

Architectural Review Board Staff Report

Project Type:	Site Development Section Plan
Meeting Date:	July 8, 2021
From:	Mike Knight, Assistant City Planner <i>gmk</i>
Location:	A 4.9 acre tract of land located southeast of the intersection of Wild Horse Creek Road and Old Chesterfield Road.
Description:	<u>Wildhorse Village, Lot 2A-1 (The Flats at Wildhorse Village) SDSP:</u> A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for a 4.9 acre tract of land located southeast of the intersection of Wild Horse Creek Road and Old Chesterfield Road.

PROPOSAL SUMMARY

This request is to allow for a 266 unit multi-family building. This is the third Site Development Section Plan submitted to the City for the 18 lot development known as Wildhorse Village. Although this is the third lot, this will be the first lot before the Architectural Review Board (ARB) as the first two were single-family developments that are exempt from the ARB review.

The building is 4 stories tall, roughly 48' in height, and contains a 405 space parking garage internal to the building hidden from the public eye. The building is pushed up close to the internal roadway (Wildhorse Lake Blvd.) as required by the site specific governing ordinance. The primary building materials consist of white brick, grey metal shingles, and brushed masonry veneer.



Figure 1: Rendered Image of the Entrance

HISTORY OF SUBJECT SITE

On March 19th, 2008 the City of Chesterfield City Council approved Ordinance 2449. This ordinance amended the previous governing zoning ordinance of the City of Chesterfield by changing the boundaries of the following: an "R-8" Residence District with a Planned Environmental Unit Procedure, "R-5" Residence District, "FPR-5" Residence District, "R-6A" PEU Residence District with a Planned Environmental Unit Procedure, "C-8" Planned Commercial District, "NU" Non-Urban District and "M-3" Planned Industrial District to **one "PC & R" Planned Commercial & Residence District.**

City of Chesterfield Ordinance 2449 governed the entire PC&R district but defined specific development criteria for 3 specific "Categories". Ordinance 2449 also defined 3 specific areas within the PC&R district known as Area 1, Area 2, and Area 3.

In February of 2018, the City of Chesterfield approved Ordinance 2990. This ordinance solely amended the legal description of the entire PC&R district. This legal description removed approximately 2.9 acres in the northwestern section of the district just north of Wild Horse Creek Road and added approximately 3.4 acres in the northwestern section of the district just south of Wild Horse Creek Road.

In November of 2018, the City of Chesterfield approved Ordinance 3023. This zoning request had two main objectives: (1) to amend the legal description and incorporate a .438 acre parcel zoned "NU" Non-Urban; and (2) to amend the development criteria for the zoning district. The ordinance amendment essentially allowed a development team the ability to provide a separate Landscape Plan, Lighting Plan, and sign requirements for the areas of the PC&R district located both north and south of Wild Horse Creek Road individually instead of one Concept Plan for all 99 acres.

In June of 2020, Stock & Associates Consulting Engineers Inc. on behalf of Wildhorse Village, LP made a request to amend the legal description and development criteria for an existing "PC&R" Planned Commercial and Residence District. The zoning petition had two main objectives. The first was to incorporate and re-zone a 0.6 acre "C-8" Planned Commercial District parcel to the Planned Commercial and Residence District "PC&R" known as "Downtown Chesterfield". The second was to amend the development criteria of the governing ordinance. City Council approved this request creating Ordinance 3114. Since the approval of this ordinance, there has been an abundance of plan submission and a number of approvals specifically for Categories A and B of the ordinance. **Categories A and B are now commonly known as Wildhorse Village.**

On the following page (Figure 2) is a table that provides a high level historical summary of significant events for the PC&R district including the aforementioned plans that were submitted and approved.

Year	Month	Approval	Description	Action
2008	March	ORD 2449	Consolidation of six zoning districts into one PC&R district creating Downtown Chesterfield	Subsequent site plans were never submitted under zoning regulations of Ordinance 2449
2018	Feb	ORD 2990	Text amendment removing 2.9 acres and adding 3.4 acres	Provided necessary legal description change to facilitate the development for the Aventura development to the north
	Nov	ORD 3023	Incorporated (0.4) acres into PC&R district and amended development criteria	Allowed for separate concept plans north of Wild Horse Creek Road (Category C) and south of Wild Horse Creek Road (Categories A&B).
2019	Feb	SDCP	Concept Plan for Category C	A Site Development Concept Plan, Landscape Concept Plan, Signage Concept Plan, and Lighting Fixture Concept Plan for the 22 acre phased development north of WHCR in which future individual lots may now seek approval to develop
		SDSP	Lot A of Category C	Allowed for development of a mixed-use building containing residential units, retail, and restaurant on Lot A.
2020	Feb	SDSP	Lot B of Category C	Allowed for development of a hotel and conference center on Lot B
	Aug	ORD 3114	Incorporated (0.6) acres into PC&R district and amended development criteria	Ordinance to facilitate the development known as Wildhorse Village
	October	SDCP	Concept Plan for Infrastructure only of Categories A & B	Allowed for grading to be reviewed and approved to facilitate roadways, storm sewers, and sanitary sewers
2021	Feb	ASDCP	Amended Concept Plan for Categories A&B	Allowed for a phased mixed use development of 17 lots known as Wildhorse Village
	May	SDSP	Site Development Section Plan for Lot 6	Approval for a 35 single family home development
			Site Development Section Plan for Lot 1	Approval for a 72 attached single family home development

STAFF ANALYSIS

The subject site is located south of Wild Horse Creek Road (WHCR), east of its intersection with Old Chesterfield Road (OCR). The subject site is located directly south of WHCR. This roadway is classified as a major arterial in accordance to the City’s functional classification system and all facades will be highly visible to a large number of users. The area is designated City Center (Urban Transition) within the City of Chesterfield Comprehensive Land Use Plan and this development would be 4.9 acres of the 77 acre development known as Wildhorse Village.

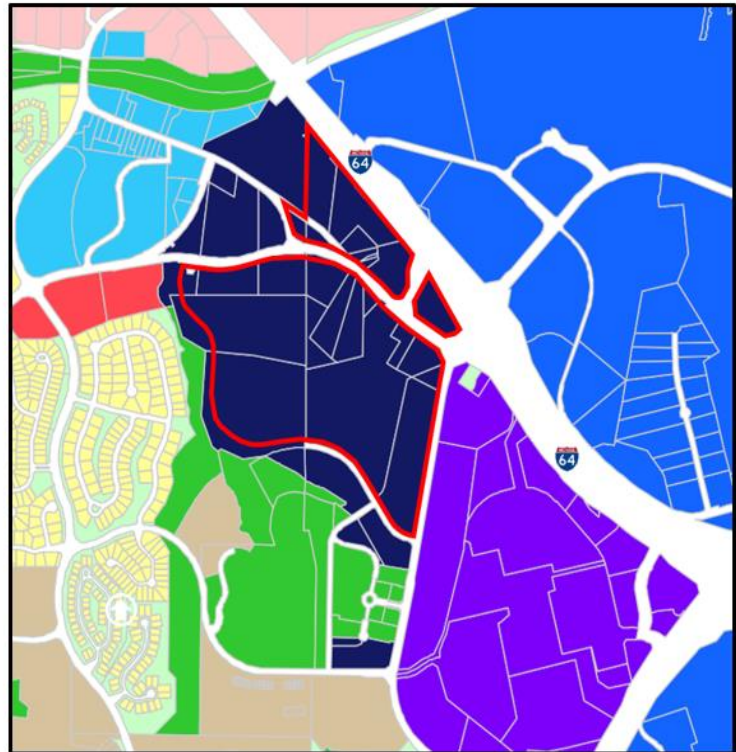
Zoning District:

A PC&R District development is intended to create a diverse residential and commercial mixed-use environment in which residential and commercial uses can be integrated pursuant to a downtown concept that encourages creative and coordinated design and architectural styles, efficient and effective pedestrian circulation, conservation of land resources, efficient and effective vehicular circulation, and where people can choose to live, work, eat, shop, enjoy cultural amenities and recreate.

Comprehensive Plan:

The subject site is located within Ward 2 of the City of Chesterfield. The City of Chesterfield Comprehensive Land Use Plan indicates this parcel is within the City Center (Urban Transition) land use designation. The Comprehensive Plan provides a character description of the Urban Transition area. The description states;

“Land developed to offer residents the opportunity to live, work, shop and play within the larger City Center area. This includes a mixture of housing types and residential densities, integrated with a number of goods and services, especially in the downtown core. Buildings typically stand multiple stories often with residential units above storefronts or other pedestrian activity. Parking is satisfied using on-street parking, structured parking, or shared rear-lot parking strategies. An interconnected network of walkable streets connects the neighborhood to the downtown core.”



- | | |
|----------------------|-------------------------------------|
| Business and Office | Regional Commercial |
| Conservation | Suburban Neighborhood |
| Industrial | City Center (Corporate Village) |
| Mixed Residential | City Center (Downtown) |
| Neighborhood Center | City Center (Historic Chesterfield) |
| Parks and Recreation | City Center (Urban Transition) |

The City Center (Urban Transition) land use designation also states a series of development policies within the Comprehensive Plan. Below, and the following page are specific development policies (**blue**) followed by how the governing ordinance and the Site Development Section Plan relate to those policies.

City Center should serve as the physical and visual focus for the City and include both residential and commercial developments with parks, municipal services, and preservation of historic structures and areas, with cultural, entertainment and pedestrian amenities for its residents.

This is a multi-family development that is east of an approved attached single family development and west of a programmed mixture of residential, office, and commercial activity centered by a lake and amenity areas.

