtains a permit for such construction work; provided, however, that no permit will be required for the repair, service or maintenance of existing equipment.

SECTION 34: Fees.

Fees related to mechanical permits and mechanical work shall be in accordance with Fee Table No. 3-A and 3-C.

TABLE NO. 3-A BUILDING PERMIT FEES

NOTE: Fee categories marked with an asterisk represent an alternate method of calculating mechanical, plumbing and electrical permit fees for new Group R Occupancies.

VALUATION IN DOLLARS		BLDG PERMIT FEE	PLAN CHECK FEE	ZONING CHECK FEE	MECH PERMIT FEE*	PLUMB PERMIT FEE*	ELEC PERMIT FEE*	M P E PERMIT FEE*
1 to	500	14	9	1	2	3	3	8
501 to	600	15	10	1	2	3	3	8
601 to	700	17	11	1	3	3	3	9
701 to	800	20	13	1	3	4	4	11
801 to	900	21	14	1	3	4	4	11
901 to	1000	23	15	1	3	5	5	13
1000 to	1100	26	17	1	4	5	5	14
1101 to	1200	28	18	1	4	6	6	16
1201 to	1300	30	20	2	5	6	6	17
1301 to	1400	31	20	2	5	6	6	17
1401 to	1500	33	21	2	5	7	7	19
1501 to	1600	35	23	2	5	7	7	19
1601 to	1700	37	24	2	6	7	7	20
1701 to	1800	40	26	2	6	8	8	22
1801 to	1900	41	27	2	6	8	8	22
1901 to	2000	42	27	2	6	8	8	22
2001 to	3000	61	40	3	9	12	12	33
3001 to	4000	65	42	3	10	13	13	36
4001 to	5000	71	46	4	11	14	14	39
5001 to	6000	78	51	4	12	16	16	44
6001 to	7000	87	57	4	13	17	17	47
7001 to	8000	96	62	5	14	19	19	52
8001 to	9000	101	66	5	15	20	20	55
9001 to	10000	105	68	5	16	21	21	58
10001 to	11000	112	73	6	17	22	22	61
11001 to	12000	121	79	6	18	24	24	66
12001 to	13000	132	86	7	20	26	26	72
13001 to	14000	135	88	7	20	27	27	74
14001 to	15000	140	91	7	21	28	28	77
15001 to	16000	148	96	7	22	30	30	82
16001 to	17000	157	102	8	24	31	31	86
17001 to	18000	166	108	8	25	33	33	91
18001 to	19000	169	110	8	25	34	34	93
19001 to	20000	173	112	9	26	35	35	96
20001 to	21000	183	119	9	27	37	37	101
21001 to	22000	192	125	10	29	38	38	105
22001 to	23000	200	130	10	30	40	40	110

