



October 13<sup>th</sup>, 2016

Mr. Adam Sayre  
Director of Planning & Development – City of Verona  
111 Lincoln St.  
Verona, WI 53593-1520

Re: PD Process Step 4: Precise Implementation Plan – West End Mixed Use Proposal

Mr. Sayre:

This letter is in regard to our proposed Mixed Use Development of the ~3.33 acre parcel generally located at the West End. Please find attached a full application and supporting materials required for Precise Implementation Plan Review. Additionally, please find attached a Trip Generation and Traffic Study prepared by KL Engineering which addresses in detail site circulation, egress and ingress. We anticipate this review taking place at the November 7<sup>th</sup> Plan Commission and November 14<sup>th</sup> Common Council meetings.

In preparation for our review and in response to the comments we received from both the Plan Commission and Common Council during the Concept Review and GDP stage, we have spent time evaluating and revising our site plan. In particular, we have met with KL Engineering and City Staff for the purposes of reviewing site circulation and access both in terms of our proposed improvements and likely future improvements made by others. We have also matched the number of units in the multifamily building to the underground parking capacity. This resulted in a slight reduction of units (we are now proposing 37). Additionally, we have included a complete landscaping plan, zoning analysis and civil engineering set.

We remain excited for this opportunity to deliver a great product for the City of Verona and we look forward to continued discussion in September. In the meantime, any questions or comments can be directed to me at Steve Brown Apartments (608-255-7100 or [dseeley@stevebrownapts.com](mailto:dseeley@stevebrownapts.com)).

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Seeley", written over a light blue horizontal line.

Dan Seeley  
Director of Development  
Steve Brown Apartments

# WEST END DEVELOPMENT

## PRECISE IMPLEMENTATION PLAN

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#### DEVELOPER



120 W. GORHAM STREET  
MADISON, WI 53703

#### ARCHITECT



202 W. GORHAM STREET  
MADISON, WI 53703

#### LANDSCAPE ARCHITECT



2830 PARMENTER ST.  
MIDDLETON, WI 53562

#### CIVIL ENGINEER



999 FOURIER DRIVE, SUITE 201  
MADISON, WI 53717

10/13/16

# PROJECT OVERVIEW:

With its prominence on West Verona Avenue, proximity to the future VASD campus and current EPIC campus, as well as its ease of access to Hwy 18/151, the West End Site is a unique opportunity to provide a gateway to the City of Verona. Although this area was once envisioned primarily as a “big box” retail site, the realization of that vision is no longer a possibility. This grants Verona a second chance to step back, reevaluate and improve upon the previously approved plan. Steve Brown Apartments is the perfect development partner to collaboratively activate this important site to its fullest potential. With more than 35 years in the property management and development business, we are a homegrown and local company that has developed a reputation for market leading construction quality and management operations. We aren’t looking for the fastest, least expensive path to a return. Instead, we approach each development or acquisition opportunity with an eye on the future and the intention of a long-term commitment. For a new development, this translates to high quality construction and design that stands out from the norm and an award winning management approach for maintenance and operations. We are excited to continue investing in Verona and we are looking forward to a strong partnership.

## Project Themes and Images:

In concert with the Comprehensive Plan, we envision West Verona Avenue as a modern retail corridor intended to attract local, sophisticated and upscale operators. The overall theme for the retail at West End draws inspiration through incorporating a chic rustic “old main street” feel with the traditional offerings of successful “Lifestyle Centers.” These spaces will be aesthetically pleasing and functional at the pedestrian scale. These multi-purpose leisure-time destinations cater to modern lifestyles and often include upscale restaurants, entertainment and retail opportunities while focusing on design ambiance and amenities such as fountains, elaborate landscaping and street furniture that are conducive to casual browsing. The architecture will be varied to visually reference individual storefronts. This will be intentionally achieved by utilizing updated modern industrial materials, colors in the facades and articulated elevations in terms of height and style in the roof lines. Special attention will also be given to smaller details like signage, pavement materials and lighting. It is our experience that residential design using high quality interior and exterior materials combined with strong and intentional management results in high renewal rates. We develop and manage apartment *homes* and our residents view them as such. The residences will provide a range of housing options attractive to different demographics and lifestyle preferences. Single-family townhouses will speak to newly formed households who may not be prepared for or have the financial means to purchase a home but who are seeking a similar experience. The residential building will be preferred by individuals who are likely in the early stages of their



professional careers or new to the area. A range of styles and unit types will more appropriately meet the needs of a variety of persons than a more homogeneous development. Both the housing

configurations will employ architecture that is reflective of a residential neighborhood style. This will be demonstrated through individual entries, pitched roofs, gables, porches, and a variety of colors and materials.

## Mix of Dwelling Unit Types and/or Land Uses:

The retail portion of the project features 15,192 square feet of retail space configured across multiple single-story standalone structures. We intend to deliver the project in a single phase beginning with a commercial building being constructed on spec. This initial building will be delivered in the Spring/Summer of 2017 and will establish the design aesthetic for the site while maintaining flexibility for uses. The remaining retail and residential structures will be subsequently constructed with the entire site being completed in the Spring/Summer of 2018. The Residential portion of the project will be comprised of thirty-seven (37) units presented in two building styles. Two-story terraced homes with walk up entries, porches and patios, and individual two-car garages will contain eight (8) three bedroom units. These units will be constructed in two groupings and designed to read visually as a neighborhood of single family homes. A mix of unit styles totaling twenty-nine (29) units will make up the composition of a three-story multi-family building which will be designed to visually complement the terraced homes. These will also include private entries where possible, porches or balconies, and a one unit to one space ratio of underground parking. Architecturally the building will mimic the design of the townhouses and present a more residential, less urban style.

## Residential densities and nonresidential intensities as described by dwelling units per acre, floor area ratio and impervious surface area ratio:

- Residential Densities: 11.21 DU/Acre and .37 (FAR)
- Nonresidential Intensities: .1 (FAR)
- Impervious Surface Area Ratio: 70.44%

## Treatment of natural features:

The existing condition is a vacant lot with no significant natural features. We intend to add and incorporate natural features to soften the landscape and to provide a finished product that is pleasing to and in service of a pedestrian scale. Vegetation will be utilized to screen the residential aspects of the development from the commercial in addition to creating shade and definition of place for the outdoor gathering spaces associated with the retail components. The majority of the residences will have balconies and we intend to employ furniture, patios and walkways to connect retail guests with the outdoor spaces. The existing green space "Commons" of the West End Apartments will also be tied through to the new residences and shops via connected path which will feature a fountain or another significant landscaping element. All structures will have good exposure in 360 degrees allowing for ample sunlight and shading with the seasons.

## Relationship to the Master Plan, nearby properties and public streets:

The introductory paragraph of The City of Verona 2010 Comprehensive Plan indicates the City of Verona faces significant population, household, and employment growth during its 20-year planning period (2010 – 2030). This growth, as noted in the Plan, will need to be planned for and intelligently accommodated. The Plan further confirms it's not a question of *should* Verona grow or *will* Verona grow but *how* should Verona grow. Answering that question is the task the Plan sets out to address and in the process of doing so, presents data and statistics which conclude the City's population will likely triple over the next 20 years. Our proposal seeks to plan for and accommodate that growth by providing infrastructure for increased economic development through the addition of retail and commercial space as well as additional housing units targeted for the workforce who will drive the economic growth. We respond to these needs by aligning with the policies established in support of the goals the Comprehensive Plan seeks to achieve. Specifically:

### Land Use General Goal Two: Prevent Land Use Conflicts

- » Policy – Encourage office and similar non-residential development adjacent to the 18-151 by-pass.

### Housing General Goal One: Maintain the City of Verona as Hometown U.S.A

- » Policy – encourage development of a range of housing options for people of different ages, incomes and varying housing preferences.
- » Policy – promote smart growth and direct new urban growth to the existing city and to the grown edge of the city

### Housing General Goal Two: Manage Urban Growth and Urban Development

- » Policy – reserve lands for industrial and commercial development where conditions are most favorable for them.

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### Housing General Goal Three: Encourage a variety of new housing options within the City

- » Policy – consider continuing to respond to market demands for both rental and owner occupied housing development.
- » Policy – consider allowing residential developments that are exclusively multi-family
- » Policy – continue to support higher-density residential in-fill and redevelopment projects in the city's downtown area and in areas adjacent to Verona Ave.

## Relationship to the Master Plan, nearby properties and public streets (cont.):

This proposal is in line with and in support of these and many of the additional objectives and statements established by the Comprehensive Plan as well as being appropriate for the proposed location with regard to nearby properties and public streets. Residents typically must travel outside the City of Verona to satisfy routine needs for consumer goods and a wider variety of retail resources is desired by many residents. Commercial and retail development on West Verona Ave. is consistent with the preference of the majority of Verona residents. These residents indicated via a survey taken in association with the development of the Comprehensive Plan that W. Verona Ave and Verona's downtown should continue to be promoted as the City's commercial center. The residences will be an extension of the existing multi-family while providing new housing forms and a range of housing choices intended to meet the needs of individuals of varied income levels. The new development will also be connected to the nearby properties via an extension of the existing greenway which could eventually provide a pedestrian path from the bus stop on West Verona Ave, through the newly constructed shops, housing, future school campus and to the Military Ridge path.

The project will encourage and support a range of transportation choices via proximity to the Military Ridge path, a public transit bus stop and highly trafficked streets. It will be served by a combination of public streets and an existing private drive. Bounded by W. Verona Ave to the North, Wall St. to the West, West End Circle to the East and a private drive to the South, the new development will be accessed by pedestrians, bikes and motorists by a combination of sidewalk extensions and curb cuts. The site is currently served by a bus stop on W. Verona Ave in addition to an existing sidewalk to support pedestrian traffic. Vehicular traffic will access the site from Wall St. via future curb cut allowing only for right in/out movements. A future curb cut at West End Circle with a right in only restriction will provide access to the retail units and multifamily building. The existing east/west private drive will be designated as a parking restricted fire lane and will serve both the residences and the retail via future curb cut allowing for full ingress and egress movements. A final curb cut in the existing West End Circle median will provide left turn ingress and egress from the private drive. Last, the existing sidewalk will be extended to bound and serve the entire site.

## Statement of Rationale and Justification for PD:

PD zoning is being requested and proposed for this development due to the inability of traditional zoning to adequately serve a master planned, mixed use development. The constraints of traditional zoning and areas where the proposed plan deviates are detailed below and in the attached. While the commercial components and both types of residential forms are important on their own, the real impact and strength of this project is in their relationship to and support of each other. This is viewed as an entire site activation and while the basic tenets of the underlying zoning will be maintained, flexibility is required to properly deliver the envisioned product to Verona. To bring this project to completion, a Conditional Use is required for the residential components and the proposed Conditional Use meets or exceeds the standards identified in 13-1-363(d). Specifically, the proposed Conditional Use is in harmony with the purposes, goals, objectives,

policies and standards of the City of Verona Comprehensive Plan and other documents as described in the narrative above. Most simply, this Conditional Use provides the City of Verona with increased diversity of housing stock. This stock is necessary to meet current market demand being driven by shifting demographics and lifestyle preferences that seek high-quality rental housing as the residences of choice. Given the existing conditions of the proposed development's location, the multifamily component of this PD will make a positive impact and set a high bar for future construction in terms of neighborhood character and architectural and aesthetic design. The Conditional Use and development as a whole have also been designed and reviewed to fit within the existing and future traffic and access constraints. Additionally, the residences create an appropriate buffer of medium density housing as transition between the future commercial uses and existing high density housing. The implementation of this Conditional Use is an important component of the larger Planned Development. Its approval outweighs any potential adverse impacts both in respect to the development as a whole and for the multifamily component as a stand-alone entity.