The thoroughfare character should be urban and very walkable.

The project is very walkable with a 10' wide sidewalk along both the main street to the south, and Parkview terrace to the west with a 12' wide mixed use trail along Wild Horse Creek Road.

Buildings to be constructed closer to the roadways to promote the pedestrian experience.

The building is located along the main street (Wildhorse Lake Blvd.) and the plan references the required (build-to line vs a set-back line) to promote the pedestrian experience.

Incorporate a comprehensive network of open space throughout to accommodate small parks, gathering places and community gardens; preserve tree stands; and help reduce stormwater runoff.

This project has an extended (60') landscape buffer along most of the frontage adjacent to Wild Horse Creek Road with an internal courtyard for the residents.

Public art should be incorporated into new construction and re-development projects throughout the City Center.

The applicant provided the location of public art to be next to the entrance of the building, visible to the public realm.

General Requirements for Site Design:

This request is for one 266 unit multi-family building containing both an internal parking structure and an internal courtyard on a 4.9 acre tract of land. The site has one access point of the internal main street to the south, known Wildhorse Lake Blvd, with on-street parking in front of the building. The site has pedestrian accommodations circumnavigating the building with a 12' mixed use trail adjacent to Wild Horse Creek Road.

A. Site Relationships

This is a multi-family development that is east of an approved attached single family development, north of a programmed condo building and west of programmed mixture of residential, office, and commercial activity all within the larger Wildhorse Village development. The project is bordered to the north by two multi-family buildings (Aventura at Wild Horse Creek and Wildhorse Apartments).

B. Circulation System and Access

The site is accessed by the one aforementioned curb cut off Wildhorse Lake Blvd. All vehicular access will utilize this drive for tenant parking, loading and trash. Internal pedestrian paths connect to the large pedestrian paths of the overall Wildhorse Village development. A color Site Development Section Plan (Figure 3) was provided in this packet depicting the access and circulation locations.



Figure 3: Color Site Plan

C. Topography and Retaining Walls

The site slopes from a high point at the southwest corner property line towards the northeast, falling approximately 10'. There are four retaining walls located on the site, two proposed on the northwest and two proposed on the northeast portion of the site. All of the walls are at or under 5' in height. The retaining walls will be constructed of modular masonry. Landscaping has been incorporated into the retaining walls to minimize visibility.

General Requirements for Building Design:

The building is 4 stories tall, roughly 48’ in height, and contains a 405 space parking garage internal to the building hidden from the public eye. The building is pushed up close to the internal roadway (Wildhorse Lake Blvd.) as required by the site specific governing ordinance. The building will be highly visible from all four facades.

D. Scale, Design, Materials, and Color

In recent history, three developments in close proximity have been approved and are either under construction or have received full occupancy. The first is a four story multi-family residential building, constructed primarily with stone and fiber cement siding known as Aventura at Wildhorse Creek. The other two are a 3-4 story mixed use building, and 5 story hotel consisting largely of the same materials (brick, EIFS, ribbed black metal panel) known as Wildhorse and AC Hotel. The applicant has provided images of all three buildings within the attached packet.

The site specific governing ordinance (Ordinance 3114) has specific language in regards to the building placement, overall height, first floor height, and function. There is also a streetscape exhibit for Wildhorse Lake Blvd. The placement, overall height, and function all comply with the site specific ordinance. The site does have a requirement in which the applicant is seeking a modification. The ordinance requires the first floor of buildings to be a minimum of 12’ in height. The applicant is requesting an 11’ 7 7/8” first floor height.

The building is primarily white brick for the first three stories and charcoal gray metal shingle for the fourth floor. A masonry veneer is contained around the base of the building with various recessed and protruding balconies throughout all four facades. All the balconies have a metal railing with horizontal cables. Below is an image of the building with the manufacturer, style, and color of the building materials.

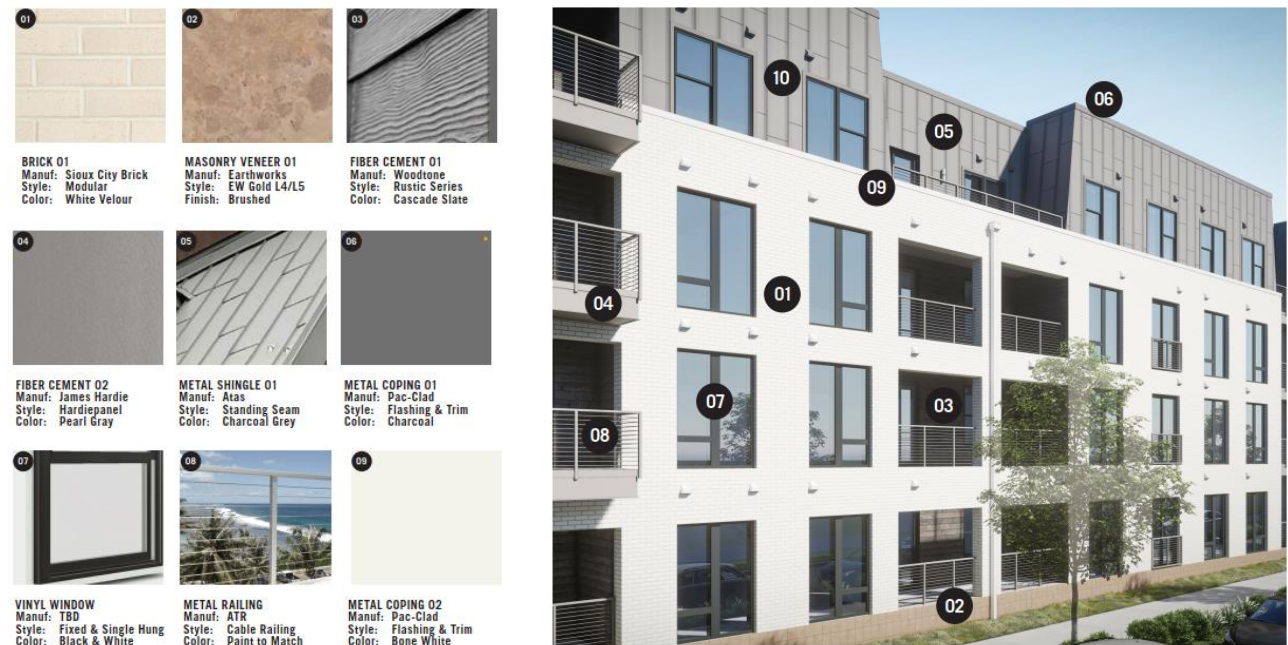


Figure 4: Building Materials

E. Landscape Design

The site contains 19 deciduous canopy trees (29%), 13 evergreen trees (20%), and 28 deciduous understory trees (51%). The site also contains 73 deciduous shrubs and 76 evergreen shrubs. The growth rates for the trees are 23% slow, 49% moderate, and 28% fast. The most common tree on the site is the American Arborvitae and the most common shrub is the Arrowwood Viburnum. The site's heaviest landscaping is along Wild Horse Creek Road along the north façade.

F. Screening

The residential units will be screened by the parapet walls. The applicant has provided a roof-top screening exhibit which is included in the packet. The units will be located above the residential units as depicted in the image below (Figure 5.)



Figure 5: Roof Top Units

A dog run consisting of an artificial turf is located at the northeast corner of the property. The dog run will be enclosed by a decorative black metal fencing. An image of the fencing is included in the packet.

G. Lighting

All exterior lighting will adhere to all UDC lighting code requirements. All exterior lighting will be white in color, and all the cut sheets have been included within the submittal. The site does have two bollards that are illuminated located in the southeast corner of the site near the entrance.

MODIFICATION

The applicant is seeking two modifications from the governing ordinance. One is the previously mentioned first floor height requirement. The site specific governing ordinance requires the first floor of this building to be 12' in height. The applicant is proposing an 11' 7-7/8" first floor height.

As designed, the first floor height uses precut dimensional lumber. In order to achieve the height requirement, there would be additional construction waste, time, and finances required to cut down the studs according to the applicant. The full narrative of the modification request is included in this packet.

The second is in regards to the rooftop mechanical screening requirement. Ordinance 3114 states, "rooftop mechanical equipment shall be permitted on roof within architecturally designed, fully enclosed penthouses that complement the building design". The applicant is proposing to screen the rooftop equipment on all visible sides with materials that are an integral part of the architecture.

This is the same language that exists for every development in the City’s Unified Development Code. Again the full narrative of the modification request is included in this packet.

The Architectural Review Board’s recommendation on the requested modifications will be provided to the Planning Commission.

RENDERING

Below in Figures 6 and 7 are renderings of two prominent viewpoints that can be seen when traveling east and west on Wild Horse Creek Road.



Figure 6: Rendering (Traveling West on WHCR)



Figure 7: Rendering (Traveling East on WHCR)

DEPARTMENT INPUT

Be advised, this project is still going through development review by City Staff and will not proceed to the Planning Commission until all outstanding items have been addressed. All recommendations made by the ARB will be included in Staff's report to the Planning Commission. Staff requests review and recommendation on this submittal for Wildhorse Village, Lot 2A-1 (The Flats at Wildhorse Village) Site Development Section Plan.

MOTION

The following options are provided to the Architectural Review Board for consideration relative to this application:

- 1) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for Wildhorse Village, Lot 2A-1 (The Flats at Wildhorse Village) SDSP as presented, with a recommendation for approval (or denial)."
- 2) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for Wildhorse Village, Lot 2A-1 (The Flats at Wildhorse Village) SDSP with the following recommendations..."

Attachments

1. Applicant's Modification Request
2. Architectural Review Packet Submittal

STOCK | & ASSOCIATES
Consulting Engineers, Inc.

