

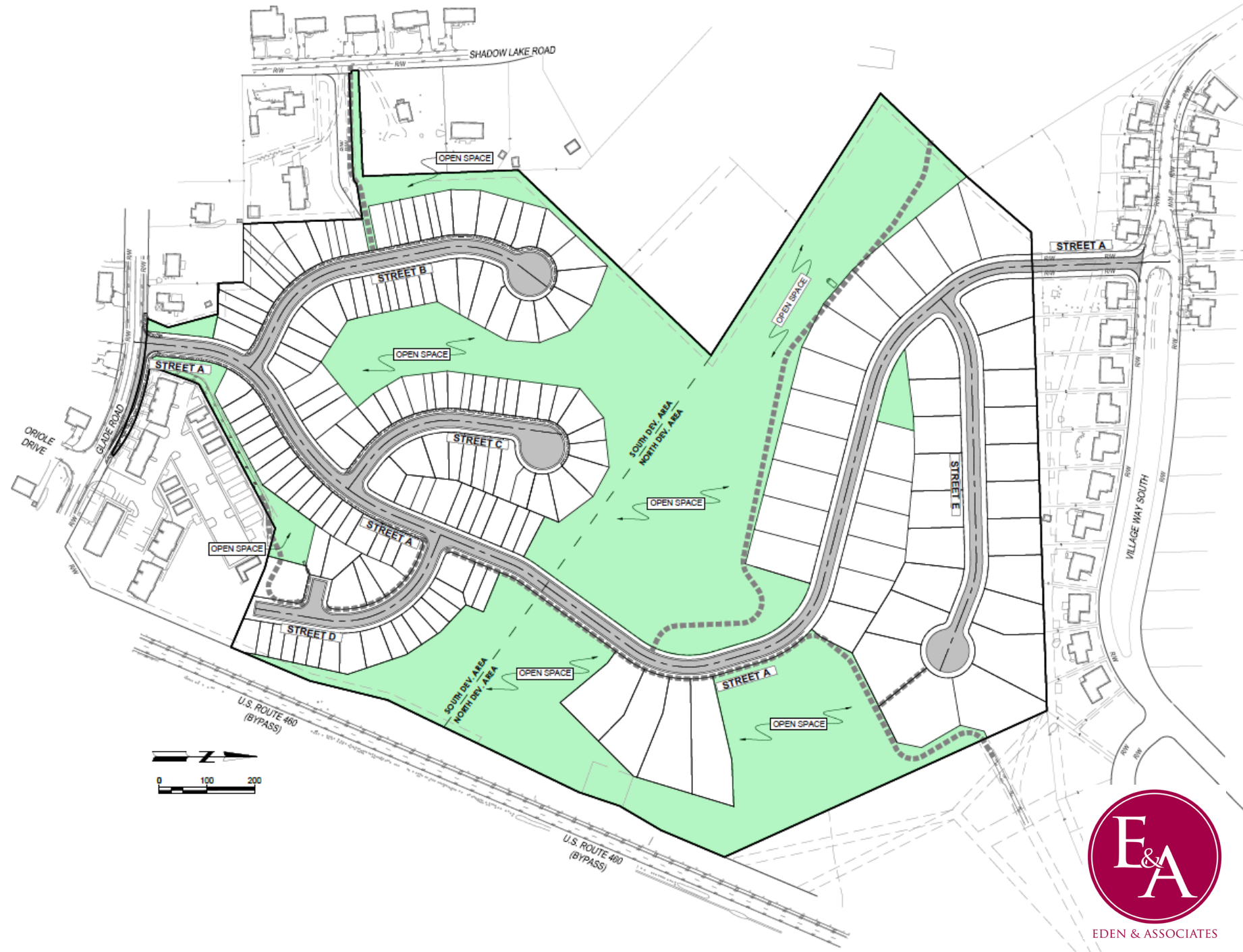


Planning Commission Worksession
January 31, 2023



Topics

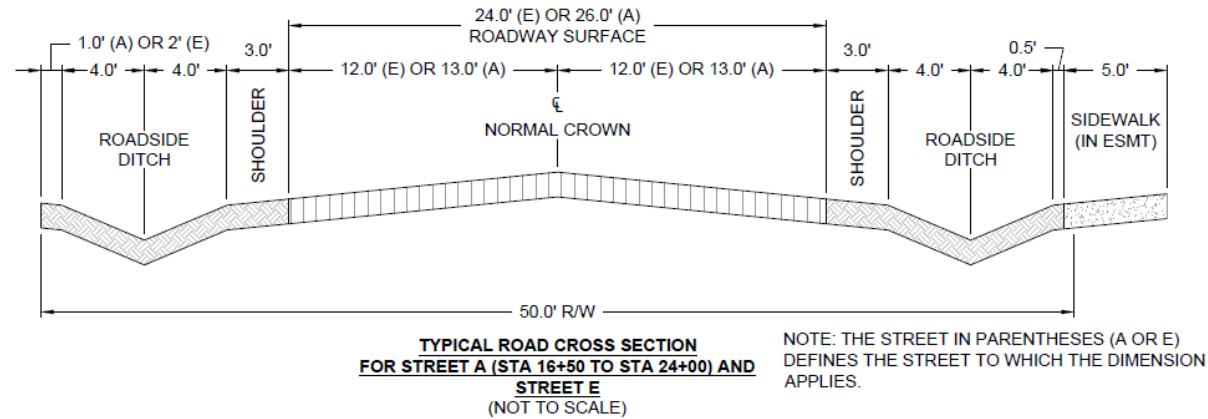
- Road A Cross section reasoning
- Site Development Regulation changes