**Draft list of zoning standards which will not be met by the proposed PD and the location(s) in which they apply and, a complete list of zoning standards which will be more than met by the proposed PD and the location(s) in which they apply:**

	Required or Permitted	Proposed	Met
<b>13-1-86 Residential Land Uses</b>			
<b>Conditional Uses</b>			
Shall comply with adopted residential policies, including any phasing policies which limit the number of apartment or multiplex dwelling units that may be constructed			Yes
Shall provide high-quality architectural design and pleasing aesthetics, including "four-sided" architecture, substantial amounts of windows, and detailed architectural features			Yes
Shall use substantial amounts of high-quality exterior materials such as brick, stone, or cementitious siding			Yes
Shall enhance and promote the general character of the surrounding area			Yes
<b>13-1-49 Urban Residential (UR) District</b>			
<b>Land Uses Permitted by Right</b>			
Townhouse	3600 sf lot	143676 sf	Yes
<b>Land Uses Permitted as Conditional Use</b>			
Apartment	3600 sqft/du	4490 sf/du	Yes
<b>Density and Intensity</b>			
<b>Conventional Development</b>			
Max Gross Density	12 du/acre	11.21 du/acre	Yes
Minimum Zoning District Area	1 acre	3.30 acres	Yes
Maximum Building Coverage	40%	15%	Yes
Minimum Landscape Surface Ratio	0.5	0.33	No
<b>Residential Bulk Requirements</b>			
<b>Minimum Lot Area</b>			
Townhouse	3600 sqft	143676 sf	Yes
Apartment			
3+ Bedroom	3900 sqft	143676 sf	Yes
2 Bedroom	3600 sqft	143676 sf	Yes
1 Bedroom	3000 sqft	143676 sf	Yes
Studio/Efficiency	3000 sqft	143676 sf	Yes
<b>Minimum Lot Width</b>			
Townhouse	20 feet, 34 feet corner lot	585 feet	Yes
Apartment	66 feet, 80 feet corner lot	585 feet	Yes

	Required or Permitted	Proposed	Met
<b>Minimum Setbacks (Townhouses)</b>			
Front or Street Side Lot Line to House	25 feet	36 feet	Yes
Front or Street Side Lot Line to Garage	25 feet	24 feet	No
Side Lot Line to House or Garage	15 feet	24 feet	Yes
Total of Both Sides, Lot Lines to House/Garage	30 feet	60 feet	Yes
Rear Lot Line to House or Garage	25 feet	162 feet (min)	Yes
Side Lot Line to Accessory Structures	3 feet	N/A	
Rear Lot Line to Accessory Structure	3 feet	N/A	
Peripheral Setback	0.2	N/A	
Minimum Paved Surface Setback	5 feet from side or rear, 10 feet from street	4 feet from side, 13 feet from street	No
<b>Minimum Setbacks (Apartments)</b>			
Front or Street Side Lot Line to House	25 feet	40 feet	Yes
Front or Street Side Lot Line to Garage	25 feet	34 feet	Yes
Side Lot Line to House or Garage	15 feet	34 feet	Yes
Total of Both Sides, Lot Lines to House/Garage	30 feet	74 feet	Yes
Rear Lot Line to House or Garage	25 feet	186 feet	Yes
Side Lot Line to Accessory Structures	3 feet	N/A	
Rear Lot Line to Accessory Structure	3 feet	N/A	
Peripheral Setback		N/A	
Minimum Paved Surface Setback	5 feet from side or rear, 10 feet from street	8 feet from side, 17 feet from street	Yes
<b>Minimum Dwelling Unit Separation</b>	30 feet	0 feet	No
<b>Maximum Height of Dwelling Unit</b>	35 feet	33 feet	Yes
<b>Minimum Number of Off-Street Spaces</b>			
Studio/Efficiency	1.5	N/A	
1 Bedroom	2	N/A	
2 Bedroom	2.5	N/A	
3+ Bedroom	3	16	
Total	24	16	No
<b>Minimum Dwelling Core Dimensions</b>			
Studio/Efficiency	600 sqft	N/A	
1 Bedroom	800 sqft	N/A	
2 Bedroom	1000 sqft	N/A	Yes
<b>Minimum Roof Pitch</b>	3:12	6:12	Yes
<b>Minimum Eave Width</b>	18 inches	18 inches	Yes

	Required or Permitted	Proposed	Met
<b>Minimum Dwelling Unit Separation</b>	30 feet	0 feet	No
<b>Maximum Height of Dwelling Unit</b>	35 feet	10 feet per floor	Yes
<b>Minimum Number of Off-Street Spaces</b>			
Studio/Efficiency	1.5	N/A	
1 Bedroom	2	29 (estimated)	
2 Bedroom	2.5	N/A	
3+ Bedroom	3	N/A	
Total	52	29	No
<b>Minimum Dwelling Core Dimensions</b>			
Studio/Efficiency	600 sqft	N/A	Yes
1 Bedroom	800 sqft	826 sqft (avg)	Yes
2 Bedroom	1000 sqft	N/A	
<b>Minimum Roof Pitch</b>	3:12	6:12	Yes
<b>Minimum Eave Width</b>	18 inches	18 inches	Yes

**Nonresidential Bulk Requirements**

Minimum Lot Area: 1 acre (20,000 sf is permitted with conditional use permit and site plan for end use of property demonstrating full compliance with this Chapter. Existing lots smaller than 1 acre may be used for nonresidential uses. No new lots smaller than 20,000 sf may be created.)	1 acre	3.30 acres	Yes
<b>Minimum Lot Width</b>	100 feet	585 feet	Yes
<b>Minimum Street Frontage</b>	50 Feet	527 feet	Yes
<b>Minimum Setbacks</b>			
Building to Front or Street Side Lot Line	50 feet	5 feet	No
Building to Residential Side Lot Line	50 feet	30 feet	No
Building to Residential Rear Lot Line	50 feet	206 feet	Yes
Building to Nonresidential Side Lot Line	25 feet	30 feet	Yes
Building to Nonresidential Rear Lot Line	25 feet	206 feet	Yes
Peripheral Setback - see 13-1-249	0.2	N/A	
Minimum Paved Surface Setback	5 feet from side or rear, 10 feet from street	14 feet from side, 30 feet from street	Yes
Minimum Building Separation	50 Feet	15 feet	No
Maximum Building Height	35 Feet	30 feet	Yes
Minimum Number of Off-Street Parking Spaces (1 space per 300 sf gross floor area for SC zoning)	51 spaces	80 spaces	Yes

**13-1-54 Suburban Commercial (SC) District**

**Land Uses Permitted by Right**

h. Personal or Professional Services - one space per 300 sf of gross floor area	51 spaces	80 spaces	Yes
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**Land Uses Permitted as Conditional Use**

h. Indoor Commercial Entertainment  
 Parking Regulations - 1 space for every 3 patrons seats or lockers or one space per 3 persons at maximum capacity of the establishment

**Density and Intensity**

Minimum Lot Area: 1 acre (20,000 sf is permitted with conditional use permit and site plan for end use of property demonstrating full compliance with this Chapter. Existing lots smaller than 1 acre may be used for nonresidential uses. No new lots smaller than 20,000 sf may be created.)	1 acre	3.30 acres	Yes
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**Minimum Lot Width**

100 feet	585 feet	Yes
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**Minimum Street Frontage**

50 feet	527 feet	Yes
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**Minimum Setbacks**

Building to Front or Street Side Lot Line	25 feet	8 feet	No
Building to Residential Side Lot Line	10 feet	47 feet	Yes
Building to Residential Rear Lot Line	25 feet	188 feet	Yes

Building to Nonresidential Side Lot Line	10 feet or 0 feet on 0 lot line side	47 feet	Yes
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Building to Nonresidential Rear Lot Line	25 feet	188 feet	Yes
Peripheral Setback - see 13-1-249	0.2	N/A	

Minimum Paved Surface Setback	5 feet from side or rear, 10 feet from street	15 feet from side, 31 feet from street	Yes
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Minimum Building Separation	20 Feet	20 feet	Yes
Maximum Building Height	45 Feet	33 feet	Yes

Minimum Number of Off-Street Parking Spaces	51 spaces	80 spaces	Yes
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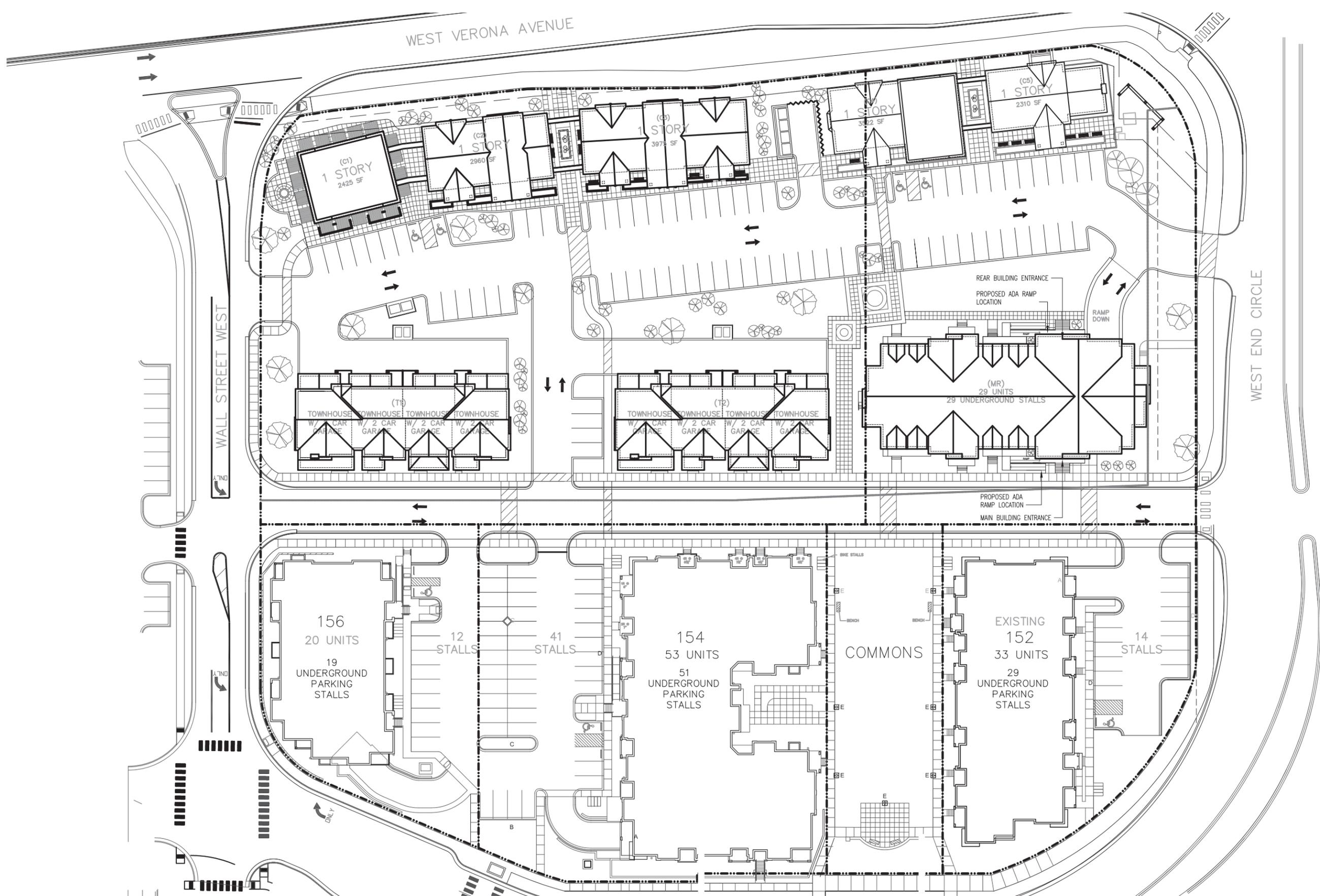
**Landscaping Requirements**