June 16, 2021

Via E-Mail (jknight@chesterfield.mo.us)

City of Chesterfield
690 Chesterfield Pkwy W.
Chesterfield MO 63017-0760

Attention: Mr. Mike Knight – Assistant City Planner

Re: Wildhorse Village Lot 2A-1 (SDSP letter dated 06/04/2021)
(Stock Project No. 220-6873)

Dear Mike,

Pursuant to your City letter dated 06/04/21, we are respectfully request the following modification to City of Chesterfield Ordinance No. 3114

Modification Request to City of Chesterfield Ordinance No. 3114
Attachment A -Section IB.1-Building Floor Height

Specifically, our request is as follows:

We request a modification to Section IB.1-Building Floor Height of Ordinance No. 3114, which states: “first story heights shall be 12-30 feet with the exception that the residential buildings in the geographic areas of Lots 1 and 6 on the Preliminary Development Plan shall be 9-30 feet.” We are proposing an 11’-7 7/8” first floor height in lieu of 12’-0”. As designed, the first floor height uses precut dimensional lumber. In order to achieve 12’-0” as required by the ordinance, a significant amount of construction waste, time and money would be required to cut the studs down to size.

Sincerely,



George M. Stock, P.E.
President

STOCK | & ASSOCIATES
Consulting Engineers, Inc.

June 16, 2021

Via E-Mail (jknight@chesterfield.mo.us)

City of Chesterfield
690 Chesterfield Pkwy W.
Chesterfield MO 63017-0760

Attention: Mr. Mike Knight – Assistant City Planner

Re: Wildhorse Village Lot 2A-1 (SDSP letter dated 06/04/2021)
(Stock Project No. 220-6873)

Dear Mike,


Pursuant to your City letter dated 06/04/21, we are respectfully request the following modification to City of Chesterfield Ordinance No. 3114

Modification Request to City of Chesterfield Ordinance No. 3114
Attachment A -Section IG.5

Specifically, our request is as follows:

We request a modification to Section IG.5 of Ordinance No. 3114, which states: “rooftop mechanical equipment shall be permitted on roofs within architecturally designed, fully enclosed penthouses that complement the building design.” We are proposing to screen rooftop equipment on all visible sides with materials that are an integral part of the architecture. Parapet walls or screen walls will be treated as an integral part of the architecture and will not visually weaken the design of the structure, per UDC Section 405.04.010.

Sincerely,



George M. Stock, P.E.
President

The Flats at Wildhorse Village

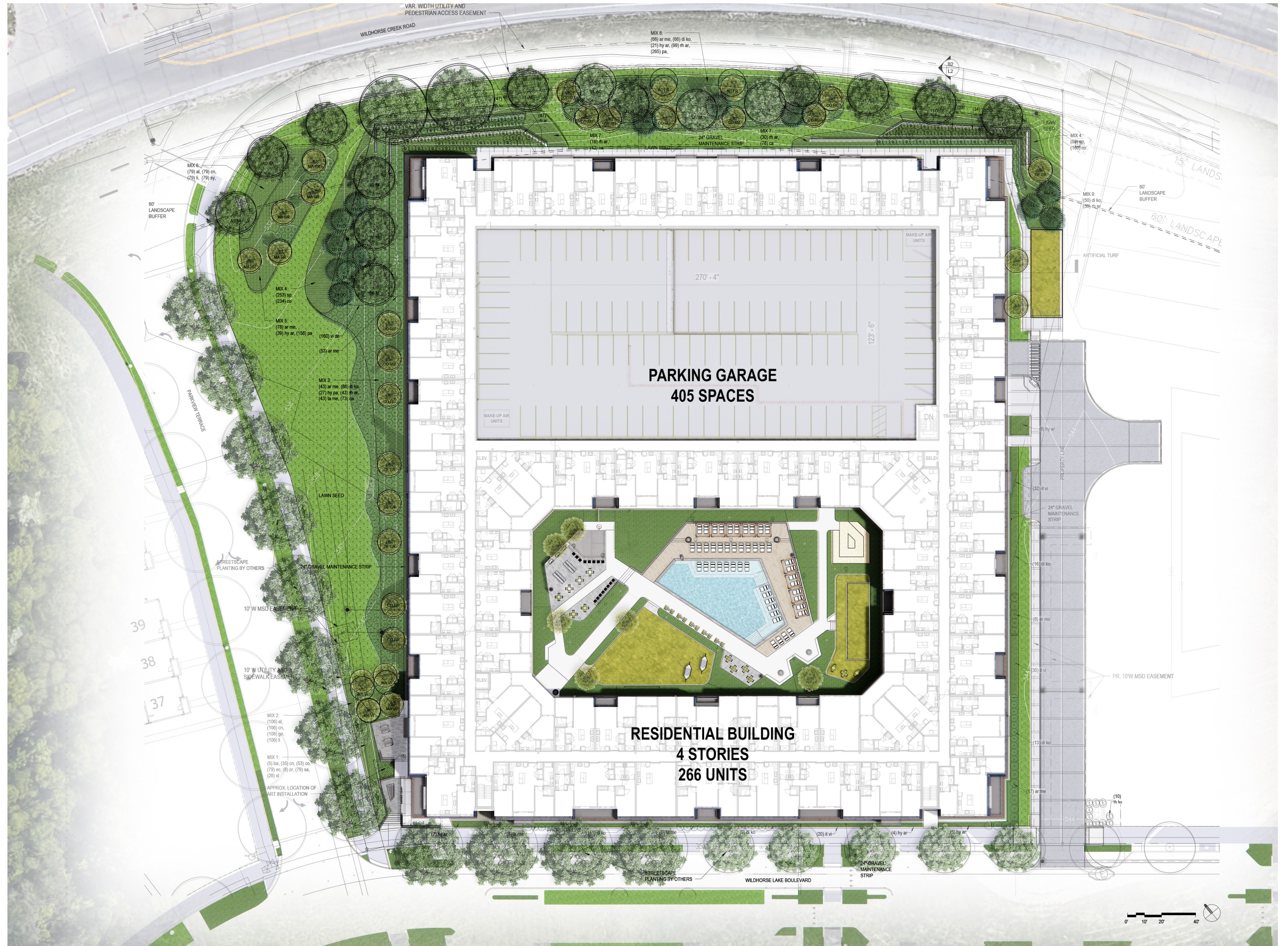
Architectural Review Presentation



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Site Plan



Adjacent Site Photos



Building Elevations



1 NORTH ELEVATION
A3.2 1/16" = 1'-0"



2 EAST ELEVATION
A3.2 1/16" = 1'-0"

Building Elevations



Rendering - Main Entry at Wildhorse Lake BLVD



Rendering - Wildhorse Lake BLVD & Parkview Terrace



Rendering - Wild Horse Creek Road Looking West



Rendering - Wild Horse Creek Road Looking SE



Rendering - View Corridor Along Parkview Terrace



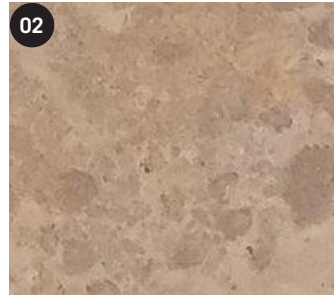
Rendering - Courtyard



Exterior Building Materials



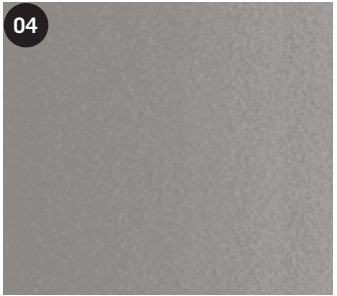
BRICK 01
 Manuf: Sioux City Brick
 Style: Modular
 Color: White Velour



MASONRY VENEER 01
 Manuf: Earthworks
 Style: EW Gold L4/L5
 Finish: Brushed



FIBER CEMENT 01
 Manuf: Woodtone
 Style: Rustic Series
 Color: Cascade Slate



FIBER CEMENT 02
 Manuf: James Hardie
 Style: Hardiepanel
 Color: Pearl Gray



METAL SHINGLE 01
 Manuf: Atas
 Style: Standing Seam
 Color: Charcoal Grey



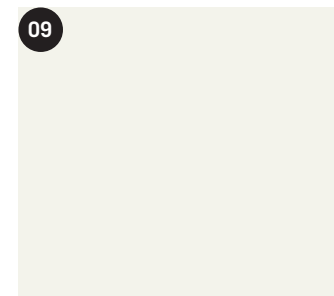
METAL COPING 01
 Manuf: Pac-Clad
 Style: Flashing & Trim
 Color: Charcoal