- Other notable changes
- Alternative Road Plan
- Managed Successional Areas: Landscaping



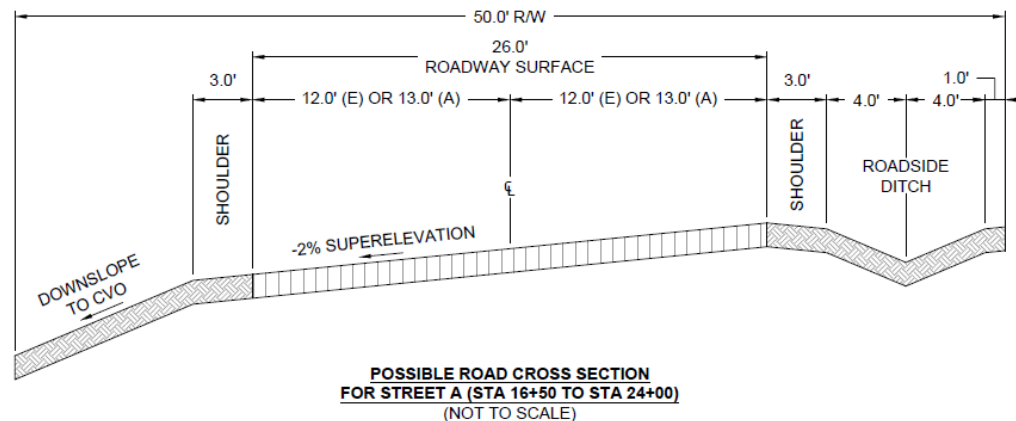


North area Road Cross section reasoning curb/gutter and sidewalk variance Typical Section