VALUATION IN DOLLARS	BLDG PERMIT FEE	PLAN CHECK FEE	ZONING CHECK FEE	MECH PERMIT FEE*	PLUMB PERMIT FEE*	ELEC PERMIT FEE*	M P E PERMIT FEE*
23001 to 24000	209	136	10	31	42	42	115
24001 to 25000	213	138	11	32	43	43	118
25001 to 26000	217	141	11	33	43	43	119
26001 to 27000	227	148	11	34	45	45	124
27001 to 28000	234	152	12	35	47	47	129
28001 to 29000	238	155	12	36	48	48	132
29001 to 30000	244	159	12	37	49	49	135
30001 to 31000	252	164	13	38	50	50	138
31001 to 32000	258	168	13	39	52	52	143
32001 to 33000	264	172	13	40	53	53	146
33001 to 34000	267	174	13	40	53	53	146
34001 to 35000	270	176	14	41	54	54	149
35001 to 36000	278	181	14	42	56	56	154
36001 to 37000	284	185	14	43	57	57	157
37001 to 38000	290	189	15	44	58	58	160
38001 to 39000	293	190	15	44	59	59	162
39001 to 40000	296	192	15	44	59	59	162
40001 to 41000	301	196	15	45	60	60	165
41001 to 42000	308	200	15	46	62	62	170
42001 to 43000	314	204	16	47	63	63	173
43001 to 44000	320	208	16	48	64	64	176
44001 to 45000	327	213	16	49	65	65	179
45001 to 46000	330	215	17	50	66	66	182
46001 to 47000	334	217	17	50	67	67	184
47001 to 48000	339	220	17	51	68	68	187
48001 to 49000	345	224	17	52	69	69	190
49001 to 50000	351	228	18	53	70	70	193
50001 to 51000	354	230	18	53	71	71	195
51001 to 52000	358	233	18	54	72	72	198
52001 to 53000	364	237	18	55	73	73	201
53001 to 54000	370	241	19	56	74	74	204
54001 to 55000	376	244	19	56	75	75	206
55001 to 56000	379	246	19	57	76	76	209
56001 to 57000	382	248	19	57	76	76	209
57001 to 58000	388	252	19	58	78	78	214
58001 to 59000	396	257	20	59	79	79	217
59001 to 60000	401	261	20	60	80	80	220
60001 to 61000	407	265	20	61	81	81	223
61001 to 62000	409	266	20	61	82	82	225
62001 to 63000	411	267	21	62	82	82	226
63001 to 64000	416	270	21	62	83	83	228

VALUATION IN DOLLARS	BLDG PERMIT FEE	PLAN CHECK FEE	ZONING CHECK FEE	MECH PERMIT FEE*	PLUMB PERMIT FEE*	ELEC PERMIT FEE*	M P E PERMIT FEE*
64001 to 65000	421	274	21	63	84	84	231
65001 to 66000	428	278	21	64	86	86	236
66001 to 67000	431	280	22	65	86	86	237
67001 to 68000	433	281	22	65	87	87	239
68001 to 69000	437	284	22	66	87	87	240
69001 to 70000	442	287	22	66	88	88	242
70001 to 71000	446	290	22	67	89	89	245
71001 to 72000	449	292	22	67	90	90	247
72001 to 73000	452	294	23	68	90	90	248
73001 to 74000	457	297	23	69	91	91	251
74001 to 75000	462	300	23	69	92	92	253
75001 to 76000	467	304	23	70	93	93	256
76001 to 77000	469	305	23	70	94	94	258
77001 to 78000	471	306	24	71	94	94	259
78001 to 79000	478	311	24	72	96	96	264
79001 to 80000	482	313	24	72	96	96	264
80001 to 81000	486	316	24	73	97	97	267
81001 to 82000	488	317	24	73	98	98	269
82001 to 83000	492	320	25	74	98	98	270
83001 to 84000	497	323	25	75	99	99	273
84001 to 85000	502	326	25	75	100	100	275
85001 to 86000	507	330	25	76	101	101	278
86001 to 87000	509	331	25	76	102	102	280
87001 to 88000	512	333	26	77	102	102	281
88001 to 89000	515	335	26	77	103	103	283
89001 to 90000	520	338	26	78	104	104	286
90001 to 91000	527	343	26	79	105	105	289
91001 to 92000	529	344	26	79	106	106	291
92001 to 93000	531	345	27	80	106	106	292
93001 to 94000	538	350	27	81	108	108	297
94001 to 95000	542	352	27	81	108	108	297
95001 to 96000	545	354	27	82	109	109	300
96001 to 97000	548	356	27	82	110	110	302
97001 to 98000	551	358	28	83	110	110	303
98001 to 99000	555	361	28	83	111	111	305
99001 to 100000	561	365	28	84	112	112	308

OVER \$100,000 AND UP: \$561.00 FOR THE FIRST \$100,000 PLUS \$3.10 PER EACH ADDITIONAL THOUSAND OR FRACTION THEREOF.