VINYL WINDOW
 Manuf: TBD
 Style: Fixed & Single Hung
 Color: Black & White



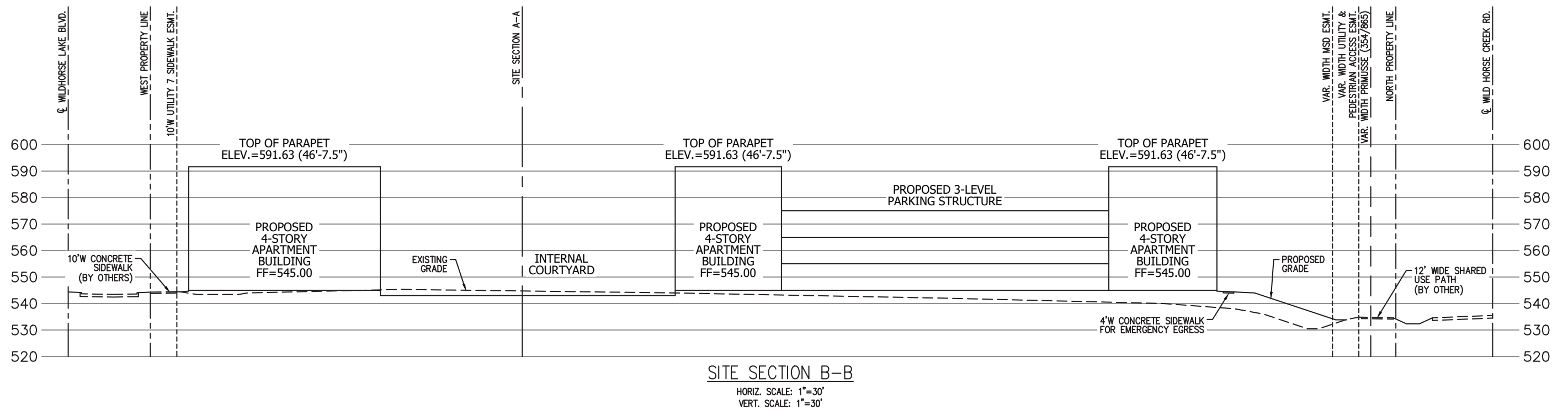
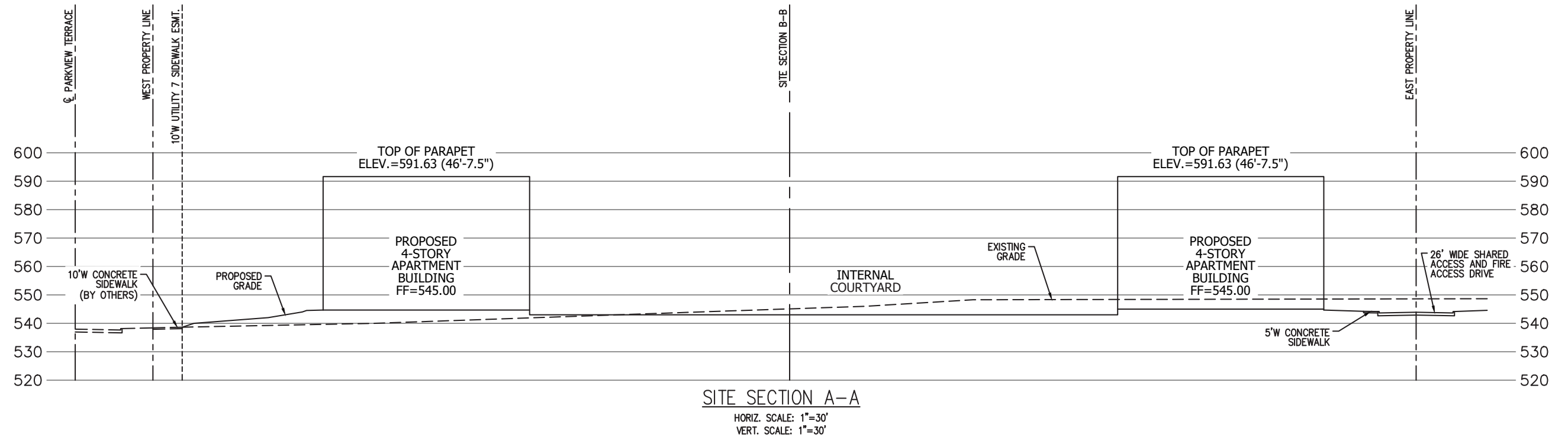
METAL RAILING
 Manuf: ATR
 Style: Cable Railing
 Color: Paint to Match



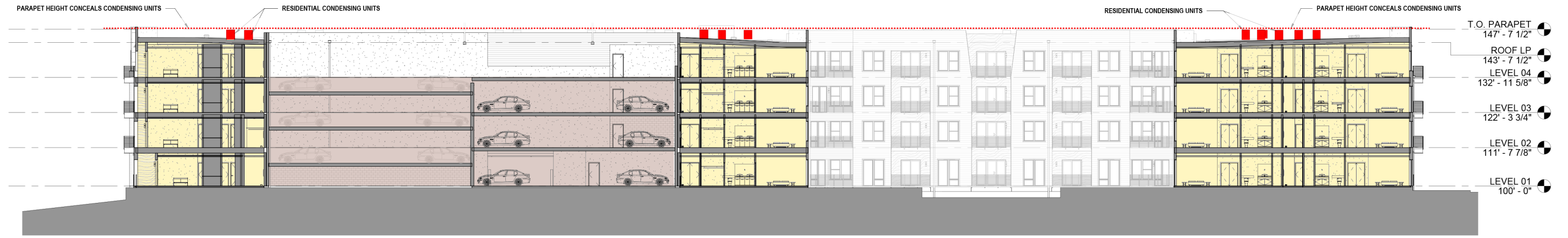
METAL COPING 02
 Manuf: Pac-Clad
 Style: Flashing & Trim
 Color: Bone White



Building Sections



Rooftop Screening



1 NORTH-SOUTH SECTION
A0-07 1/16" = 1'-0"



2 EAST-WEST SECTION
A0-07 1/16" = 1'-0"

Architect's Statement

General Requirements for Site Design:

- Site Relationship

The proposed project is part of the larger Wildhorse Village development and as such conforms to and incorporates the site design requirements as outlined in Ordinance 3114. The project is bordered to the north by Aventura at Wild Horse Creek Apartments and Wildhorse Apartments along Wild Horse Creek Road. Lots to the east, west, and south are also part of the larger Wildhorse Village development with uses as allowed in Ordinance 3114. The Flats at Wildhorse Village is planned to embrace views of the existing lake to the south and to intentionally tie into the planned streets, sidewalks and trails of Wildhorse Village. Public art is proposed near the main entry of the development at Parkview Terrace and Wildhorse Lake BLVD.

- Circulation System and Access

The site is accessed via one curb-cut shared between lots 2A-1 and 2A-2. All vehicular access will utilize this drive for tenant parking, loading and trash. There are no other internal drives. Internal pedestrian sidewalks and paths connect to the large pedestrian paths of the Wildhorse Village development.

- Topography

The site slopes from a high point at the southwest corner property line towards the northeast, falling approximately 10 feet.

- Retaining Walls

Due to the topography of the site, the proposed development utilizes a series of terraced retaining walls at the northeast and northwest corners of the building. The walls are designed to be minimal in appearance with heights ranging between 3-5 feet. Extensive landscaping will help obscure the walls from Wild Horse Creek Road. The retaining walls will be constructed of modular masonry.

General Requirements for Building Design:

- Scale

Great consideration and has been given regarding the massing and scale of the architecture. This development has been designed in concert with the density and urban aspirations of the Wildhorse Village master plan. The building utilizes an articulation pattern of voids and recesses with unifying

roof elements to create a rhythm of “corners and edges.” These “corner and edges” help breakdown the façade into individual townhome-like elements, similar in scale to classic European and historic US streets. Other façade elements like the inset balconies, protruding balconies and open terraces provide that extra layer of depth and activity not found in other multifamily development. The residential building completely conceals the parking garage, blocking unwanted views. Finally, the implied 4th floor attic story helps to breakdown the vertical scale of the building while also provide interesting visual relief and architectural continuity.

- Design

The architecture intends to instill a feeling of quality and quiet sophistication by blending clean, modern aesthetics with hints of classical forms and organization. High contrasting elements like the white brick against the black windows provide visual interest, as do the deeply inset balconies and terraces. The subtle sloped roof forms at the 4th floor insets also play on expectations of modern and classical design. Programmatically, the development utilizes one point of entry to help localize and isolate servicing. The trash room and parking garage are internal, fully concealed from public view. Conversely, locating the main entry at the corner of Parkview Terrace and Wildhorse Lake BLVD will help to activate the corner and provide interest at a main entry point in to the larger Wildhorse Village development. Overall, the building is strong yet subdued, aging well over time and providing a fitting backdrop to the urban fabric.