**Nonresidential Density and Intensity Requirements**

Minimum Landscape Surface Ratio	0.25	0.33	Yes
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**Nonresidential Landscaping Requirements (Nonresidential, Two-Family and Multifamily)**

Street frontage - 1020 LF	408	1270	Yes
Paved areas - 61480 SF	344	1661	Yes
Building foundation - 2526 LF	1010	1018	Yes
Developed lot - 39726 SF	397	510	Yes



WEST VERONA AVENUE

WALL STREET WEST

WEST END CIRCLE



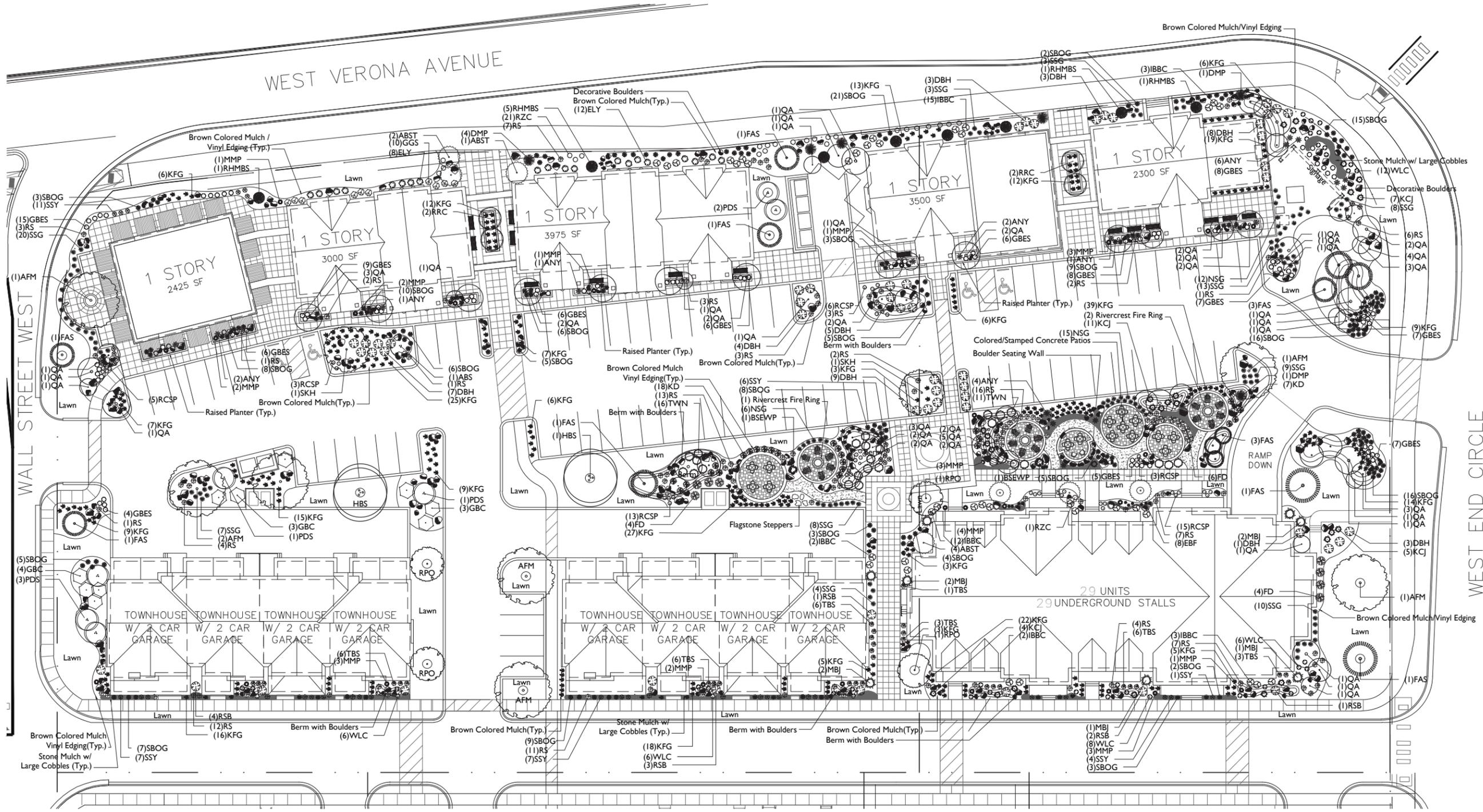
WEST END DEVELOPMENT  
PROPOSED SITE PLAN

DEVELOPER: Stone BROWN APARTMENT

ARCHITECT: brownhouse ARCHITECTURE + INTERIOR DESIGN

LANDSCAPE ARCHITECT: the bruce company OF WISCONSIN INC.

CIVIL ENGINEER: vierbicher planners | engineers | advisors



WEST END CIRCLE

**WEST END DEVELOPMENT**  
 WEST END CIRCLE  
 VERONA, WISCONSIN 53593

Checked By: SS  
 Drawn By: 10/12/16  
 RS

Revised:  
 Revised:  
 Revised:  
 Revised:  
 Revised:  
 Revised:  
 Revised:  
 Revised:



**PIP Landscape Plan**

SCALE: 1"=20'-0"

**WEST END DEVELOPMENT  
 PROPOSED LANDSCAPE PLAN**

DEVELOPER: **BROWN**  
 ARCHITECT: **brownhouse**  
 ARCHITECTURE • INTERIOR DESIGN

**L1**

This plan made exclusively for the party named in the title block. It remains the property of The Bruce Company of Wisconsin, Inc. and may not be reproduced or implemented in whole or part by any method without prior written consent of The Bruce Company of Wisconsin, Inc.

**GENERAL NOTES**

- A) Areas labeled "Brown Colored Wood Mulch" to receive a mixture of recycled wood mulch, colored brown, spread to a 3" depth over pre-emergent herbicide.
- B) Individual trees (and shrub groupings) found along perimeter of property as well as those found within lawn areas to receive wood mulch rings (and wood mulch beds) consisting of a mixture of recycled wood mulch, colored brown, spread to a minimum 3" depth (3' wide beds for shrub groupings).
- C) "Vinyl Edging" to be Valley View Black Diamond Vinyl Edging or equivalent.
- D) Areas labeled "washed stone" to receive 1-1/2" washed stone spread to a 3" depth over fabric weed barrier.
- E) "Lawn" areas shall be finish-graded and seeded at a rate of 4 lbs. per 1,000 sq. ft.
- F) Seed shall consist of the following mixture:  
 10% Palmer IV Perennial Ryegrass  
 20% Dragon Kentucky Bluegrass  
 20% Diva Kentucky Bluegrass  
 20% Foxy II Creeping Red Fescue  
 15% Vail II Perennial Ryegrass  
 15% Ginney Kentucky Bluegrass
- G) Areas labeled "Lawn" shall be seeded with the above-noted premium lawn seed mixture and overlaid with DS75 straw erosion control netting that is then pegged into the soil with metal staples.
- H) Areas labeled "Sod" shall receive only No. 1 grade nursery-grown bluegrass sod.
- I) Plant beds adjacent to building foundation to be mulched with 1-1/2" diameter washed stone mulch spread to a 3" depth over fabric weed barrier.

**CITY OF VERONA LANDSCAPE POINTS REQUIREMENTS**

**West End Development -- PUD District  
(Suburban Commercial District used for Point Calculations)**

**STREET FRONTAGE - 1020 LF - 408 POINTS REQUIRED**

#	Plant Category	Pts	Subtotal
2	Climax Tree	75	150
26	Tall Deciduous Tree	30	780
6	Low Deciduous Tree	10	60
7	Tall Evergreen Tree	40	280
			<b>1,270 Total Achieved</b>

**PAVED AREAS - 61,480 SF - 344 Points Required**

#	Plant Category	Pts	Subtotal
9	Climax Tree	75	675
22	Tall Tree	30	660
2	Low Deciduous Tree	10	20
4	Tall Evergreen Tree	40	120
17	Tall Deciduous Shrub	5	85
50	Low Deciduous Shrub	1	50
17	Low Evergreen Shrubs	3	51
			<b>1,661 Total Achieved</b>

**BUILDING FOUNDATION - 2,526 LF - 1,010 Points Required**

#	Plant Category	Pts	Subtotal
23	Low Deciduous Tree	10	230
4	Tall Evergreen Tree	40	160
8	Low Evergreen Tree	12	96
33	Tall Evergreen Shrubs	5	165
28	Low Evergreen Shrubs	3	84
46	Tall Deciduous Shrub	5	230
53	Low Deciduous Shrub	1	53
			<b>1,018 Total Achieved</b>

**DEVELOPED LOT - 39,726 SF - 397 Points Required**

#	Plant Category	Pts	Subtotal
4	Climax Tree	75	300
7	Tall Tree	30	210
0	Tall Evergreen Tree	40	0
0	Low Evergreen Tree	12	0
0	Low Deciduous Shrub	1	0
			<b>510 Total Achieved</b>

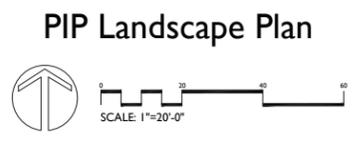
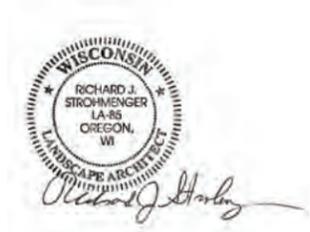
**Plant Material List**