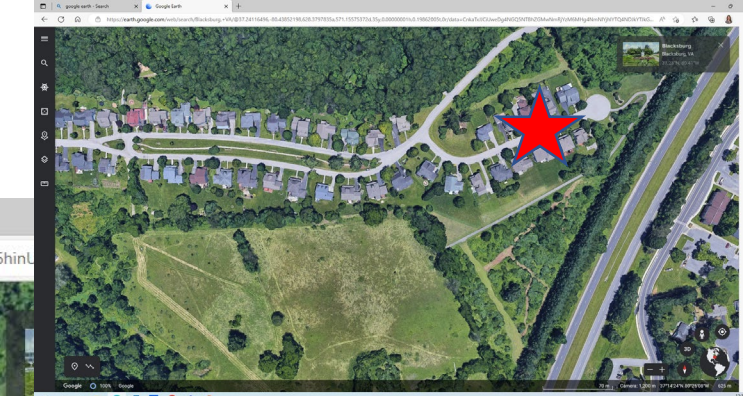
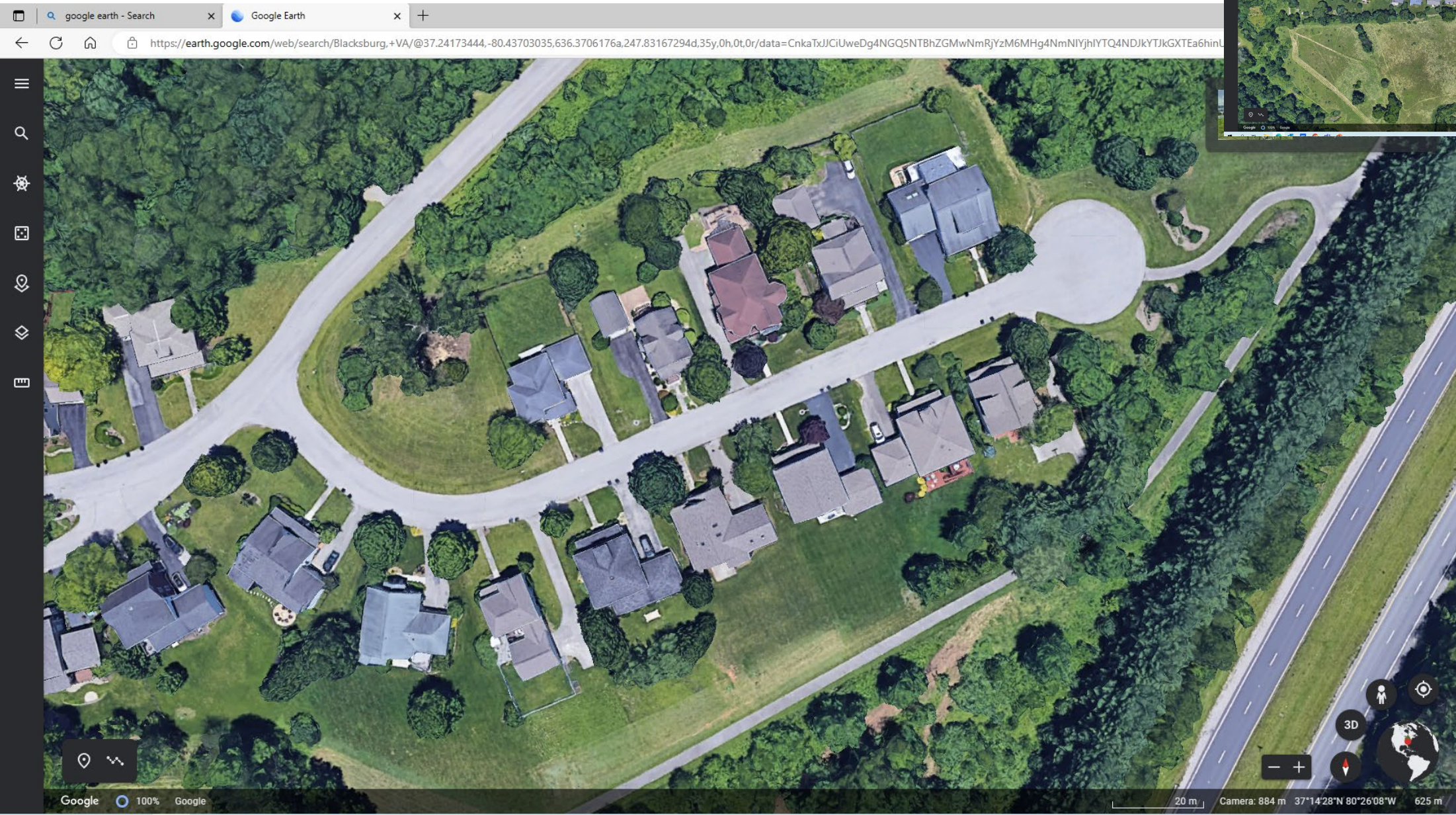
Ditch on both sides of road