TABLE NO. 3-A – BUILDING PERMIT FEES (continued)

- NOTE:
1. The administrative issuance fee of \$50.00 applies to each permit.
 2. The minimum permit fee is \$14.00 (exclusive of Plan Check Fees and Zoning Check Fees).
 3. The Plan Check Fee is 65% of the Building Permit Fee.
 4. The Zoning Check Fee is based upon Planning Department requirements.
 5. If all sub-trades are issued as part of the primary residential permit issuance, the following fees will be in effect.
 - The Mechanical Permit Fee is 15% of the Building Permit Fee.
 - The Plumbing Permit Fee is 20% of the Building Permit Fee.
 - The Electrical Permit Fee is 20% of the Building Permit Fee.
 - The M P E Permit is 55% of the Building Permit Fee.
 6. If separate trade permits (electrical, plumbing, mechanical) are required or requested, fees shall be based upon contract valuation as designated in the Table.

**CHART OF MINIMUM VALUATION PER SQUARE FOOT
CITY OF LAS VEGAS, DEPARTMENT OF BUILDING AND SAFETY**

OCCUPANCY AND TYPES		PER SQFT VALUE	OCCUPANCY AND TYPES		PER SQFT VALUE
1.	APARTMENT HOUSES:		7.	CHURCHES:	
	Type IA or IB*	73.00		Type IA or IB*	82.00
	Type II or			Type IIA	61.00
	Type V - Masonry	60.00		Type IIB	58.00
	Type V - Wood	53.00		Type IIIA	67.00
	Type I Bsmt Garage	31.00		Type IIIB	64.00
	(Balcony = 1/2 sq ft cost)			Type VA	62.00
				Type VB	59.00
2.	AUDITORIUMS:		8.	CONVALESCENT HOSPITALS:	
	Type IA or IB	87.00		Type IA or IB*	115.00
	Type IIA	63.00		Type IIA	80.00
	Type IIB	59.00		Type IIIA	82.00
	Type IIIA	66.00		Type VA	77.00
	Type VA	63.00			
	Type VB	59.00	9.	DWELLINGS:	
3.	BANKS:			Type V Wood > 4000 sf	64.00
	Type IA or IB*	123.00		Type V Wood ≤ 4000 sf	46.00
	Type IIA	90.00		Type V Masonry	63.00
	Type IIB	87.00		Bsmts, Finished	35.00
	Type IIIA	100.00		Bsmts, Unfinished	21.00
	Type IIIB	96.00	10.	EXHIBIT HALLS/CONVENTION CNTR	
	Type VA	90.00		Type IA or IB	50.00
	Type VB	86.00		Type IIA or VA	29.00
4.	BOWLING ALLEYS:			Type IIB or VB	28.00
	Type IIA	42.00		Type IIIA	33.00
	Type IIB	39.00		Type IIIB	32.00
	Type IIIA	46.00	11.	FIRE STATIONS:	
	Type IIIB	43.00		Type IA or IB	95.00
	Type VA	31.00		Type IIA	62.00
5.	CASINOS:			Type IIB	59.00
	Type IA or IB*	95.00		Type IIIA	68.00
	Type IIA	67.00		Type IIIB	65.00
	Type IIB	64.00		Type VA	64.00
	Type IIIA	72.00		Type VB	60.00
	Type IIIB	70.00	12.	HOSPITALS:	
	Type VA	65.00		Type IA or IB*	136.00
	Type VB	63.00		Type IIIA	112.00
6.	CLUBHOUSE/RECREATION BLDGS:			Type VA	107.00
	Type IIA	56.00	13.	HOTELS/MOTELS:	
	Type IIB	53.00		Type IA or IB*	82.00
	Type IIIA	61.00		Type IIIA	72.00
	Type IIIB	58.00		Type IIIB	69.00
	Type VA	56.00		Type VA	63.00
	Type VB	53.00		Type VB	62.00

* Add 0.8 % to total cost for each story over three ** Deduct 20 % for shell-only Bldgs