Quantity	Code Name	Common Name	Scientific Name	Planting Size
<b>Broadleaf Deciduous</b>				
7	AFM	Autumn Fantasy Maple	Acer X Freemanii 'autumn Fantasy'	2" B&B
11	RSB	Regent Serviceberry	Amelanchier Alnifolia 'regent'	5 GAL.
1	ABS	Autumn Brill Serviceberry	Amelanchier X Grand 'autumn Brill'	6" B&B
7	ABST	Autumn Brill Serviceberry (tf)	Amelanchier X Grand 'autumn Brill' (tf)	2" B&B
7	PDS	Princess Diana Serviceberry	Amelanchier X Grand 'princess Diana'	7" B&B
2	HBS	Heritage River Birch (sng)	Betula Nigra 'cully' (sng)	2" B&B
2	SKH	Street Keeper Honeylocust	Gleditsia Triacan 'draves'	2" B&B
4	RRC	Royal Raindrops Crabapple	Malus 'jfs-Kw5'	2" B&B
24	QA	Quaking Aspen	Populus Tremuloides	2" B&B
25	QA	Quaking Aspen	Populus Tremuloides	1 3/4" B&B
19	QA	Quaking Aspen	Populus Tremuloides	1 1/2" B&B
4	RPO	Regal Prince English Oak	Quercus Robur 'long'	3" B&B
<b>Conifer Evergreen</b>				
27	KCJ	Kallay Compact Juniper	Juniperus Chinen 'kallays Compacta'	#5 CONT.
8	MBJ	Mountbatten Juniper	Juniperus Chinen 'mountbatten'	5" B&B
13	FAS	Fat Albert Blue Spruce	Picea Pungens 'fat Albert'	6" B&B
8	RHMBS	Montgomery Blue Spruce	Picea Pungens 'montgomery'	4" B&B
26	MMP	Mops Mugo Pine	Pinus Mugo 'mops'	#3 CONT.
6	DMP	Dwf Mugo Pine	Pinus Mugo Var Pumilio	#5 CONT.
2	BSEWP	Blue Shag Eastern White Pine	Pinus Strobus 'blue Shag'	#6 CONT.
20	ELY	Everlow Yew	Taxus X Media 'everlow'	18" B&B
<b>Perennial</b>				
36	SSY	Strawberry Seduction Yarrow	Achillea 'strawberry Seduction'	#1 CONT.
316	KFG	Karl Foerster's Feather Reed Grass	Calamagrostis Acutiflora 'karl Foerster'	#1 CONT.
8	EBF	Elijah Blue Fescue	Festuca Glauca 'elijah Blue'	#1 CONT.
25	RZC	Rozanne Cranesbill	Geranium 'rozanne'	#1 CONT.
171	SBOG	Sapphire Blue Oat Grass	Helictotrichon Sempervirens 'saphirsprudel'	#1 CONT.
38	WLC	Walker's Low Catmint	Nepeta X Faassenii 'walker's Low'	#1 CONT.
33	NSG	Northwind Switch Grass	Panicum Virgatum 'northwind'	#1 CONT.
85	SSG	Shenandoah Switch Grass	Panicum Virgatum 'shenandoah'	#1 CONT.
109	RS	Russian Sage	Perovskia Atriplicifolia	#1 CONT.
94	GBES	Goldsturm Black-Eyed Susan	Rudbeckia Ful Var Sullivan 'goldsturm'	#1 CONT.
45	RCSP	Royal Candles Speedwell	Veronica Spicata 'royal Candles'	#1 CONT.
18	ANY	Adam's - Needle Yucca	Yucca Filamentosa	#3 CONT.
<b>Shrub</b>				
37	IBBC	Iroquois Beauty Black Chokeber	Aronia Melanocarpa 'morton'	#5 CONT.
10	GBC	Glossy Black Chokeberry	Aronia Melanocarpa Var Elata	5 GAL.
14	FD	Firedance Dogwood	Cornus Sericea 'bailadeline'	#2 CONT.
25	KD	Kelsey Dogwood	Cornus Sericea 'kelsey'	#3 CONT.
43	DBH	Dwf Bush-Honeysuckle	Diervilla Lonicera	#5 CONT.
27	TWN	Tiny Wine Ninebark	Physocarpus Opulifolius 'smpotw'	#3 CONT.
10	GGs	Glow Girl Spirea	Spiraea Betulifolia 'tor Gold'	#2 CONT.
31	TBS	Tor Birchleaf Spirea	Spiraea Betulifolia 'tor'	#5 CONT.

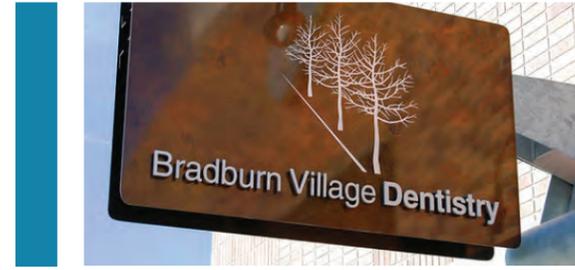
**WEST END DEVELOPMENT**  
 WEST END CIRCLE  
 VERONA, WISCONSIN 53593

Checked By: SS  
 Drawn By: 10/12/16  
 RS

Revised:  
 Revised:  
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 Revised:







WEST END DEVELOPMENT  
CONCEPT IMAGERY

DEVELOPER: 

ARCHITECT: 

LANDSCAPE ARCHITECT: 

CIVIL ENGINEER: 



**WEST END DEVELOPMENT  
AERIAL VIEW**

DEVELOPER:  **STEVE BROWN**

ARCHITECT:  **brownhouse**  
ARCHITECTURE • INTERIOR DESIGN

LANDSCAPE ARCHITECT:  **the bruce company**  
OF WISCONSIN INC.

CIVIL ENGINEER:  **vierbicher**  
planners | engineers | advisors



COMMERCIAL BUILDINGS (C1 & C2) PERSPECTIVE FROM WALL STREET WEST



COMMERCIAL BUILDINGS (C1 & C2) PERSPECTIVE FROM PARKING



COMMERCIAL BUILDINGS (C3 & C4) PERSPECTIVE FROM PARKING



COMMERCIAL BUILDING (C3) PERSPECTIVE FROM PARKING



COMMERCIAL BUILDINGS (C4 & C5) PERSPECTIVE FROM PARKING



COMMERCIAL BUILDINGS (C4 & C5) PERSPECTIVES FROM WEST VERONA AVENUE



TOWNHOUSES' PERSPECTIVES FROM STREET



TOWNHOUSES' PERSPECTIVES FROM PARKING



MULTIFAMILY PERSPECTIVE FROM STREET



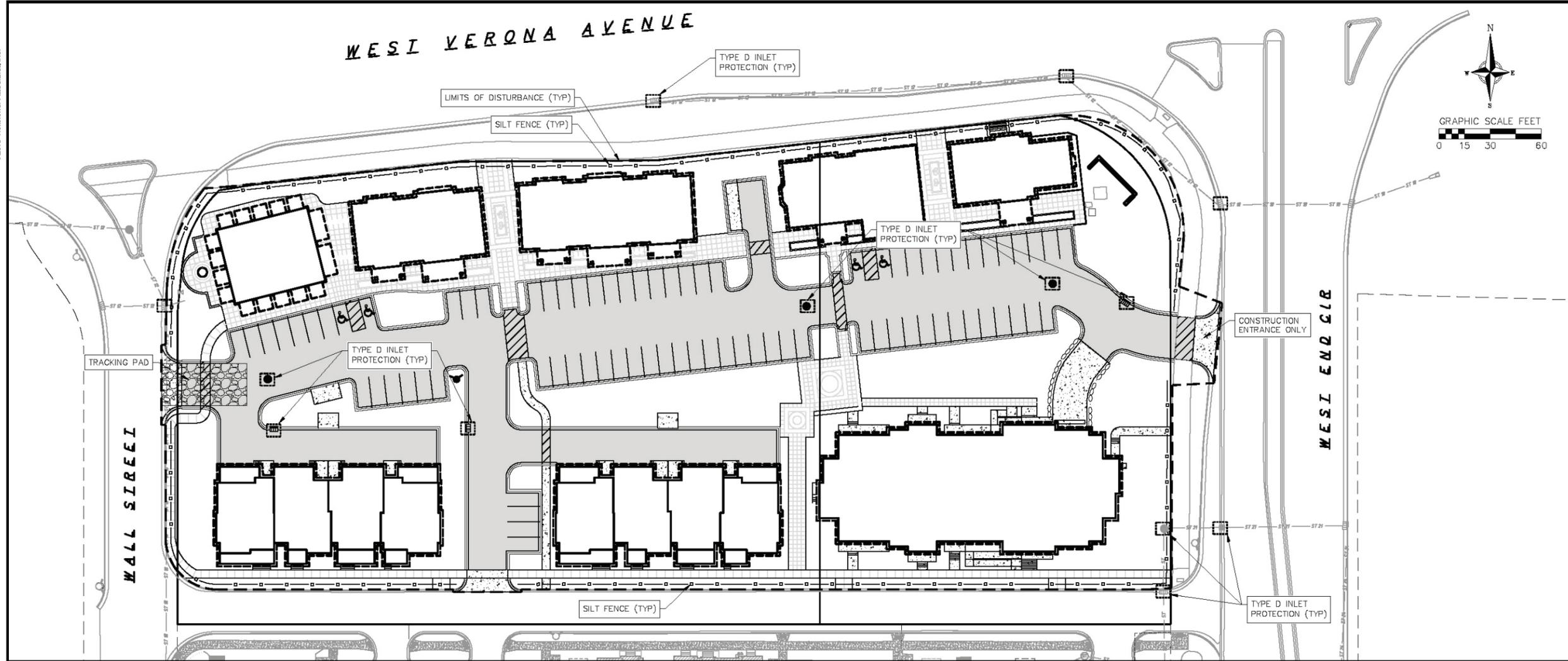
MULTIFAMILY PERSPECTIVE FROM THE COMMERCIAL WALKWAYS



MULTIFAMILY PERSPECTIVE FROM PARKING



WEST VERONA AVENUE



**vierbicher**  
 planners | engineers | advisors  
 400 W. VERONA AVENUE, SUITE 200  
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**Erosion Control Plan**  
 West End Development  
 City of Verona  
 Dane County, Wisconsin

- EROSION CONTROL LEGEND**
- SILT FENCE
  - DISTURBED LIMITS
  - INLET PROTECTION
  - TRACKING PAD
- SITE PLAN LEGEND**
- PROPERTY BOUNDARY
  - CURB AND GUTTER
  - PROPOSED CONCRETE
  - PROPOSED ASPHALT
  - PROPOSED PAVERS
  - PROPOSED HANDICAP PARKING