Superelevated road with overland flow across lots, no ditch needed

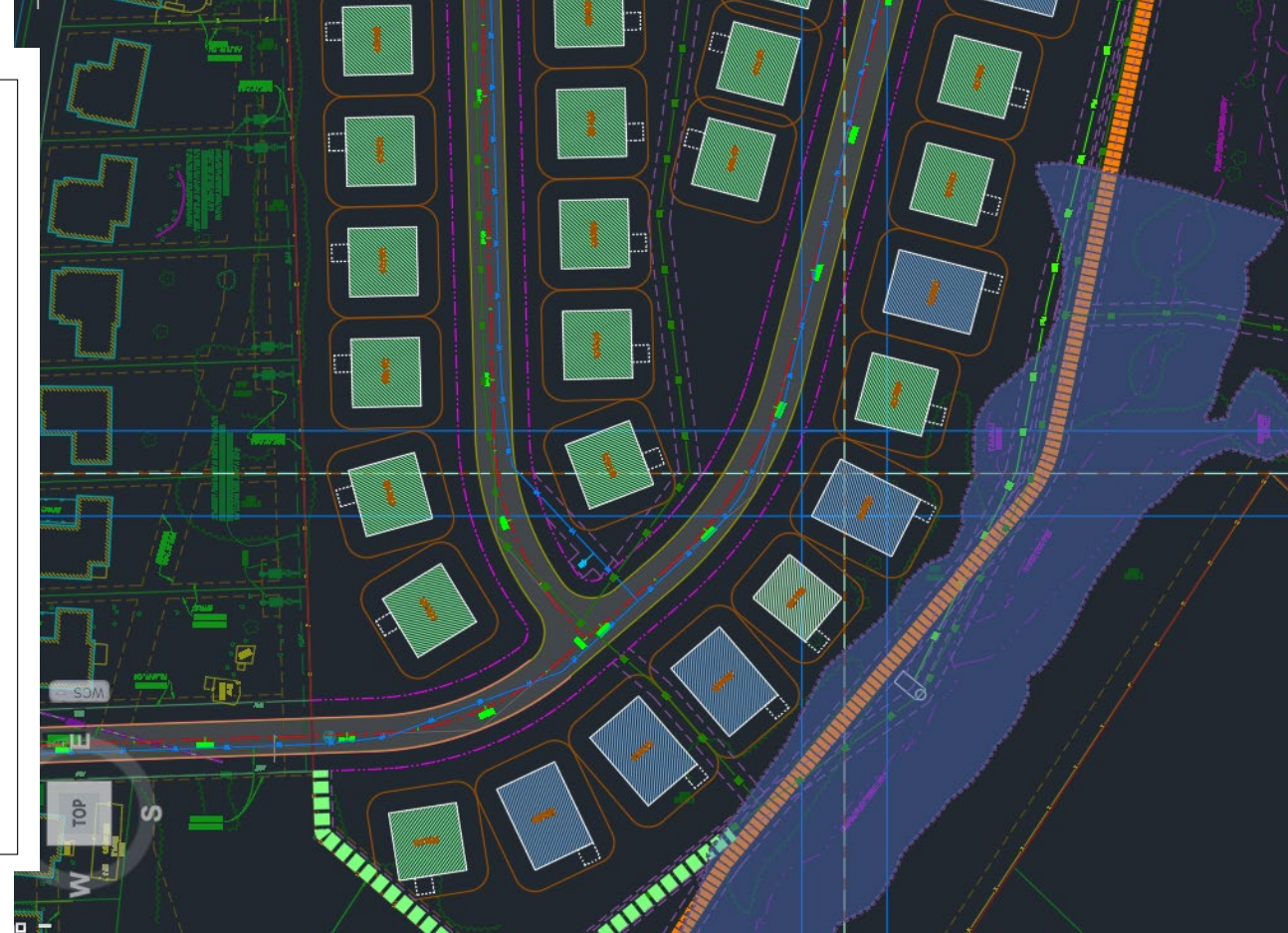
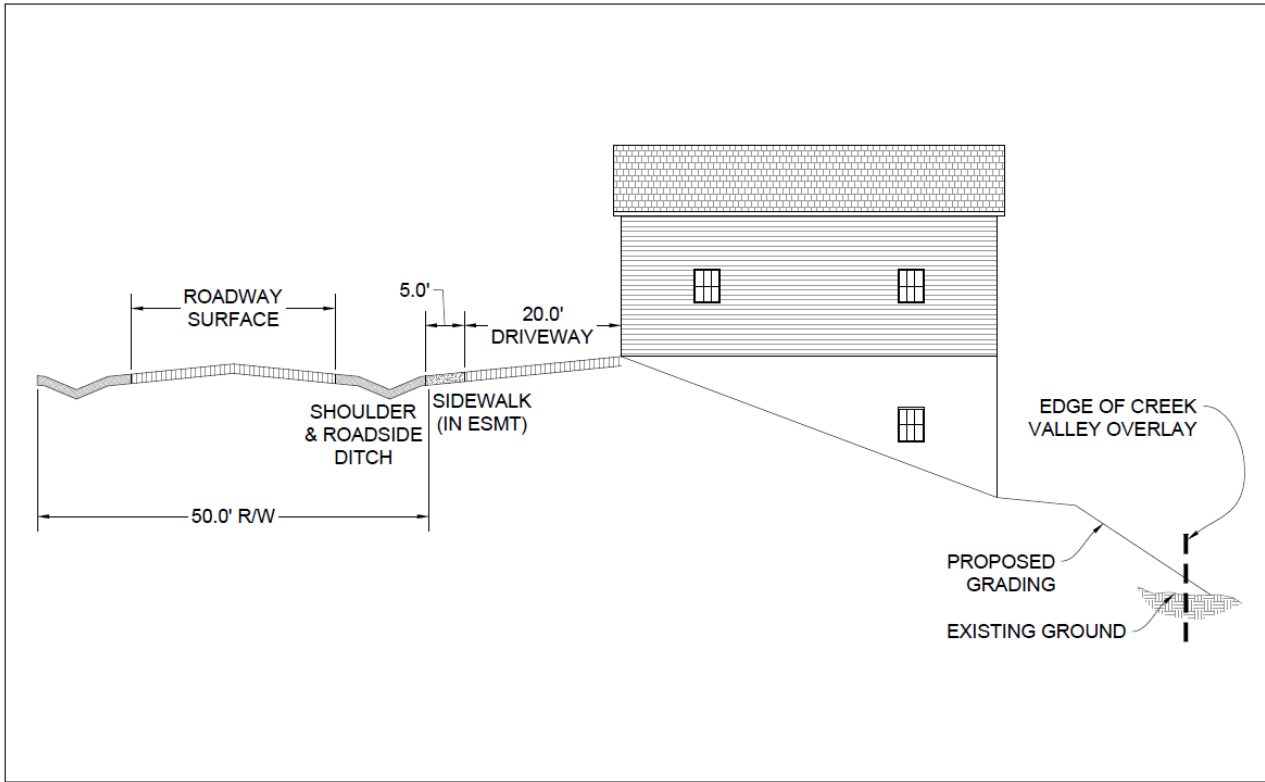