*** Deduct 11 % for Mini-warehouses

**CHART OF MINIMUM VALUATION PER SQUARE FOOT
CITY OF LAS VEGAS, DEPARTMENT OF BUILDING & SAFETY
PAGE 2**

<u>OCCUPANCY AND TYPES</u>	<u>PER SQFT VALUE</u>	<u>OCCUPANCY AND TYPES</u>	<u>PER SQFT VALUE</u>
14. INDUSTRIAL PLANTS:		20. RESTAURANTS:	
Type IA or IB*	47.00	Type IIA	80.00
Type IIA	32.00	Type IIIB	78.00
Type IIB	30.00	Type VA	74.00
Type IIIA	36.00	Type VB	71.00
Type IIIB	34.00		
Type VA	34.00	21. SCHOOLS:	
Type VB	31.00	Type IA or IB	92.00
Tilt-up	24.00	Type IIA	63.00
		Type IIIA	67.00
15. LIBRARIARIES:		Type IIIB	64.00
Type IA or IB	96.00	Type VA	63.00
Type IIA	70.00	Type VB	60.00
Type IIB	67.00		
Type IIIA	74.00	22. SERVICE STATIONS:	
Type IIIB	71.00	Type IIB	55.00
Type VA	70.00	Type IIIA	58.00
Type VB	67.00	Type VA	49.00
		Canopies	23.00
16. MEDICAL OFFICES:			
Type IA or IB*	99.00	23. STORES:	
Type IIA	76.00	Type IA or IB*	68.00
Type IIB	72.00	Type IIA	41.00
Type IIIA	80.00	Type IIB	40.00
Type IIIB	77.00	Type IIIA	51.00
Type VA	74.00	Type IIIB	47.00
Type VB	72.00	Type VA	42.00
		Type VB	39.00
17. OFFICES:			
Type IA or IB*	88.00	24. THEATERS:	
Type IIA	59.00	Type IA or IB	91.00
Type IIB	56.00	Type IIIA	66.00
Type IIIA	64.00	Type IIIB	63.00
Type IIIB	61.00	Type VA	62.00
Type VA	60.00	Type VB	59.00
Type VB	56.00		
		25. WAREHOUSES: ***	
18. PRIVATE GARAGES:		Type IA or IB	41.00
Masonry	20.00	Type IIA	24.00
Wood Frame	22.00	Type VA	24.00
Open Carport	13.00	Type IIB / VB	22.00
		Type IIIA	27.00
19. PUBLIC GARAGES:		Type IIIB	26.00
Type IA or IB*	40.00		
Type IIA	23.00	26. CONVERSIONS:	
Type IIIA	30.00	Garage to Living	18.00
Type IIIB	27.00	Carport to Living	25.00
Type VA	28.00	Cov Patio to Living	25.00
		Carport to Garage	7.00
		Finish Basement	21.00

* Add 0.8 % to total cost for each story over three ** Deduct 20 % for shell-only Bldgs

*** Deduct 11 % for Mini-warehouses

**CHART OF MINIMUM VALUATION PER SQUARE FOOT
CITY OF LAS VEGAS, DEPARTMENT OF BUILDING & SAFETY
PAGE 3**

<u>OCCUPANCY AND TYPES</u>	<u>PER SQFT VALUE</u>	<u>OCCUPANCY AND TYPES</u>	<u>PER SQFT VALUE</u>
27. ADDITIONS:		32. AGRICULTURAL BLDGS:	
Room	35.00	Stables / Kennels	14.00
Finish Basement	29.00	Animal Shelters	14.00
Unfinished Basement	21.00	Storage Sheds	9.75
28. CARPORT/PATIO COVER ADDITIONS:		33. FIREPLACES (Unit Cost):	
(Add flatwork cost if no existing floor)		Standard Single	1834.00
Alum / Steel	5.00	Double	2755.00
Wood	9.00	Triple Sided	3676.00
Wood Lattice	7.00	Free Standing Stove	861.00
Balcony / Sun Deck	15.00	Free Standing BBQ	1377.00
Screen Room	14.00	Precast Tilt-up	1533.00
29. EQUIPMENT:		34. FENCES:	
Air Conditioning:		Chain Link	1.25
Commercial	4.75	Ornamental Iron	2.50
Residential	3.75	Block	5.50
Sprinkler System	2.25	Brick / Stone	7.00
30. SWIMMING POOLS / SPAS:		Concrete	4.25
Based on contract valuation		Wood, Solid	1.25
		Wood, Picket / Grape	0.75
		Retaining Walls	6.25
31. FLATWORK:		35. ROOFING:	1.75 sqft
Pool Kool Decking	4.00	36. TRAILER / MOBILE HOME PARKS:	
Concrete	4.00	Contract Price	
Brick Paving / Vaneer	7.00		
Asphalt	1.25		