**EROSION CONTROL MEASURE NOTES:**

1. EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE CITY EROSION CONTROL ORDINANCE AND CHAPTER NR 216 OF THE WISCONSIN ADMINISTRATIVE CODE.
2. CONSTRUCT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH WISCONSIN DNR TECHNICAL STANDARDS (<http://dnr.wi.gov/runoff/stormwater/techstds.htm>) AND WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK.
3. INSTALL SEDIMENT CONTROL PRACTICES (TRACKING PAD, PERIMETER SILT FENCE, ETC.) PRIOR TO INITIATING LAND DISTURBING CONSTRUCTION ACTIVITIES.
4. THE CONTRACTOR IS REQUIRED TO MAKE EROSION CONTROL INSPECTIONS AT THE END OF EACH WEEK AND WHEN 0.5 INCHES OF RAIN FALLS WITHIN 24 HOURS. INSPECTION REPORTS SHALL BE PREPARED AND FILED AS REQUIRED BY THE DNR AND/OR CITY. ALL MAINTENANCE WILL FOLLOW AN INSPECTION WITHIN 24 HOURS.
5. EROSION CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ACCEPTANCE OF THIS PROJECT. EROSION CONTROL MEASURES AS SHOWN SHALL BE THE MINIMUM PRECAUTIONS THAT WILL BE ALLOWED. ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED IN WRITING BY THE STATE OR LOCAL INSPECTORS, OR THE DEVELOPER'S ENGINEER, SHALL BE INSTALLED WITHIN 24 HOURS.
6. A 3" CLEAR STONE TRACKING PAD SHALL BE INSTALLED TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE ADJACENT PAVED PUBLIC ROADWAY. SEDIMENT TRACKING PAD SHALL CONFORM TO WISDNR TECHNICAL STANDARD 1057. SEDIMENT REACHING THE PUBLIC ROAD SHALL BE REMOVED BY STREET CLEANING (NOT HYDRAULIC FLUSHING) BEFORE THE END OF EACH WORK DAY.
7. STABILIZED DISTURBED GROUND: ANY SOIL OR DIRT PILES WHICH WILL REMAIN IN EXISTENCE FOR MORE THAN 7-CONSECUTIVE DAYS, WHETHER TO BE WORKED DURING THAT PERIOD OR NOT, SHALL NOT BE LOCATED WITHIN 25- FEET OF ANY ROADWAY, PARKING LOT, PAVED AREA, OR DRAINAGE STRUCTURE OR CHANNEL (UNLESS INTENDED TO BE USED AS PART OF THE EROSION CONTROL MEASURES). TEMPORARY STABILIZATION AND CONTROL MEASURES (SEEDING, MULCHING, TARPING, EROSION MATTING, BARRIER FENCING, ETC.) ARE REQUIRED FOR THE PROTECTION OF DISTURBED AREAS AND SOIL PILES, WHICH WILL REMAIN UN-WORKED FOR A PERIOD OF MORE THAN 14-CONSECUTIVE CALENDAR DAYS. THESE MEASURES SHALL REMAIN IN PLACE UNTIL SITE HAS STABILIZED.
8. SITE DE-WATERING: WATER PUMPED FROM THE SITE SHALL BE TREATED BY TEMPORARY SEDIMENTATION BASINS OR OTHER APPROPRIATE CONTROL MEASURES. SEDIMENTATION BASINS SHALL HAVE A DEPTH OF AT LEAST 3 FEET, BE SURROUNDED BY SNOWFENCE OR EQUIVALENT BARRIER AND HAVE SUFFICIENT SURFACE AREA TO PROVIDE A SURFACE SETTLING RATE OF NO MORE THAN 750 GALLONS PER SQUARE FOOT PER DAY AT THE HIGHEST DEWATERING PUMPING RATE. WATER MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE, A NEIGHBORING SITE, OR THE BED OR BANKS OF THE RECEIVING WATER. POLYMERS MAY BE USED AS DIRECTED BY DNR TECHNICAL STANDARD 1061 (DE-WATERING). PUMPING OF WATER FROM FOUNDATION AREA DURING CONSTRUCTION SHALL NOT EXCEED A RATE OF 70 GALLONS PER MINUTE. SUMP PUMP SHALL BE PLACED ON A CLEAR STONE BEDDING AND A CLOTH/MESH SOCK SHALL BE PLACED ON THE OUTLET END OF THE PIPE TO CONTROL SEDIMENT LOSS.
9. WASHED STONE WEEPERS OR TEMPORARY EARTH BERMS SHALL BE BUILT AS NECESSARY BY CONTRACTOR TO TRAP SEDIMENT OR SLOW THE VELOCITY OF STORM WATER.
10. INLET FILTERS ARE TO BE PLACED IN STORMWATER INLET STRUCTURES AS SOON AS THEY ARE INSTALLED. ALL PROJECT AREA STORM INLETS NEED WISCONSIN D.O.T. TYPE D INLET PROTECTION. THE FILTERS SHALL BE MAINTAINED UNTIL THE CITY HAS ACCEPTED THE BINDER COURSE OF ASPHALT.
11. RESTORATION (SEED, FERTILIZE AND MULCH) SHALL BE PER SPECIFICATIONS ON THIS SHEET UNLESS SPECIAL RESTORATION IS CALLED FOR ON THE LANDSCAPE PLAN.
12. ALL AREAS WHICH ARE NOT PAVED SHALL RECEIVE A MINIMUM OF 4" TOPSOIL PRIOR TO SEEDING.
13. SEED, FERTILIZER AND MULCH SHALL BE APPLIED WITHIN 7 DAYS AFTER FINAL GRADE HAS BEEN ESTABLISHED. IF DISTURBED AREAS WILL NOT BE RESTORED IMMEDIATELY AFTER ROUGH GRADING, TEMPORARY SEED SHALL BE PLACED.
14. FOR THE FIRST SIX WEEKS AFTER RESTORATION (E.G. SEED & MULCH, EROSION MAT, SOG) OF A DISTURBED AREA, INCLUDE SUMMER WATERING PROVISIONS OF ALL NEWLY SEEDED AND MULCHED AREAS WHENEVER 7 DAYS ELAPSE WITHOUT A RAIN EVENT.
15. EROSION MAT (TYPE I CLASS A PER WISCONSIN D.O.T. P.A.L.) SHALL BE INSTALLED ON ALL SLOPES 3:1 OR GREATER BUT LESS THAN 1:1.
16. SOIL STABILIZERS SHALL BE APPLIED TO DISTURBED AREAS WITH SLOPES BETWEEN 10% AND 3:1 (DO NOT USE IN CHANNELS). SOIL STABILIZERS SHALL BE TYPE B, PER WISCONSIN D.O.T. P.A.L. (PRODUCT ACCEPTABILITY LIST), OR EQUAL. APPLY AT RATES AND METHODS SPECIFIED PER MANUFACTURER. SOIL STABILIZERS SHALL BE RE-APPLIED WHENEVER VEHICLES OR OTHER EQUIPMENT TRACK ON THE AREA.
17. SILT FENCE TO BE USED ACROSS AREAS OF THE LOT THAT SLOPE TOWARDS A PUBLIC STREET OR WATERWAY.
18. SEDIMENT SHALL BE CLEANED FROM CURB AND GUTTER AFTER EACH RAINFALL AND PRIOR TO PROJECT ACCEPTANCE.
19. ALL CONSTRUCTION ENTRANCES SHALL HAVE TEMPORARY ROAD CLOSED SIGNS THAT WILL BE IN PLACE WHEN THE ENTRANCE IS NOT IN USE AND AT THE END OF EACH DAY.

REVISIONS		NO.	DATE	REMARKS

SCALE  
 1"=30' (24x36)  
 1"=60' (11x17)

DATE  
 10/11/2016

DRAFTER  
 OGUY

CHECKED  
 RK/CL

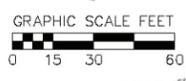
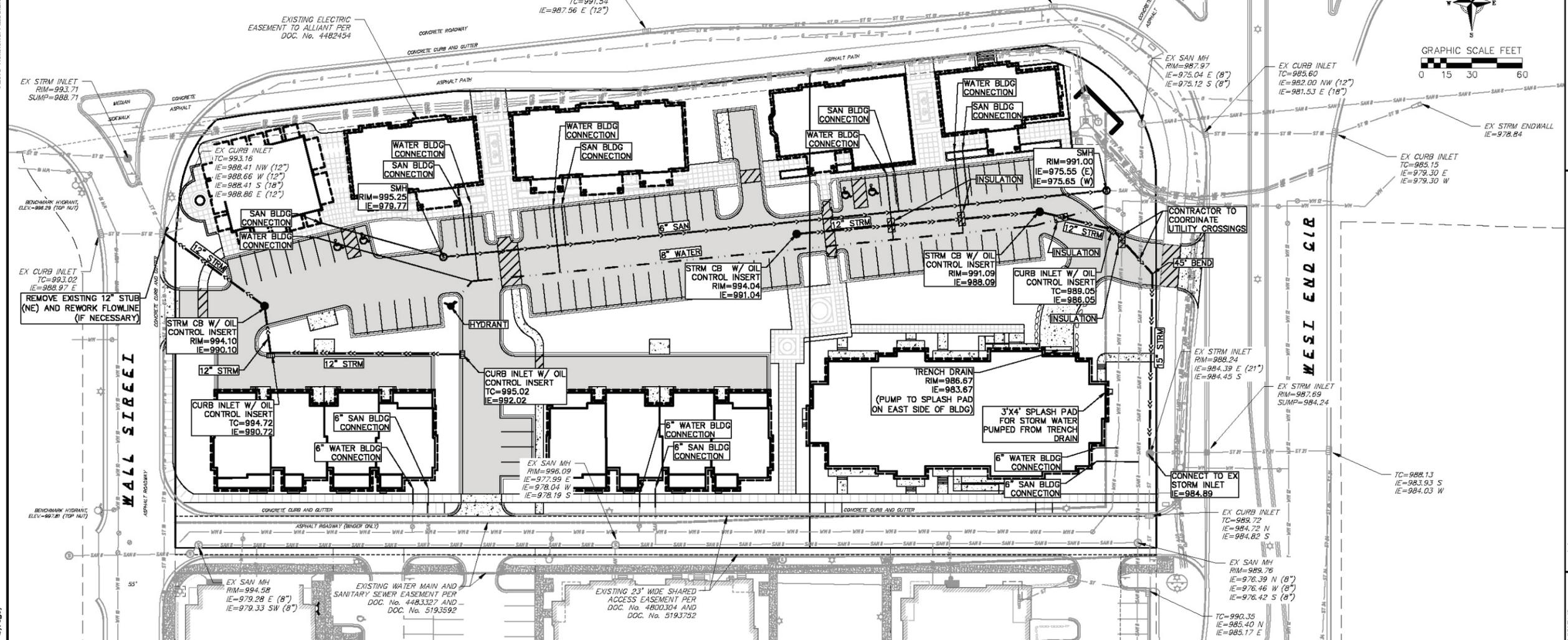
PROJECT NO.  
 150296

SHEET  
 2 OF 5

DWG. NO.  
 C-2.0



# WEST VERONA AVENUE



**vierbicher**  
planners | engineers | advisors  
1500 W. Wisconsin Ave., Suite 200  
West Verona, WI 53593  
Phone: (608) 594-4468 Fax: (608) 594-6218

Utility Plan  
West End Development  
City of Verona  
Dane County, Wisconsin

**PROPOSED UTILITY LEGEND**

- STORM SEWER PIPE
- STORM SEWER MANHOLE
- STORM SEWER CURB INLET
- STORM SEWER FIELD INLET
- SANITARY SEWER PIPE (GRAVITY)
- SANITARY SEWER LATERAL PIPE
- SANITARY SEWER MANHOLE
- WATER MAIN
- WATER SERVICE LATERAL PIPE
- FIRE HYDRANT
- PROPOSED PIPE INSULATION

**SITE PLAN LEGEND**

- PROPERTY BOUNDARY
- CURB AND GUTTER
- PROPOSED CONCRETE
- PROPOSED ASPHALT
- PROPOSED PAVERS
- PROPOSED HANDICAP PARKING

**ABBREVIATIONS**

- CB - CATCH BASIN
- SMH - SANITARY MANHOLE

### UTILITY NOTES:

- PRIVATE WATER MAIN AND SERVICES SHALL BE DUCTILE IRON (AWWA C-151, CLASS 52) OR APPROVED EQUAL MATERIAL THAT CONFORMS TO COMM 84.30(4)(d).
- PRIVATE SANITARY SEWER AND LATERALS SHALL BE POLYVINYL CHLORIDE (PVC) ASTM D3034 - SDR 35 OR APPROVED EQUAL MATERIAL THAT CONFORMS TO COMM 84.30(2)(c).
- A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS AND WATER SERVICES/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED PER COMM 82.10(11)(h) AND COMM 82.40(8)(k).
- EXTERIOR WATER SUPPLY PIPING SETBACKS AND CROSSINGS SHALL BE IN ACCORDANCE WITH COMM 82.40(8)(b).
- NO PERSON MAY ENGAGE IN WORK AT PLUMBING IN THE STATE UNLESS LICENSED TO DO SO BY THE DEPARTMENT OF COMMERCE PER S.145.06.
- SITE CONTRACTOR SHALL LEAVE SANITARY AND WATER LATERALS FIVE (5) FEET SHORT (HORIZONTALLY) FROM THE BUILDING. BUILDING PLUMBER SHALL VERIFY SIZE AND EXACT LOCATION OF PROPOSED SANITARY AND WATER LATERALS.
- CONTRACTOR SHALL FIELD VERIFY THE SIZE, TYPE, LOCATION, AND ELEVATION OF EXISTING UTILITIES PRIOR TO INSTALLING ANY ON-SITE UTILITIES OR STRUCTURES. CONTACT ENGINEER PRIOR TO INSTALLATION IF DISCREPANCY EXISTS WITHIN THESE PLANS.
- PROPOSED UTILITY SERVICE LINES AS SHOWN ARE APPROXIMATE. COORDINATE THE EXACT LOCATIONS WITH THE PLUMBING DRAWINGS. COORDINATE THE LOCATIONS WITH THE PLUMBING CONTRACTOR AND/OR OWNER'S CONSTRUCTION REPRESENTATIVE PRIOR TO INSTALLATION OF ANY NEW UTILITIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF ANY UTILITIES ENCOUNTERED AND REPLACEMENT OF ANY UTILITIES DAMAGED WITHIN INFLUENCE ZONE OF NEW CONSTRUCTION. CONTACT ENGINEER IF THE EXISTING UTILITIES VARY APPRECIABLY FROM THE PLANS.
- ALL WATER MAIN AND SERVICES SHALL BE INSTALLED AT A MINIMUM DEPTH OF 6.5' FROM TOP OF FINISHED GROUND ELEVATION TO TOP OF MAIN.
- CLEAN OUT ALL EXISTING AND PROPOSED STORM INLETS AND CATCH BASINS AT THE COMPLETION OF CONSTRUCTION.