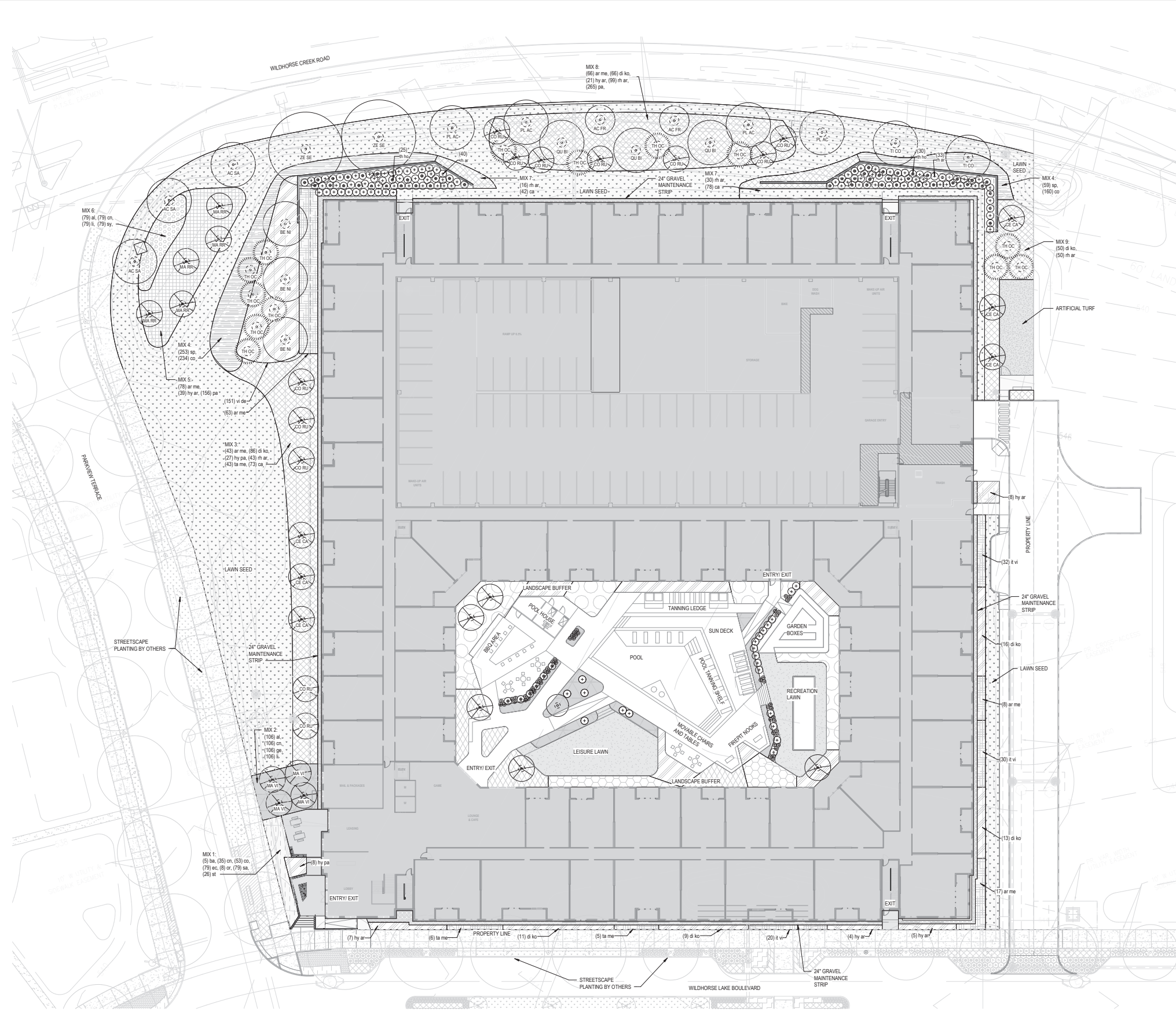
- Materials and Color

The main building materials will be white brick, vision glass, gray metal shingles, gray fiber cement panels and wood tone fiber cement panels. Black vinyl doors and windows with Low E glazing will be used at all residential units. Black anodized storefront system with insulated glass units (IGUs) will be located at the main entry lobby. The monochromatic color palette of the project of whites, grays and blacks juxtaposed to create high-contrasting elements providing interest.

- Landscape Design, Screening and Fencing

The development incorporates a comprehensive landscape design package intended to enhance natural features, views, as well as integrate into the Wildhorse Village master landscape plan. Where possible, site utilities will be screened by plantings. At decorative metal railing encloses the dog run at the northeast corner of the property.

Landscape Plan



PLANTING NOTES

1. PLANT NAMES MAY BE ABBREVIATED ON DRAWINGS. REFER TO PLANTING SCHEDULE AND LEGENDS FOR SYMBOLS, ABBREVIATIONS, BOTANICAL AND COMMON NAMES, SIZES, ESTIMATED QUANTITIES AND OTHER REMARKS.
2. VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO STARTING CONSTRUCTION AND IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
3. VERIFY THE LOCATION OF ALL UTILITIES INCLUDING SANITARY AND STORM SEWER + ROOF DRAINS PRIOR TO BEGINNING CONSTRUCTION.
4. ALL WORK PERFORMED SHALL BE IN COMPLIANCE WITH THE CONTRACT DOCUMENTS AND WITH ALL APPLICABLE CODES, STANDARDS AND ORDINANCES.
5. ALL PLANTS SHALL BE GUARANTEED FOR ONE FULL YEAR FROM THE SUBSTANTIAL COMPLETION OF THE LANDSCAPE CONTRACT AT FULL REPLACEMENT VALUE INCLUDING LABOR TO REPLACE PLANT MATERIALS.
6. ALL PLANT MATERIAL SHALL BE OF SPECIMEN QUALITY AND OF THE SIZE AND TYPE SPECIFIED IN THE PLANT SCHEDULE.
7. THE SITE SHALL BE FINISH GRADED BY THE LANDSCAPE CONTRACTOR. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN FINISHED GRADES AND RE-GRADE ANY AREAS DISTURBED BY LANDSCAPE OPERATIONS.
8. ANY CLEAN EXCESS SOIL FROM LANDSCAPE OPERATIONS SHALL BE WASTED ON SITE AT THE DISCRETION OF THE CONTRACTOR OR DISPOSED OF OFF SITE. ALL CONSTRUCTION DEBRIS FROM LANDSCAPE OPERATIONS SHALL BE DISPOSED OF OFF SITE.
9. REFER TO SPECIFICATION FOR SOIL TYPE. ALL AREAS INDICATED IN THE PLANS TO BE SOODED, SHALL BE MOVED JUST PRIOR TO INSTALLATION AND SHALL BE GUARANTEED FOR A PERIOD OF ONE MONTH. ALL SOO AREAS ARE TO BE WATERED DAILY FOR ONE WEEK AND EVERY OTHER DAY FOR THE NEXT TWO WEEKS.
10. ALL PLANTING AREAS MUST BE FREE OF ALL WEEDS AND DEBRIS BEFORE PLANTING, SOODING, AND/OR SEEDING.
11. REF. SPECIFICATIONS AND DETAILS FOR PLANTING METHODS, REQUIREMENTS, SOIL TESTING, MATERIALS, EXECUTIONS AND PLAN PROTECTIONS.
12. PROVIDE AND INSTALL LOCALLY AVAILABLE SHREDED HARDWOOD MULCH AROUND THE BASE OF ALL TREES AND SHRUBS IN SHRUB BEDS ONLY. IF TREES AND SHRUBS ARE PART OF A PERENNIAL / ORNAMENTAL GRASS / GROUND COVER BED, THEN APPLY LOCAL LEAF MULCH TO ALL.
13. WHERE PROVIDED, AREA TAKEOFFS AND PLANT QUANTITY ESTIMATES IN PLANTING SCHEDULE ARE FOR INFORMATION ONLY. CONTRACTOR IS RESPONSIBLE TO DO THEIR OWN QUANTITY TAKE-OFFS FOR ALL PLANT MATERIAL AND SIZES SHOWN ON THE DRAWINGS. IN CASE OF DISCREPANCIES, BRING TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION.
14. THE CONTRACTOR SHALL PROVIDE PLANT MATERIAL QUANTITIES TO MATCH THE DRAWINGS AND TO PROVIDE TOTAL COVERAGE AT THE SPECIFIED SPACING.
15. THERE SHALL BE NO SUBSTITUTIONS OF PLANT MATERIAL WITHOUT APPROVAL OF THE OWNER/ARCHITECT. THE OWNER/ARCHITECT ALONE SHALL DETERMINE EQUALITY BASED UPON COMPLETE INFORMATION SUBMITTED BY THE CONTRACTOR. SUBSTITUTIONS SHALL NOT BE MADE UNLESS DRAWINGS AND/OR WRITTEN REQUESTS ARE SUBMITTED TO THE OWNER/ARCHITECT FOR APPROVAL.
16. CONTRACTOR IS RESPONSIBLE TO RESTORE ALL AREAS OF THE SITE OR ADJACENT AREAS WHERE DISTURBED TO A CONDITION THAT MEETS OR EXCEEDS THE CONDITIONS PRIOR TO THE DISTURBANCE.
17. SEE SHEET L4.601 FOR PLANT SCHEDULE.

PLANTING KEY

SYM	BOTANICAL NAME	CULTVAR
1. DECIDUOUS CANOPY TREES		
AC FR	Acer freemanii	'Armstrong'
AC SA	Acer saccharum	Green Mountain
BE NI	Betula nigra	
PL AC	Platanus x acerifolia	'Morton's Circle'
QU BI	Quercus bicolor	
TI CO	Tilia cordata	Greenspire
ZE SE	Zelkova serrata	Green Vase
2. EVERGREEN TREES		
TH OC	Thuja occidentalis	Smaragd
3. DECIDUOUS UNDERSTORY TREES		
CE CA	Cercis canadensis	Merlot
CO RU	Cornus Rubra*	CONSTELLATION
HE MI	Hepacodum microides	Temple of Bloom
MARR	Malus x ROYAL RAINDROPS	
MA VI	Magnolia virginiana	Jim Wilson
5. DECIDUOUS SHRUBS		
th ar	Thuja arcanota	Go-Low
th ho	Thuja occidentalis	Holmstrup
ORNAMENTAL GRASS		
ca	Calamagrostis x acutiflora	Karl Foerster
perennial		
am	Amsonia hubrichtii	

LEGEND

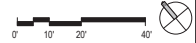
SYMBOL	DESCRIPTION	DETAIL
(Circle with dot)	CANOPY TREES	B4
(Circle with cross)	UNDERSTORY TREES	B4
(Circle with star)	EVERGREEN TREES	C1
(Square with dot)	SEEDED LAWN TURF	

WILDHORSE CREEK ROAD STREET TREES QUANTITY AND PERCENTAGES

SYM	QTY	%
AC FR	2	15%
AC SA	3	25%
PL AC	4	30%
TI CO	2	15%
ZE SE	2	15%

NOTE: SEE SHEET L2.1 FOR FULL PLANTING SCHEDULE

AT PLANTING PLAN
1" = 20'-0"