NOTE: The permit cost is based upon the calculated construction valuation or contract price, whichever is higher. The values shown may be changed without notice to reflect a more realistic valuation

* Add 0.8 % to total cost for each story over three ** Deduct 20 % for shell-only Bldgs
*** Deduct 11 % for Mini-warehouses

TABLE 3-B - GRADING FEES

Issuance Fee - \$50.00

Grading Permit Fees:

Clearing and Grubbing - \$25.00 minimum for each permit up to 50 acres, plus \$6.00 per additional 50 acres or portion thereof.

Earth Moving - \$25.00 minimum

50 cubic yards or less - \$25.00

51 to 100 cubic yards - \$29.00

101 to 1000 cubic yards - \$29.00 for the first 100 cubic yards, plus \$15.00 for each additional 1000 cubic yards or fraction thereof.

1001 to 10,000 cubic yards - \$164.00 for the first 1,000 cubic yards, plus \$12.85 for each additional 1,000 cubic yards or fraction thereof.

10,001 to 100,000 cubic yards \$281.00 for the first 10,000 cubic yards, plus \$68.13 for each additional 10,000 cubic yards or fraction thereof.

100,001 cubic yards or more - \$893.00 for the first 100,000 cubic yards, plus \$31.43 for each additional 10,000 cubic yards or fraction thereof.

Grading, Clearing and Grubbing prior to Obtaining a Permit

An additional fee of \$150.00 for each 100 acres or fraction thereof shall be levied when a grading or clearing and grubbing operation has commenced prior to obtaining a permit.

**TABLE 3-C
OTHER FEES AND CHARGES**

1. **Moving Permit moving within or into the City):** \$300.00 for each building or structure (or portion thereof).
2. **Moving Permits (moving out of the City):** \$62.00 plus administrative issuance and zoning fees, for each building or structure (or portion thereof).
3. **Certification and Certificate of Occupancy Fees:** \$50.00 per dwelling unit, guest room or tenant space. For more than four units, the fee shall be \$200.00 plus \$10.00 per additional dwelling unit in excess of four.
4. **Additional Plan Review Service Charge:** \$75.00 per hour or any part thereof. An additional \$100.00 per hour is charged if the review is done on overtime requested by the applicant.
5. **Inspections Outside of Normal Business Hours:**
 - (a) \$80.00 per hour if contiguous to work hours (minimum, 1 hour).
 - (b) Same-day (Express) inspections by appointment during regular working hours will be charged at the rate of \$100.00 per hour, minimum, with \$25.00 for each additional quarter hour or portion thereof. Express inspections after regular working hours will be charged at the rate of \$150.00 per hour minimum, and \$37.50 for each additional quarter hour or portion thereof.
 - (c) Planned Saturday callouts will be a minimum of three hours (\$240.00) and \$80.00 an hour for each hour or portion thereof over three hours.
 - (d) Emergency after hours calls (with less than 12 hours notice) and Holiday callouts will be \$240.00 for a three hour minimum, and then an additional \$80.00 for each hour or portion thereof over three hours.
 - (e) Fire investigations for permits: \$100.00, for the first hour, then \$80.00 per hour thereafter.
6. **Reinspection Under Provisions of Section 305.8:** \$75.00
7. **Demolition Permit Fee:** \$62.00, or estimated value of demolition contract, whichever is higher, plus administrative issuance and zoning fees. NOTE: Some demolitions may require the issuance of a sewer investigation permit, whose fee is the same as for a demolition permit.
8. **Expired Permit:** Permit fees for renewal/issuance for an expired permit shall be per Section 303.4