REVISIONS		NO.	DATE	REMARKS

SCALE  
1"=30' (24x36)  
1"=60' (11x17)

DATE  
10/11/2016

DRAFTER  
CGJY

CHECKED  
RKOL

PROJECT NO.  
150299

SHEET  
4 OF 5

DWG. NO.  
C-4.0

**CONSTRUCTION SEQUENCE:**

1. INSTALL SILT FENCE AND TRACKING PAD.
2. INSTALL INLET PROTECTION ON EXISTING INLETS ADJACENT TO PROPERTY.
3. PERFORM SITE DEMOLITION AND REMOVE PAVEMENT (AS NECESSARY).
4. STRIP SITE TOPSOIL AND STOCKPILE/REMOVE EXCESS.
5. ROUGH GRADE FOR BUILDING PADS AND WALKS.
6. CONSTRUCT UNDERGROUND UTILITIES.
7. INSTALL INLET PROTECTION ON NEW INLETS.
8. CONSTRUCT WALKS, DRIVE, AND CURB AND GUTTER.
9. FINAL GRADE SITE. INSTALL TOPSOIL, SEED, FERTILIZER AND MULCH.
10. REMOVE SILT FENCE AFTER DISTURBED AREAS ARE RESTORED.

**SEEDING RATES:**

**TEMPORARY:**

1. USE ANNUAL OATS AT 3.0 LB./1,000 S.F. FOR SPRING AND SUMMER PLANTINGS.
2. USE WINTER WHEAT OR RYE AT 3.0 LB./1,000 SF FOR FALL PLANTINGS STARTED AFTER SEPTEMBER 15.

**PERMANENT:**

1. USE WISCONSIN D.O.T. SEED MIX #40 AT 2 LB./1,000 S.F.

**FERTILIZING RATES:**

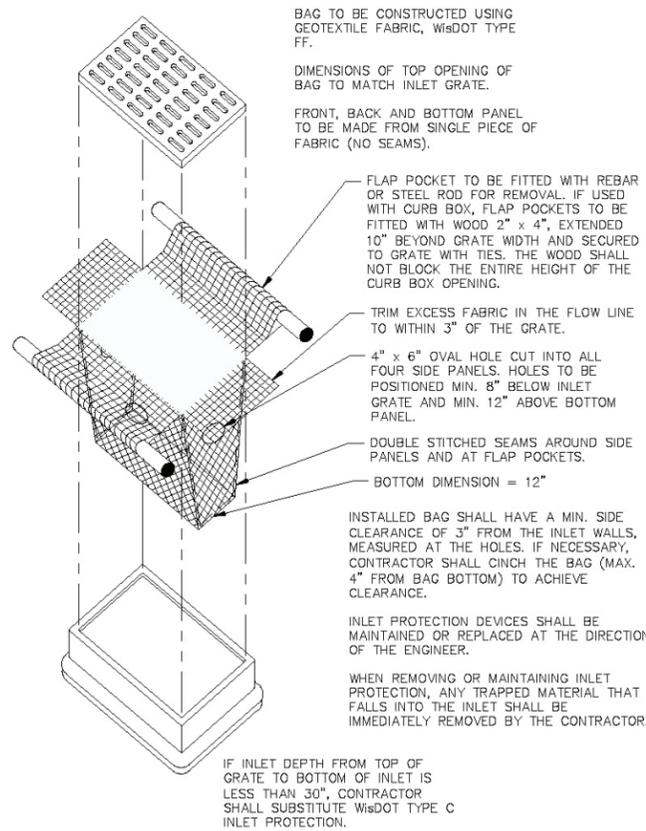
**TEMPORARY AND PERMANENT:**

- USE WISCONSIN D.O.T. TYPE A OR B AT 7 LB./1,000 S.F.

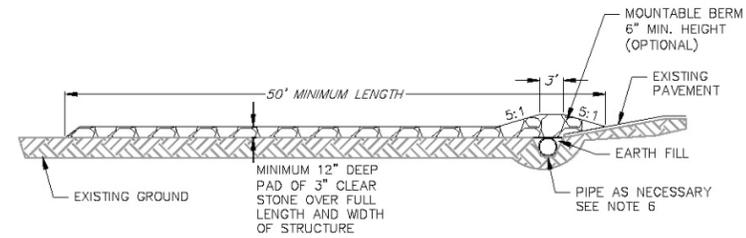
**MULCHING RATES:**

**TEMPORARY AND PERMANENT:**

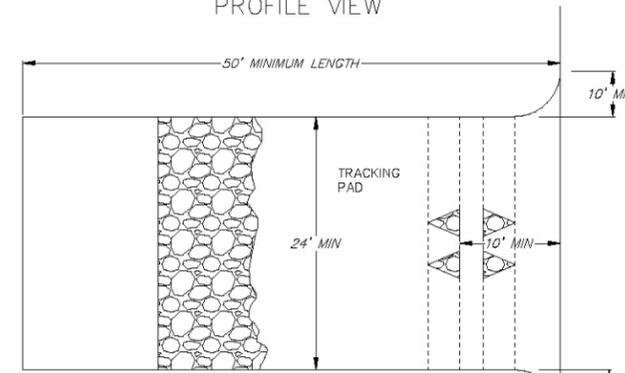
- USE 1/2" TO 1-1/2" STRAW OR HAY MULCH, CRIMPED PER SECTION 607.3.2.3, OR OTHER RATE AND METHOD PER SECTION 627, WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION



**1 INLET PROTECTION TYPE D**  
NOT TO SCALE



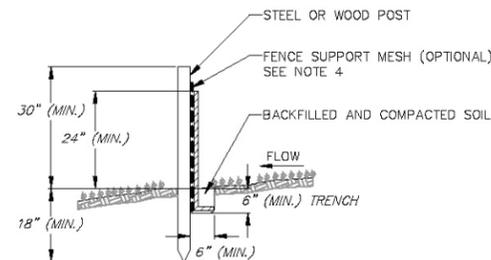
PROFILE VIEW



PLAN VIEW

1. FOLLOW WISCONSIN DNR TECHNICAL STANDARD 1057 FOR FURTHER DETAILS AND INSTALLATION.
2. LENGTH - MINIMUM OF 50'.
3. WIDTH - 24' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
4. ON SITES WITH A HIGH GROUNDWATER TABLE OR WHERE SATURATED CONDITIONS EXIST, GEOTEXTILE FABRIC SHALL BE PLACED OVER EXISTING GROUND PRIOR TO PLACING STONE. FABRIC SHALL BE WISDOT TYPE-HR GEOTEXTILE FABRIC.
5. STONE - CRUSHED 3" CLEAR STONE SHALL BE PLACED AT LEAST 12" DEEP OVER THE ENTIRE LENGTH AND WIDTH OF ENTRANCE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARDS CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE. MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND MINIMUM OF 6" STONE OVER THE PIPE. PIPE SHALL BE SIZED ACCORDING TO THE DRAINAGE REQUIREMENTS. WHEN THE ENTRANCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE SHALL NOT BE NECESSARY. THE MINIMUM PIPE DIAMETER SHALL BE 6". CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF SAID PIPE.
7. LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED WHERE CONSTRUCTION TRAFFIC ENTERS AND/OR LEAVES THE CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE TRACKING PAD.

**2 TRACKING PAD**  
NOT TO SCALE



**NOTES:**

1. INSTALL SILT FENCE TO FOLLOW THE GROUND CONTOURS AS CLOSELY AS POSSIBLE.
2. CURVE THE SILT FENCE UP THE SLOPE TO PREVENT WATER FROM RUNNING AROUND THE ENDS.
3. POST SPACING WITH FENCE SUPPORT MESH = 10 FT. (MAX.)  
POST SPACING WITHOUT FENCE SUPPORT MESH = 6 FT. (MAX.)
4. SILT FENCE SUPPORT MESH CONSISTS OF 14-GAUGE STEEL WIRE WITH A MESH SPACING OF 6 IN. X 6 IN. OR PREFABRICATED POLYMERIC MESH OF EQUIVALENT STRENGTH

**3 SILT FENCE**  
NOT TO SCALE

REVISIONS	NO.	DATE	REMARKS

SCALE: N.T.S.

DATE: 10/11/2016

DRAWER: OGJY

CHECKED: RK/CL

PROJECT NO.: 150299

SHEET: 5 OF 5

DWG. NO.: C-5.0

# West End Development Trip Generation and Access Evaluation Study West End Circle and Wall Street West

CITY OF VERONA  
DANE COUNTY, WISCONSIN



**DATE SUBMITTED:** October 11, 2016

**PREPARED FOR:**

Submittal to City of Verona Staff  
On behalf of Steve Brown Apartments

**PREPARED BY:**

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Contact Person: Mike Scarmon, P.E., PTOE



**West End Development**  
**City of Verona, Dane County, Wisconsin**  
**Trip Generation and Access Evaluation Study**

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**Exhibits**

- |  |  |
|--|--|
| Exhibit 1 – Project Location Map           | Exhibit 2 – Existing Site Volumes            |
| Exhibit 3 – Proposed Site Plan             | Exhibit 4 – Initial Access Concept           |
| Exhibit 5 – Proposed Access                | Exhibit 6 – Driveway Trips – Proposed Access |
| Exhibit 7 – West End Circle Access Concept |  |

## 1.0 Introduction

The purpose of this report is to summarize the trip generation, access locations and site circulation for the proposed West End Development, located on Lot 1 of certified survey map (CSM) 14105 and Lot 1 of CSM 14102 in Verona, Wisconsin. This report assumes the intersections along Verona Avenue has been previously constructed to accommodate additional development and trip generation, therefore this study does not include an evaluation of expected traffic operations upon completion of this development.

### 1.1 Existing Conditions

The two currently vacant lots within the development site are located between Wall Street West and West End Circle, adjacent to Verona Avenue. Verona Avenue is a four-lane divided highway with a 35 MPH speed limit. Wall Street West and West End Circle together form a semicircular loop around the development site, and an adjacent residential development to the south. Both streets are two-lane roadways without posted speed limits. The internal roadway connecting Wall Street West with West End Circle is a private roadway located on portions of the proposed development lots, and lots to the south of the development site. This internal roadway is referred to in this report as the (Parking Restricted) Fire Lane. See Exhibit 1 for a project location map.

Wall Street West forms a stop controlled intersection with West Verona Avenue at the northwest corner of the site. A channelizing island restricts movements at that intersection to right-in, right-out to and from Wall Street West.

West End Circle forms a connection with Wall Street West to the southwest of the site, runs towards the east, then curves to the north to form an intersection with West Verona Avenue and Westridge Parkway. This intersection is currently two-way stop controlled, however is scheduled to be signalized in the spring of 2017. A cul-de-sac runs to the west from the intersection of Wall Street West with West End Circle. All parcels on the cul-de-sac are currently vacant.

The existing apartment development to the south of the proposed development site is comprised of three apartment buildings. All access to the apartments is provided via the Parking Restricted Fire Lane. See Exhibit 2 for existing peak hour traffic to and from the apartment buildings.

### 1.2 Future Roadway Connection

A future roadway connection is planned between West End Circle (directly south of Verona Avenue) and Paoli Street. Several properties adjacent to the future roadway connection have been purchased by the Verona School District with anticipation of constructing a future high school. The alignment of the future roadway connection, the future school site layout and adjacent intersection(s) configuration and control is not known at this time.

### 1.3 Proposed Development

The proposed development includes residential and commercial land uses. A 26-unit apartment building consisting of one-bedroom and efficiency units as well as eight townhouses (two groups of four) are proposed for the site. The townhouses will each have an attached two-car garage and the apartment building will include underground parking. The development also includes 13,800 square feet (SF) of commercial land use proposed to be distributed across five individual buildings. While no specific plans are in place for these buildings, anticipated uses include specialty retail, a coffee shop and a restaurant. See Exhibit 3 for a proposed site plan.