Landscape Planting Schedule

MIX 1

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
5	ba	Baptisia x	Purple Smoke'	False Indigo	1 Gal.	36" O.C.	Container
35	cn	Calamittha nepeta	Calamint	Calamint	1 Qt.	18" O.C.	Container
53	co	Coreopsis lanceolata	Ticksseed	Ticksseed	1 Qt.	12" O.C.	Container
79	ec	Echinacea purpurea	Virgin'	Purple Coneflower	1 Qt.	12" O.C.	Container
8	o	Origanum x	Drings of Jupiter'	Ornamental Onion	1 Qt.	36" O.C.	Container
79	sa	Salvia nemorosa	Bumbleblue'	Meadow Sage	1 Qt.	12" O.C.	Container
26	st	Sporobolus heterolepis	Tara'	Dropsseed	1 Qt.	24" O.C.	Container

MIX 2

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
106	al	Allium	Millenium	Ornamental Onion	1 Qt.	18" O.C.	Container
106	cn	Calamittha nepeta	Calamint	Calamint	1 Qt.	18" O.C.	Container
106	ge	Geranium macrorrhizum	Benara Variety'	Cranesbill	1 Qt.	18" O.C.	Container
106	li	Litope muscari	Big Blue'	Lilyturf	1 Qt.	18" O.C.	Container

MIX 3

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
43	ar me	Aronia melanocarpa	Troquos Beauty'	Chokeberry	5 Gal.	48" O.C.	Container
86	di lo	Diervilla x	Kodiak Orange'	Diervilla	5 Gal.	36" O.C.	Container
27	hy pa	Hydrangea paniculata	LimeLight'	Panicle Hydrangea	5 Gal.	60" O.C.	Container
43	rh ar	Rhus aromatica	Gro-low'	Aromatic Sumac	5 Gal.	48" O.C.	Container
43	ta me	Taxus x media	Everlow'	Yew	5 Gal.	48" O.C.	Container
79	ca	Calamagrostis x acutiflora	Karl Foerster'	Feather Reed Grass	1 Gal.	30" O.C.	Container

MIX 4

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
306	sp	Sporobolus heterolepis	Dropsseed	Dropsseed	1 Qt.	30" O.C.	Container
382	co	Coreopsis lanceolata	Ticksseed	Ticksseed	1 Qt.	12" O.C.	Container

MIX 5

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
78	ar me	Aronia melanocarpa	Troquos Beauty'	Chokeberry	5 Gal.	48" O.C.	Container
156	hy ar	Hydrangea arborescens	Annabelle'	Smooth Hydrangea	5 Gal.	60" O.C.	Container
156	pa	Panicum virgatum	Northwind'	Switchgrass	1 Gal.	24" O.C.	Container

MIX 6

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
79	al	Allium	Millenium	Ornamental Onion	1 Qt.	18" O.C.	Container
79	cn	Calamittha nepeta	Calamint	Calamint	1 Qt.	18" O.C.	Container
79	li	Litope muscari	Big Blue'	Lilyturf	1 Qt.	18" O.C.	Container
79	sy	Symphoricarpon novae-angliae	Purple Dome'	Aster	1 Qt.	18" O.C.	Container

MIX 7

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
46	rh ar	Rhus aromatica	Gro-low'	Aromatic Sumac	5 Gal.	48" O.C.	Container
120	ca	Calamagrostis x acutiflora	Karl Foerster'	Feather Reed Grass	1 Gal.	30" O.C.	Container

MIX 8

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
66	ar me	Aronia melanocarpa	Troquos Beauty'	Chokeberry	5 Gal.	48" O.C.	Container
66	di lo	Diervilla x	Kodiak Orange'	Diervilla	5 Gal.	36" O.C.	Container
21	hy ar	Hydrangea arborescens	Annabelle'	Smooth Hydrangea	5 Gal.	60" O.C.	Container
99	rh ar	Rhus aromatica	Gro-low'	Aromatic Sumac	5 Gal.	48" O.C.	Container
265	pa	Panicum virgatum	Northwind'	Switchgrass	1 Gal.	24" O.C.	Container

MIX 9

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
50	di lo	Diervilla x	Kodiak Orange'	Kodiak Orange Diervilla	5 Gal.	48" O.C.	Container
50	rh ar	Rhus aromatica	Gro-Low'	Grow Low Sumac	5 Gal.	48" O.C.	Container

MIX 10

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
74	af	Athyrium filix	Femina'	Lady Fern	1 Qt.	18" O.C.	Container
216	ap	Astilbe pumila	Chinese Astilbe	Chinese Astilbe	1 Qt.	12" O.C.	Container
21	ar	Aralia cordata	Japanese Spikeshed	Japanese Spikeshed	1 Qt.	30" O.C.	Container
433	cx	Carex laxiculmis	Hobb' Bunny Blue'	Creeeping Sedge	1 Qt.	12" O.C.	Container
192	hm	Hakonechloa macra	Hakone Grass	Hakone Grass	1 Qt.	18" O.C.	Container

MIX 11

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
84	al	Allium	Millenium	Ornamental Onion	1 Qt.	18" O.C.	Container
84	cn	Calamittha nepeta	Calamint	Calamint	1 Qt.	18" O.C.	Container
149	co	Coreopsis lanceolata	Ticksseed	Ticksseed	1 Qt.	12" O.C.	Container
149	ec	Echinacea purpurea	Virgin'	Purple Coneflower	1 Qt.	12" O.C.	Container
51	o	Origanum x	Drings of Jupiter'	Ornamental Onion	1 Qt.	36" O.C.	Container
128	sa	Salvia nemorosa	Bumbleblue'	Russian Sage	1 Qt.	12" O.C.	Container
93	st	Sporobolus heterolepis	Tara'	Dropsseed	1 Qt.	24" O.C.	Container

MIX 12

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
98	ar lo	Aronia melanocarpa	Low Scape Mound'	Chokeberry	5 Gal.	24" O.C.	Container
42	ce oc	Cephalanthus occidentalis	Sugar Shack	Butterbush	5 Gal.	36" O.C.	Container
53	cl pl	Claytonia arifolia	Hummingbird'	Sweet Peppercush	5 Gal.	48" O.C.	Container
63	am	Amsonia hubrichtii	Bluestar	Bluestar	1 Gal.	30" O.C.	Container
83	ca	Calamagrostis x acutiflora	Karl Foerster'	Feather Reed Grass	1 Gal.	30" O.C.	Container
116	pe	Pennisetia setipicifolia	Little Spire'	Russian Sage	1 Qt.	18" O.C.	Container

MIX 13

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	SPACING	METHOD
lo oa		Fothergilla gardenii	Dwarf Fothergilla	Dwarf Fothergilla	5 Gal.	36" O.C.	Container
li vi		Ilex virginica	Swelleign	Swelleign	5 Gal.	30" O.C.	Container
cp		Carex pensylvanica	Little Henry'	Pennsylvania Sedge	1 Qt.	12" O.C.	Container
hg		Hosta	Golden Tara'	Hosta	1 Qt.	30" O.C.	Container
hm		Hosta	Halcyon'	Hosta	1 Qt.	30" O.C.	Container

GROWTH RATES

SLOW	15/65 = 23%
MODERATE	32/65 = 49%
FAST	18/65 = 28%

DECIDUOUS CANOPY TREES (29%)

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	METHOD	MATURE HEIGHT	DETAIL	COMMENTS	GROWTH RATE
2	AC FR	Acer freemanii	Armstrong'	Armstrong Maple	2.5' Cal.	B & B	50-70'	B4		Moderate
3	AC SA	Acer saccharum	Green Mountain	Sugar Maple	2.5' Cal.	B & B	45' +	B4		Fast
3	BE NI	Betula nigra		River Birch	12-14' Ht.	B & B	40-60'	B4	Multi-stem	Fast
4	PL AC	Platanus x acerifolia	Morton's Circle'	Exclamation' London Planetree	2.5' Cal.	B & B	45' +	B4		Fast
3	QU BI	Quercus bicolor		Swamp White Oak	2.5' Cal.	B & B	50-60'	B4		Moderate
2	TI CO	Tilia cordata	Greenspire	Littleleaf Linden	2.5' Cal.	B & B	50-70'	B4		Slow
2	ZE SE	Zelkova serrata	Green Vase	Zelkova	2.5' Cal.	B & B	45' +	B4		Fast

EVERGREEN TREES (20%)

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	METHOD	MATURE HEIGHT	DETAIL	COMMENTS	GROWTH RATE
13	TH OC	Thuja occidentalis	Smartpod	American arbovitae	12-14' Ht.	B & B	50' +	C1		Slow

DECIDUOUS UNDERSTORY TREES (51%)

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	METHOD	MATURE HEIGHT	DETAIL	COMMENTS	GROWTH RATE
6	CE CA	Cercis canadensis	Merlot	Eastern Redbud 'Merlot'	8-10' Ht.	B & B	10-15'	B4	Single Stem	Fast
12	CO RU	Cornus 'Rutab' CONSTELLATION	Dogwood	Eastern Redbud 'Merlot'	8-10' Ht.	B & B	12-18'	B4	Multi-stem	Moderate
1	AC PA	Haplacodium miconoides	Temple of Bloom	Seven-Sea Flower	10-12' Ht.	B & B	45' +	B4	Multi-stem	Moderate
9	MA VI	Magnolia virginiana	Jim Wilson	Sweetbay Magnolia	8-10' Ht.	B & B	15-25'	B4	Multi-stem	Moderate
5	MA RO	Malus x ROYAL RAINDROPS		flowering crabapple	2.5' Cal.	B & B	12-16'	B4	Single Stem	Moderate