Exception: Where only final inspections are incomplete, the fee to renew the permit shall be \$50.00 per trade (i.e. Building, Mechanical, Plumbing, Electrical), when approved by the Building Official.

9. **Special Investigation:** \$100.00 or \$100.00 per hour, whichever is greater. The Special Investigation results may generate a request for a review from the Building Official's Hearing Committee.
10. **Product Approval Fee:** \$500.00 submittal fee, plus \$100 per hour for review and evaluation of a building product not yet approved by the International Code Council (ICC).
11. **Amusement Ride Certificate:** \$250.00 (on an annual basis from date of issuance).
12. **Change of address:** If address change is requested by the applicant / owner after permits have been issued, a \$350.00 Administrative Processing Fee per address will be charged.
13. **Change of Contractor:** \$50.00 (plus the administrative issuance fee).
14. **Request for Review from the Building Official's Hearing Committee or Appeal to City Council:** \$100.00.
15. **Special Occupancy Verification:** \$100.00, which includes research time, calculations, and resulting letter.
16. **Administrative Issuance:** \$50.00.
17. **Deferred Submittals:** \$100.00 for each deferred submittal, plus review time and administrative fee.
18. **Fees and Charges for Noncompliance Relating to Special Inspection Agencies, Special Inspectors and Steel Fabricators:** As set forth in Table No. 3-D.

Table No. 3-D
Administrative and Investigative Fees
Relating to Special Inspection Agencies,
Special Inspectors and Steel Fabricators

Approved SI Agency	Special Inspector	Approved Steel Fabricator
Performance of Special Inspection activities on a site without an approved permit. \$400.00 ea occurrence	Performance of Special Inspection activities on a site without an appropriate permit. \$100.00 ea occurrence	Failure to perform necessary inspection activities. \$250.00 ea occurrence
Performance of Special Inspection activities by an unapproved person. \$400.00 ea occurrence	Performance of Special Inspection activities when not approved for inspection items. \$100.00 ea occurrence	Failure to document inspection activities. \$250.00 ea occurrence
Failure of agency to perform necessary Special Inspection activities. \$250.00 ea occurrence		
Failure of agency to document Special Inspection activities \$250.00 ea occurrence		

10-16-06

AGENDA SUMMARY PAGE
CITY COUNCIL MEETING OF: JANUARY 3, 2007

DEPARTMENT: CITY ATTORNEY

DIRECTOR: BRADFORD R. JERBIC

☐ Consent ☒ Discussion

SUBJECT:

RECOMMENDING COMMITTEE: BILL ELIGIBLE FOR ADOPTION AT A LATER MEETING:

Bill No. 2006-79 – Allows small wind energy systems as a conditional use in the R-A, R-E and R-D Zoning Districts. Sponsored by: Councilman Steven D. Ross

Fiscal Impact



No Impact



Augmentation Required



Budget Funds Available

Amount:

Funding Source:

Dept./Division:

PURPOSE/BACKGROUND:

During its last session, the Nevada Legislature adopted provisions to encourage the development and use of wind energy systems. This bill is intended to follow up that legislation by setting forth the circumstances under which small wind energy systems will be allowed in certain residential areas. The bill will allow the use as a conditional use in the R-A, R-E and R-D Zoning Districts.

RECOMMENDATION:

ADOPTION at 1/17/2007 City Council meeting pursuant to the 1/2/2007 Recommending Committee.

First Reading – 12/20/2006; First Publication – 1/5/2007

BACKUP DOCUMENTATION:

Bill No. 2006-79

Minutes:

Recommendation noted.