## 2.0 Trip Generation and Distribution

### 2.1 Trip Generation

The projected trip generation for the proposed development was calculated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 9<sup>th</sup> Edition*. Based on anticipated land uses, ITE land uses Apartment (ITE land use code 220), Shopping Center (ITE land use code 820), and Coffee/Doughnut Shop without Drive-Through Window (ITE land use code 936) were used to estimate proposed development trips.

The residential land uses were combined for a total of 34 units and trips were generated using the Apartment (ITE land use code 220) trip generation rate. The Apartment (ITE land use code 220) trip generation rate applies to a variety of apartment types and therefore was used to generate trips for the apartment building as well as the rental townhouses. These land uses were combined because trip generation rates for Rental Townhouse (ITE land use code 224) are not based on sufficiently robust data.

A mixture of 11,700 SF of Shopping Center (ITE land use code 820) and 2,100 SF of Coffee/Doughnut Shop without Drive-Through Window (ITE land use code 936) was used to estimate trips generated by the proposed commercial buildings.

Finally, the residential and coffee shop related trips were reduced by 5% and 10% respectively, to account for linked trips. Linked trips are those trips that no longer occur because multiple destinations or services are included in one site, thus are combined into one trip. An example of this would be a resident of the apartment building stopping at a coffee shop at the development on their way to work. Coffee Shop trips were reduced to account for customers of the shopping center land uses stopping at the coffee shop while in the development.

Pass-by trips are trips that already existed on the public roadway network that are expected to stop at the site then keep traveling to their primary destination. Pass-by trips are expected to make up a portion of the trips generated by the development, however were not quantified for this report as all driveway trips are relevant to the access evaluation component of this study. A summary of the proposed trip generation is provided below in Table 1.

**Table 1. Proposed Trip Generation**

Land Use	ITE Land Use Code	Size	Weekday Daily Trips (rate)	AM Trips			PM Trips		
				In (rate)	Out (rate)	Total (rate)	In (rate)	Out (rate)	Total (rate)
Apartment	220	34 Units	226 (6.65)	3 (20%)	14 (80%)	17 (0.51)	14 (65%)	7 (35%)	21 (0.62)
Shopping Center	820	11,700 SF	1,684 Equation	26 (62%)	16 (38%)	42 (0.51)	68 (48%)	74 (52%)	142 (0.62)
Coffee/Doughnut Shop without Drive-Through Window	936	2,100 SF	302 (0.14)	116 (51%)	112 (49%)	228 (108.38)	56 (65%)	30 (35%)	86 (40.75)
<b>Subtotal:</b>			<b>2,212</b>	<b>145</b>	<b>142</b>	<b>287</b>	<b>138</b>	<b>111</b>	<b>249</b>
Linked Trip Reduction (5%) (Residential)			(11)	0	(1)	(1)	(1)	0	(1)
Linked Trip Reduction (10%) (Coffee Shop)			(30)	(12)	(11)	(23)	(6)	(3)	(9)
<b>Total (Shopping Center and Coffee Shop):</b>			<b>2,171</b>	<b>133</b>	<b>130</b>	<b>263</b>	<b>131</b>	<b>108</b>	<b>239</b>

The development is expected to generate approximately 2,171 trips over an average weekday with 263 and 239 trips during the AM and PM peaks, respectively.

## 2.2 Trip Assignment

Trips were assigned to the roadway network based on the observed trip distribution of the existing apartments south of the proposed development, other surrounding land uses and the planned future connection to the south. Trip assignment is discussed in more detail under *Access Alternatives* as each alternative will have different assignment patterns.

## 3.0 Development Access

### 3.1 Previous Access Concepts

The site was initially proposed with three full access points and one right-in/right-out access onto the public roadway network. Two of the full access points are the existing shared access points provided by the intersections of the Parking Restricted Fire Lane with Wall Street West and West End Circle. One additional full access point was proposed on Wall Street West and one right-in/right-out access point was proposed on West End Circle. This access concept is shown in Exhibit 4.

Upon review of the initial development site plan, the City of Verona identified specific concerns and preferences related to access and circulation. An access concept was developed to reflect the concerns of the City and would eliminate the left-in movement at Wall Street West (Driveway 1). The City did not express concern with the left-out movement at Driveway 1, however, it is anticipated that the geometric restriction used to prevent left-in movement would also restrict the left-out movement. It is assumed that this access restriction was proposed in order to eliminate the possibility of vehicles using this ingress pattern from creating a queue that would extend back onto Verona Avenue.

### 3.2 Proposed Access

Upon further coordination with the City, a final access plan has been determined. The proposed access alternative includes a raised island promoting right-in/right-out access at Driveway 1, and right-in only access at West End Circle (Driveway 3). This access alternative is shown in Exhibit 5 and the trip assignment under this alternative is shown in Exhibit 6.

The right-in movement at Driveway 3 provides a direct access to the retail component of the proposed site. The City has expressed concern over the presence of this driveway due to the proximity to Verona Avenue. To address this concern, a short right turn lane is proposed to prevent conflict between right turning vehicles and southbound through traffic.

The City's concerns also included the potential of closing the median opening at the intersection of West End Circle with the Fire Lane, dependent on the future connection to Paoli Street and potential intersection control changes at the West End Circle. Full access at this location is considered crucial to the viability of the proposed site. For this reason, the Proposed Access alternative includes a restriction to the right out movement at Driveway 3 in order to reduce the likelihood of future operational issues at the Fire Lane intersection with West End Circle. Restricting the right-out movement should address the City's concern over the potential for southbound U-turns at the intersection of Fire Lane with West End Circle. Restricting the right-out movement would also decrease conflicting volumes with the northbound left movement at the median opening to the Fire Lane, allowing for slightly more efficient operations.

The full-access intersection at the Fire Lane has also been discussed regarding compatibility with a future access to the east of West End Circle. A concept has been developed containing a four-lane divided typical section with northbound and southbound left turn lanes at the location of the Fire Lane and potential future access. The raised median features and lane continuity within this concept are compatible with the expected intersection configuration at West End Circle and

Verona Avenue. This concept also fits within the existing roadway width and would be compatible with either the future roadway connection to Paoli Street or the existing West End Circle geometry. The access and future roadway concept is depicted in Exhibit 7.

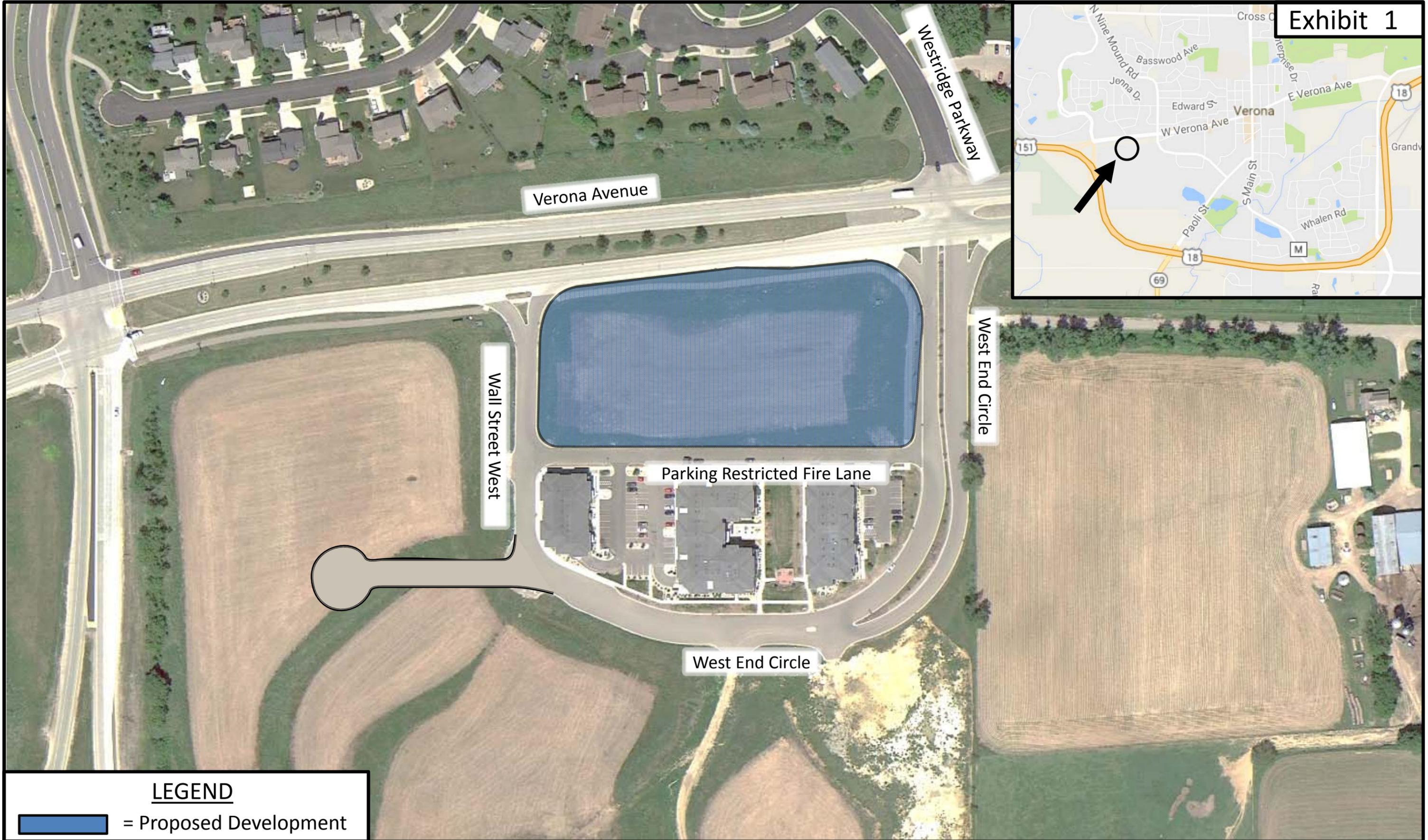
### 3.3 *Bicycle and Pedestrian Access*

The proposed development has also been evaluated for bicycle and pedestrian access to the surrounding facilities. Connectivity is provided from the development to the existing shared use path on the south side of Verona Avenue, which provides access to regional trails and destinations. The site is also expected to have good internal access to public paths and sidewalks. Additional pedestrian accommodations will be provided via the planned traffic signal at Verona Avenue and West End Circle, which is expected to include signalized crosswalks. Finally, it may be recommended to provide a connection between the public sidewalk on Wall Street West and the path along Verona Avenue for additional connectivity.

## 4.0 **Conclusions**

The conclusions relating to the proposed West End Development trip generation and access study are summarized as follows:

- Full access provided at Parking Restricted Fire Lane with a median opening along West End Circle is critical to the accessibility of the site for interim and future configurations.
- The Proposed Access alternative is expected to address external circulation concerns expressed by the City while maintaining viable access to the development site.
- Driveway 1 includes a raised island to allow only right-in and right out access
- A full-access intersection between the Fire Lane and West End Circle is compatible with future access to the east, as well as the planned intersection configuration at Verona Avenue
- Sufficient bicycle and pedestrian connectivity is provided between the proposed development and the surrounding facilities.