DECIDUOUS SHRUBS

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	METHOD	SPACING	DETAIL	COMMENTS
93	rh ar	Rhus aromatica	Gro-Low	Grow Low Sumac	5 GAL	Container	48" O.C.	B1	

DECIDUOUS SHRUB AREAS

78	ar me	Aronia melanocarpa	Morton'	Troquos Beauty Black Chokeberry	5 Gallon	Container	48" O.C.	B1	
42	di lo	Diervilla x	Kodiak Orange'	Kodiak Orange Diervilla	5 Gallon	Container	48" O.C.	B1	
55	hy ar	Hydrangea arborescens	Annabelle'	Smooth Hydrangea	5 Gallon	Container	60" O.C.	B1	
82	li vi	Ilex virginica	Little Henry'	Sweetpire	5 Gallon	Container	30" O.C.	B1	
150	li de	Viburnum dentatum CHRISTOM	Blue Mylar'	Arrowwood Viburnum	5 Gallon	Container	48" O.C.	B1	

EVERGREEN SHRUBS

QTY	SYM	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE	METHOD	SPACING	DETAIL	COMMENTS
99	th ho	Thuja occidentalis	Holmstrup	American arbovitae	5 GAL	Container	48" O.C.	B1	Needed Evergreen

EVERGREEN SHRUB AREAS

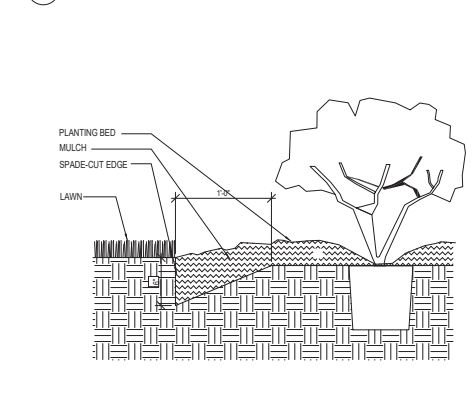
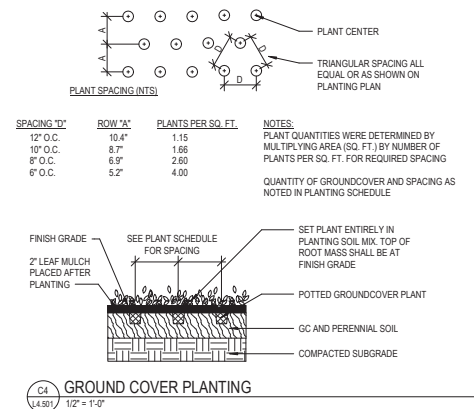
11	ta me	Taxus x media	Everlow'	Yew	5 Gallon	Container	48" O.C.	B1	
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SEEDED LAWN TURF

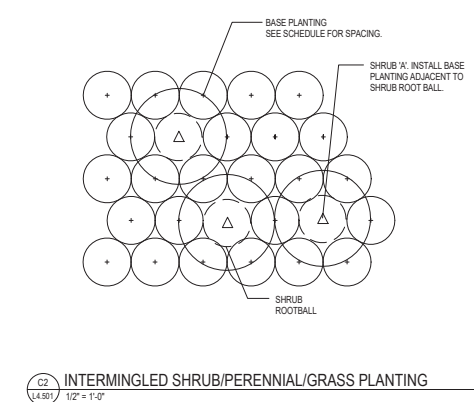
MANUFACTURER	SEED MIX	SEEDING RATE	COMMENTS
Lebanon Turf	Winning Colors Tall Fescue Blend (or approved equal)	Per Manufacturer specification	INSTALL AT RATE PER MANUFACTURER'S RECOMMENDATIONS

- NOTES:
- WHERE PROVIDED, AREA TAKEOFFS AND PLANT QUANTITY ESTIMATES IN PLANTING SCHEDULE ARE FOR INFORMATION ONLY. CONTRACTOR IS RESPONSIBLE TO DO THEIR OWN QUANTITY TAKEOFFS FOR ALL PLANT MATERIAL AND SIZES SHOWN ON THE DRAWINGS. IN CASE OF DISCREPANCIES, BRING TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION.
 - ALL PLANTING MIX AREAS WITH MORE THAN ONE PLANT TYPE PER AREA TO BE INSTALLED IN RANDOM, NATURALISTIC, TRIANGULAR SPACING AT A MINIMUM OF 20 PER AREA (SEE PLAN FOR QUANTITIES).
 - FINAL SEED MIX SPECIES, PERCENTAGES TO BE COORDINATED WITH NATIVE SEEDING CONTRACTOR.

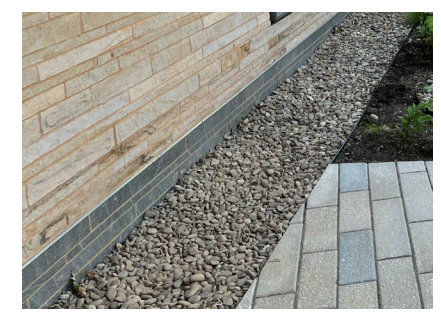
Landscape Details



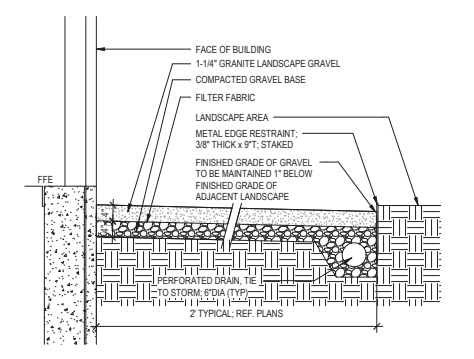
C3 1/2" = 1'-0"



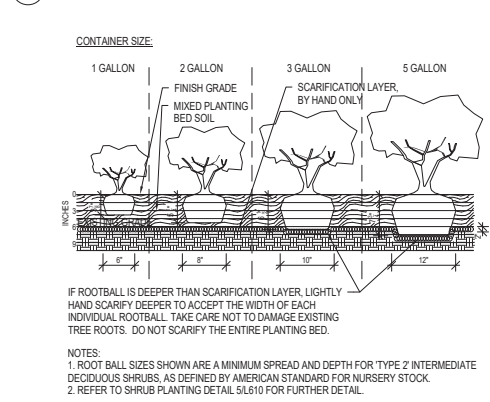
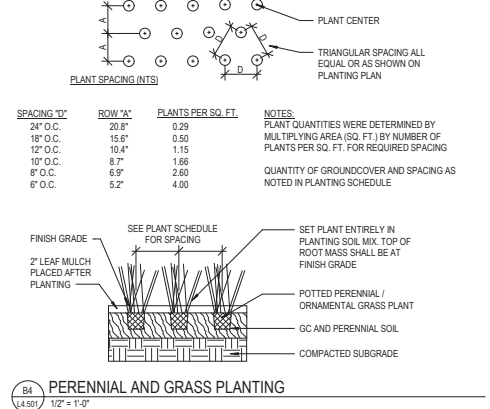
C2 1/2" = 1'-0"



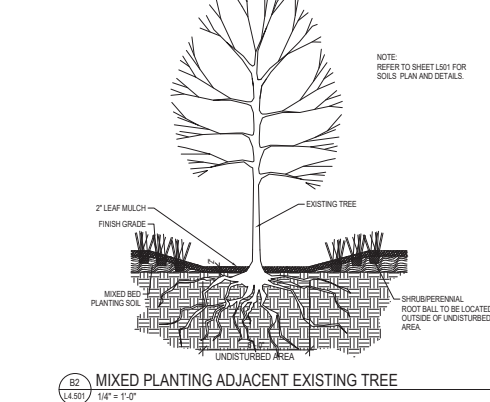
D1 3/4" = 1'-0"



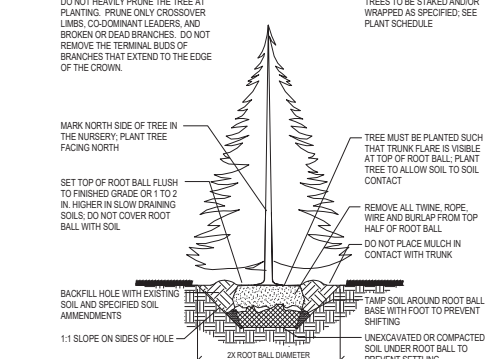
D1 3/4" = 1'-0"



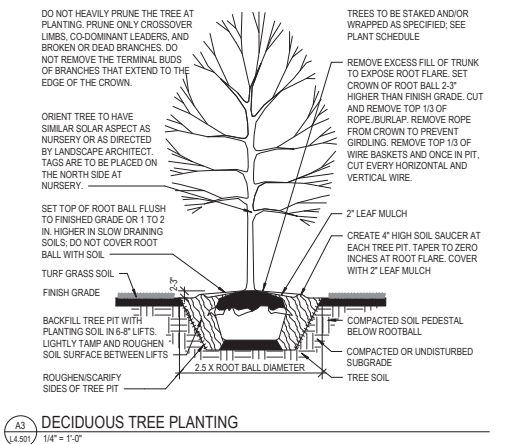
B4 1/2" = 1'-0"



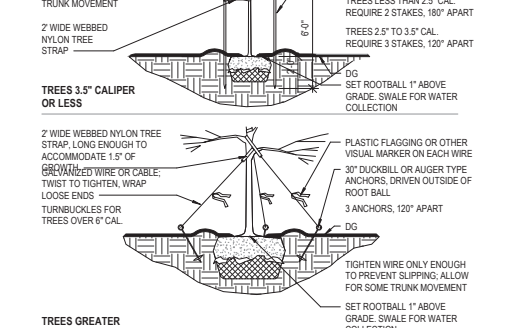
B2 1/4" = 1'-0"