1/17/2007 Council Agenda

- 1 8. A system must comply with applicable FAA regulations, including any necessary approvals for installations close to airports. For locations within the
2 Airport Overlay District, the system must comply with all regulations and requirements applicable to that district.
- 3 9. A system must comply with all applicable fire codes and building codes.
- 4 10. A building permit application for a system must be accompanied by:
- 5 a. Standard drawings of the wind turbine structure including base, tower and footings;
- 6 b. An engineering analysis of the tower showing compliance with the International Building Code and certified by a licensed professional
7 engineer; and
- 8 c. A line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the
9 National Electrical Code.
- 10 11. Before the installation of a system, the applicant must provide satisfactory evidence that the electrical utility provider has been informed of the
11 applicant's intent to install a system. An off-grid system shall be exempt from this requirement if the property is not served by an electrical utility provider.
- 12 12. No system shall be erected or moved onto any lot prior to construction of the main building unless a building permit has been issued for the
13 construction of the main building.
- 14 13. The Special Use Permit provisions of Section 19.04.040(B) do not apply to this use.
- 15 **On-site Parking Requirement:** No additional parking required beyond that which is required for the principal use on the site.

16
17 SECTION 2: Table 2 of the Land Use Tables adopted in Title 19, Chapter 4, Section
18 10, of the Municipal Code of the City of Las Vegas, Nevada, 1983 Edition, is hereby amended by
19 amending the description of the use "Utility Installation, Other than Listed" in the "Utilities,
20 Communications & Transportation Element" of Table 2 to read as follows:

21 **Description:**

22 A facility or area used as (or for) a utility installation not specifically listed in this Title. This use does
23 not include any type of wind energy conversion system.

24 SECTION 3: Title 19, Chapter 20, Section 20, of the Municipal Code of the City of
25 Las Vegas, Nevada, 1983 Edition, is hereby amended to add thereto the following term, along with
26 its corresponding definition:

27 "Small Wind Energy System" means a wind energy conversion system consisting of a wind turbine,
28 a tower and associated control or conversion electronics, which has a rated capacity of not more than
100kW and which is intended to primarily reduce on-site consumption of utility power. For purposes
of this Title, the use shall not be deemed an accessory structure.

SECTION 4: Title 19, Chapter 20, Section 20, of the Municipal Code of the City of
Las Vegas, Nevada, 1983 Edition, is hereby amended by amending the definition of the term "Utility
Installation, Other than Listed" to read as follows:

"Utility Installation, Other than Listed" means a facility or area [for] used as (or for) a utility
installation not specifically listed in this Title. The term does not include any type of wind energy

1 conversion system.

2 SECTION 5: For purposes of Section 2.100(3) of the City Charter, LVMC 19.04.010
3 and 19.20.020 are deemed to be subchapters rather than sections.

4 SECTION 6: If any section, subsection, subdivision, paragraph, sentence, clause or
5 phrase in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or
6 ineffective by any court of competent jurisdiction, such decision shall not affect the validity or
7 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the
8 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
9 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
10 subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,
11 invalid or ineffective.

12 SECTION 7: All ordinances or parts of ordinances or sections, subsections, phrases,
13 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
14 1983 Edition, in conflict herewith are hereby repealed.

15 PASSED, ADOPTED and APPROVED this ____ day of _____, 2007.

16 APPROVED:

17
18 By _____
19 OSCAR B. GOODMAN, Mayor

20 ATTEST:

21 _____
22 BARBARA JO RONEMUS, City Clerk

23 APPROVED AS TO FORM:

24 Val Steel 12-7-06
25 Date

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2006, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2007, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as first introduced and adopted by the following vote:

8 VOTING "AYE": _____
9 VOTING "NAY": _____
10 ABSENT: _____

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APPROVED:

By _____
OSCAR B. GOODMAN, Mayor

ATTEST:

BARBARA JO RONEMUS, City Clerk