**LEGEND**

 = Proposed Development



**Project Location Map**



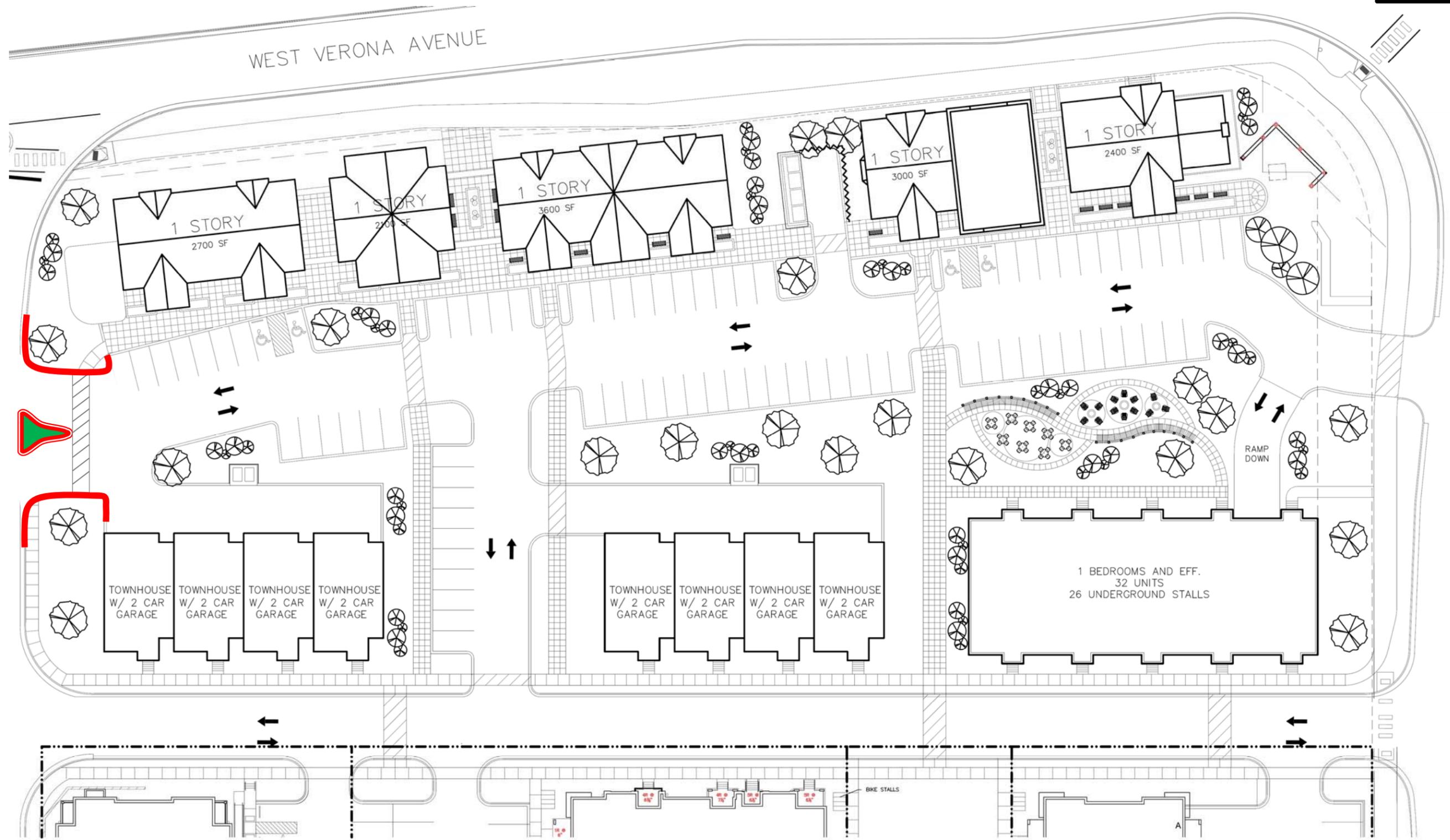
NOT TO SCALE



**LEGEND**  
 XX = AM Peak Hour  
 (XX) = PM Peak Hour  
 → = Movement



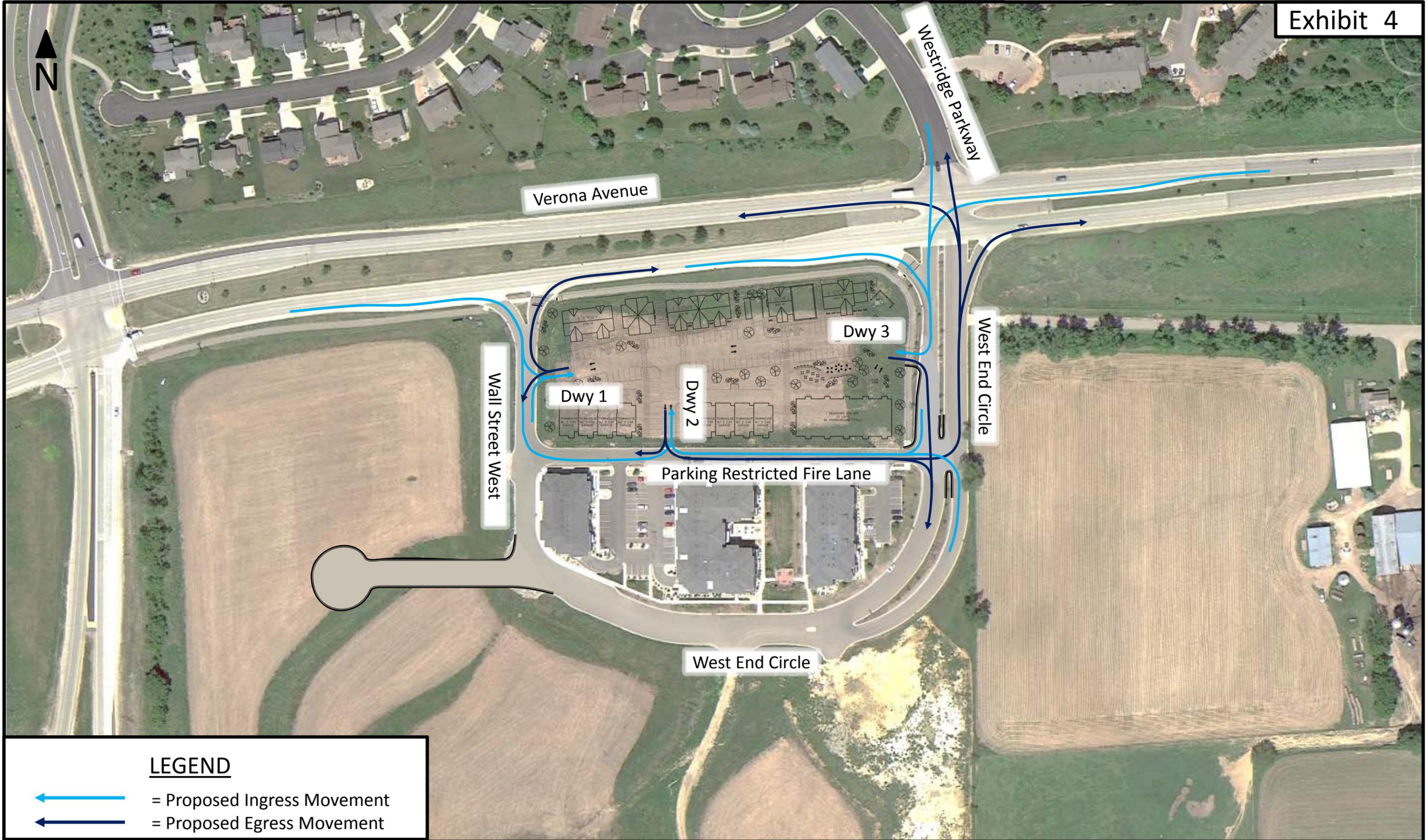
# Driveway Trips – Existing Apartment Buildings



1 WEST END DEVELOPMENT - PRELIMINARY SITE PLAN  
SCALE: 1"=40'

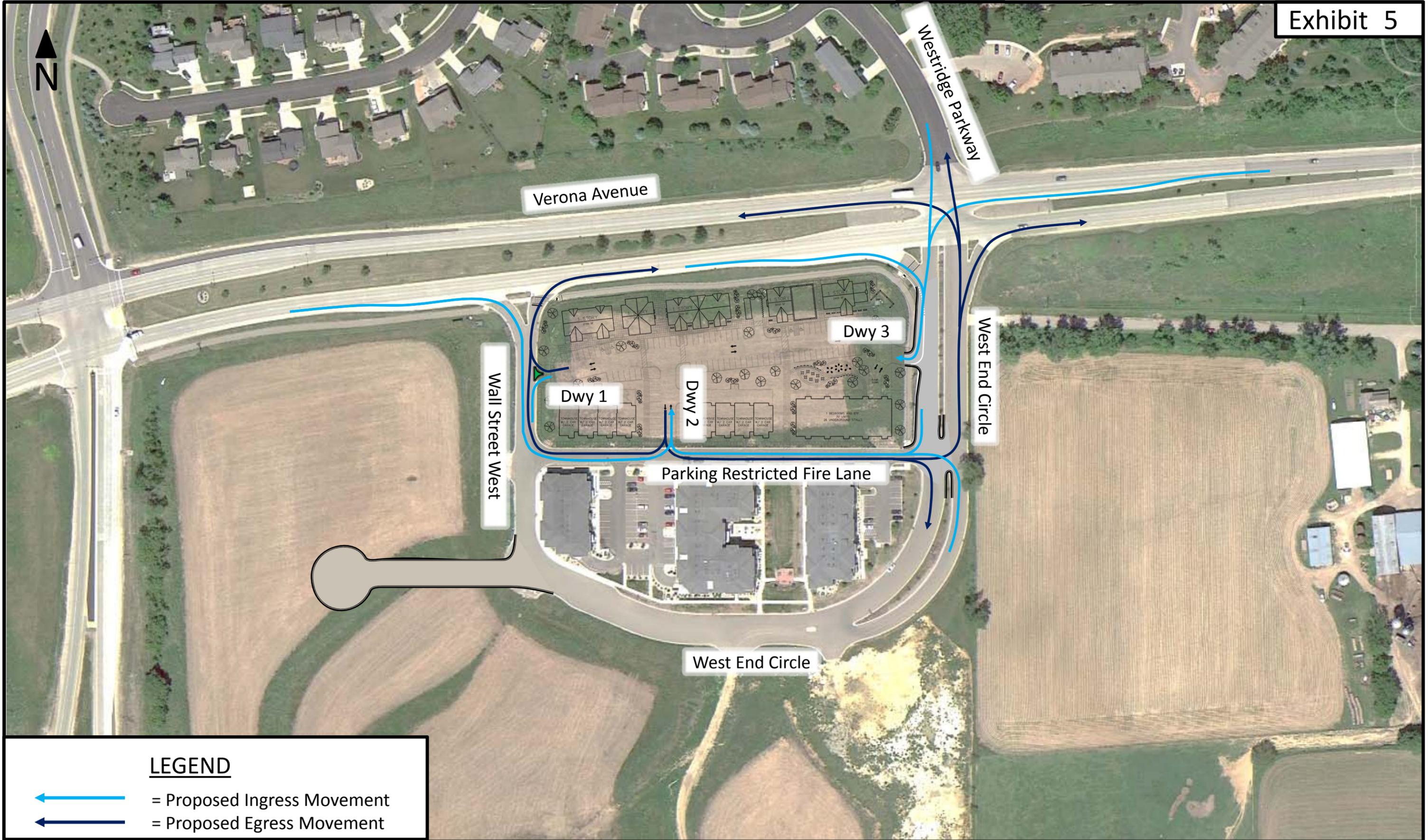


Note: The internal roadway running north-south within the development has been shifted to the west since the last submittal.



**LEGEND**

-  = Proposed Ingress Movement
-  = Proposed Egress Movement



**LEGEND**

-  = Proposed Ingress Movement
-  = Proposed Egress Movement





**LEGEND**

 = Proposed Development



# Future Access Concept – West End Circle