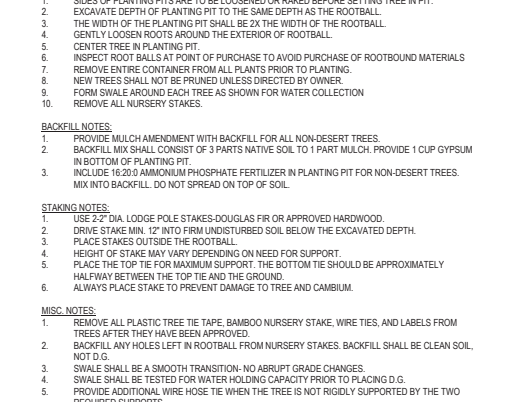
B1 1/4" = 1'-0"



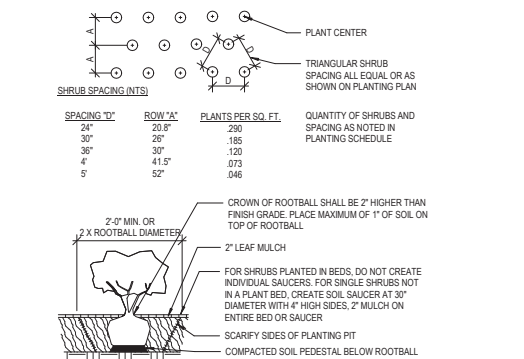
A3 1/4" = 1'-0"



A3 1/4" = 1'-0"



A2 1/4" = 1'-0"



A1 1/4" = 1'-0"

Retaining Walls and Fencing

www.versa-lok.com



Mosaic®



Four-unit Mosaic panel

Depth (in):	12
Depth (mm):	304.8
Height (in):	10
Height (mm):	254
Face width (wide) (in):	24
Face width (wide) (mm):	609.4
Face area (sq. ft.):	1.6
Maximum unreinforced height(ft.) :	3-4*
Maximum geogrid reinforced height:	50+
Setback:	1.5" per panel
Batter/Cant:	8.5
Weight (lbs):	200



POOL, PET & PLAY™

- Improved Panel Strength & Durability
- Increased Safety & Security for Children & Pets



COLOR OPTIONS

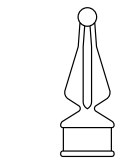


BLACK



BRONZE

ADORNMENTS



QUAD FLARE



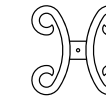
TRIAD



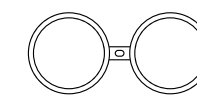
ROYALTY



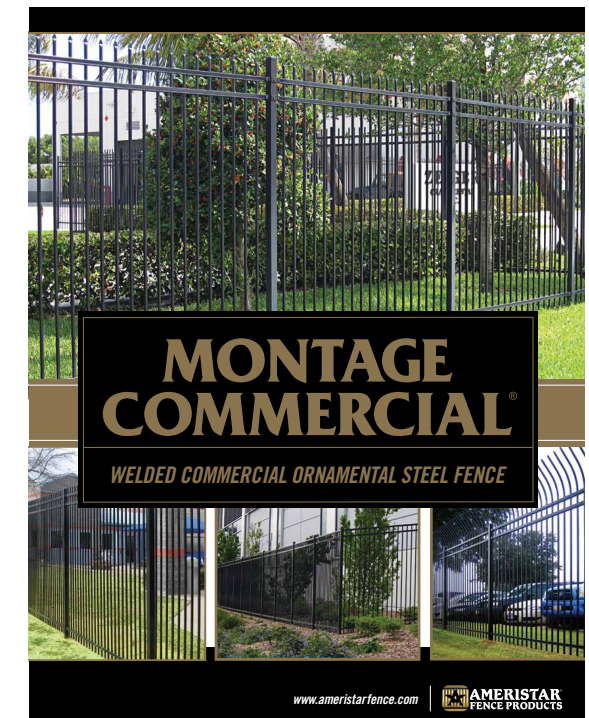
BALL CAP



BUTTERFLY SCROLL

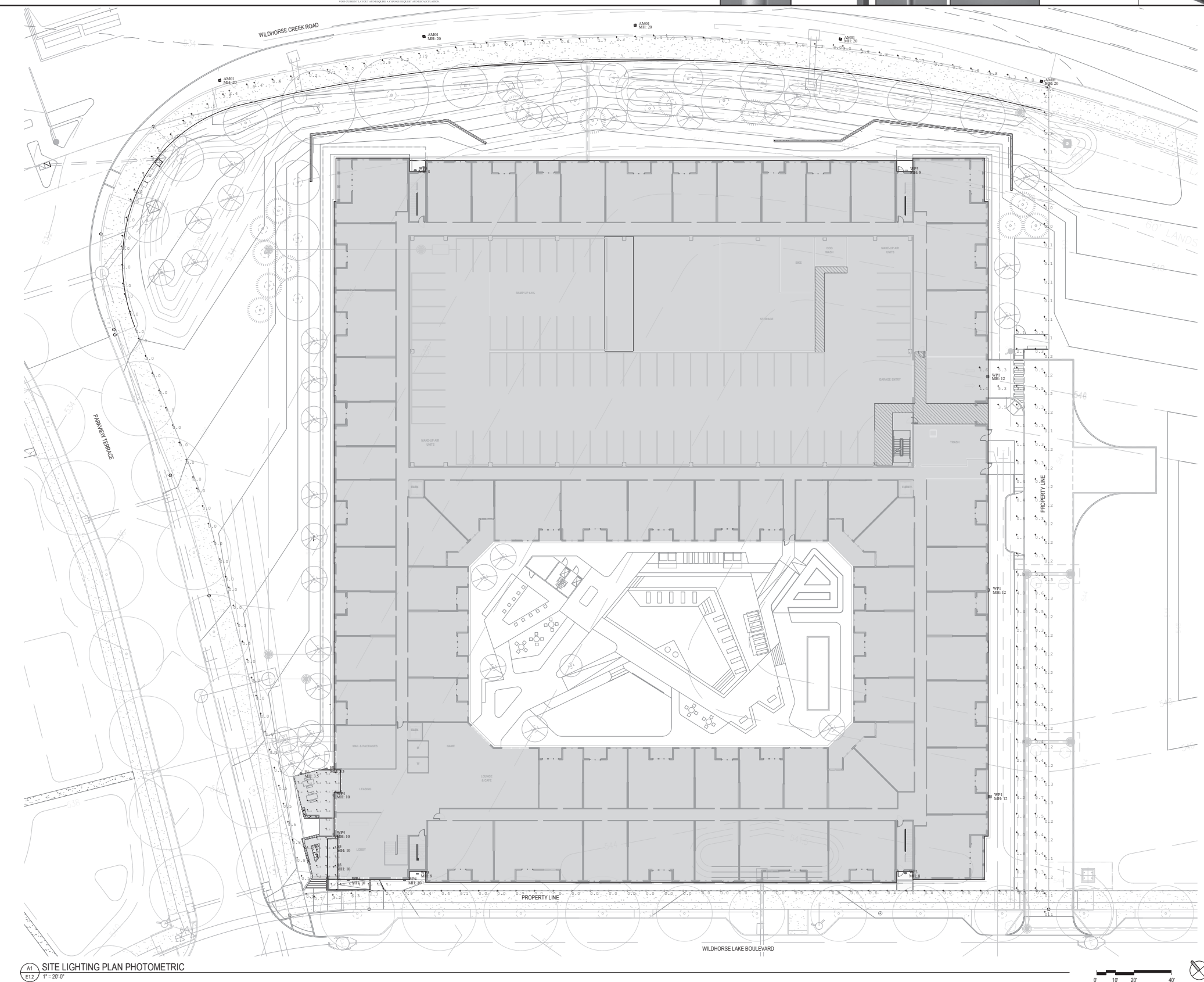


DOUBLE RINGS



Lighting Design

Calculation Summary							Luminaire Schedule								
Label	Calc Type	Units	Avg	Max	Min	Avg/Min	Max/Min	Symbol	Qty	Label	Arrangement	LLF	Lum. Watts	Total Watts	Description
ADA RAMP	Illuminance	Fc	4.24	8.5	1.4	3.00	6.07	○	2	WL	SINGLE	0.900	23	46	ARB-R3-LED-42-D1-A
PARKING GARAGE TOP D	Illuminance	Fc	2.52	12.0	0.1	25.20	120.00	○	3	S1	BACK-BACK	0.912	113	678	GLEON-SA2C-740-U-5WQ
PATIO AREA	Illuminance	Fc	5.04	10.3	0.2	25.20	51.50	○	8	S2	SINGLE	0.912	86	688	ARB-B3-LED-D1-T5
POOR SIDEWALK AREAS	Illuminance	Fc	2.17	4.7	0.3	7.28	15.07	○	2	S3	SINGLE	0.900	14.8	29.6	SL601240WH
PROPERTY LINE	Illuminance	Fc	0.60	8.0	0.0	N.A.	N.A.	○	3	WP1	SINGLE	0.912	59	177	GWU-SA1C-140U-SL2
ROADWAY	Illuminance	Fc	0.77	5.8	0.2	3.85	20.00	○	4	WP3	SINGLE	0.900	16.4	65.6	MERU-AC
								○	4	WP4	SINGLE	0.900	20.7	82.8	AMCSA
								○	5	AMB1	SINGLE	0.900	36	180	FRV-C25-D-UNV-T4-BZ



A1 SITE LIGHTING PLAN PHOTOMETRIC
E12 1"=20'-0"

Flythrough Animation

Animation