Sidewalk and Curb/Gutter Variance

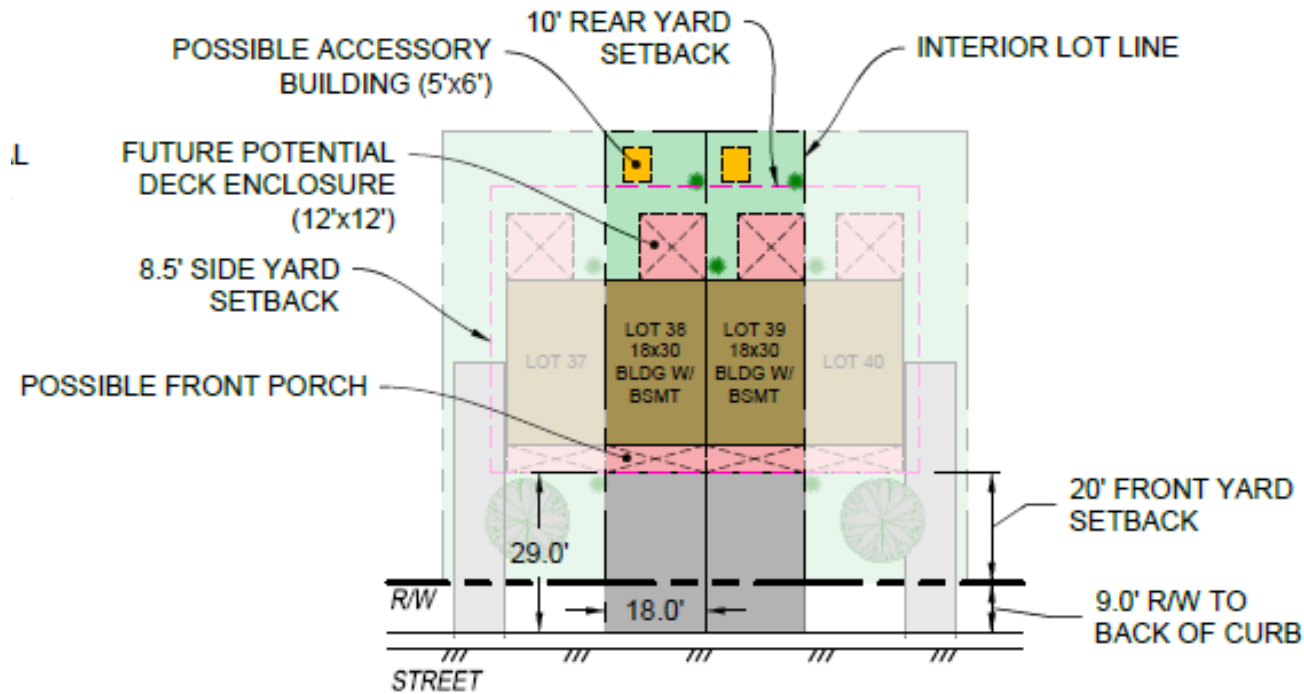


EDEN & ASSOCIATES

Sidewalk & Curb/Gutter Variance

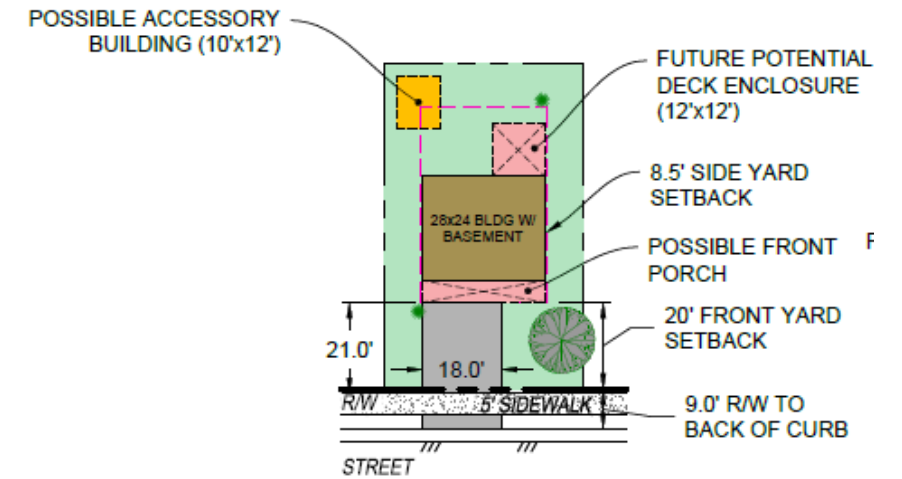


Site Development Regulation Changes



LOTS 38 AND 39 SCENARIO

LOT AREA: 1489 SF
 TOTAL FLOOR AREA: 1884 SF
 F.A.R.: 1.27
 TOTAL LOT COVERAGE: 1164 SF
 MAX. LOT COVERAGE: 78%

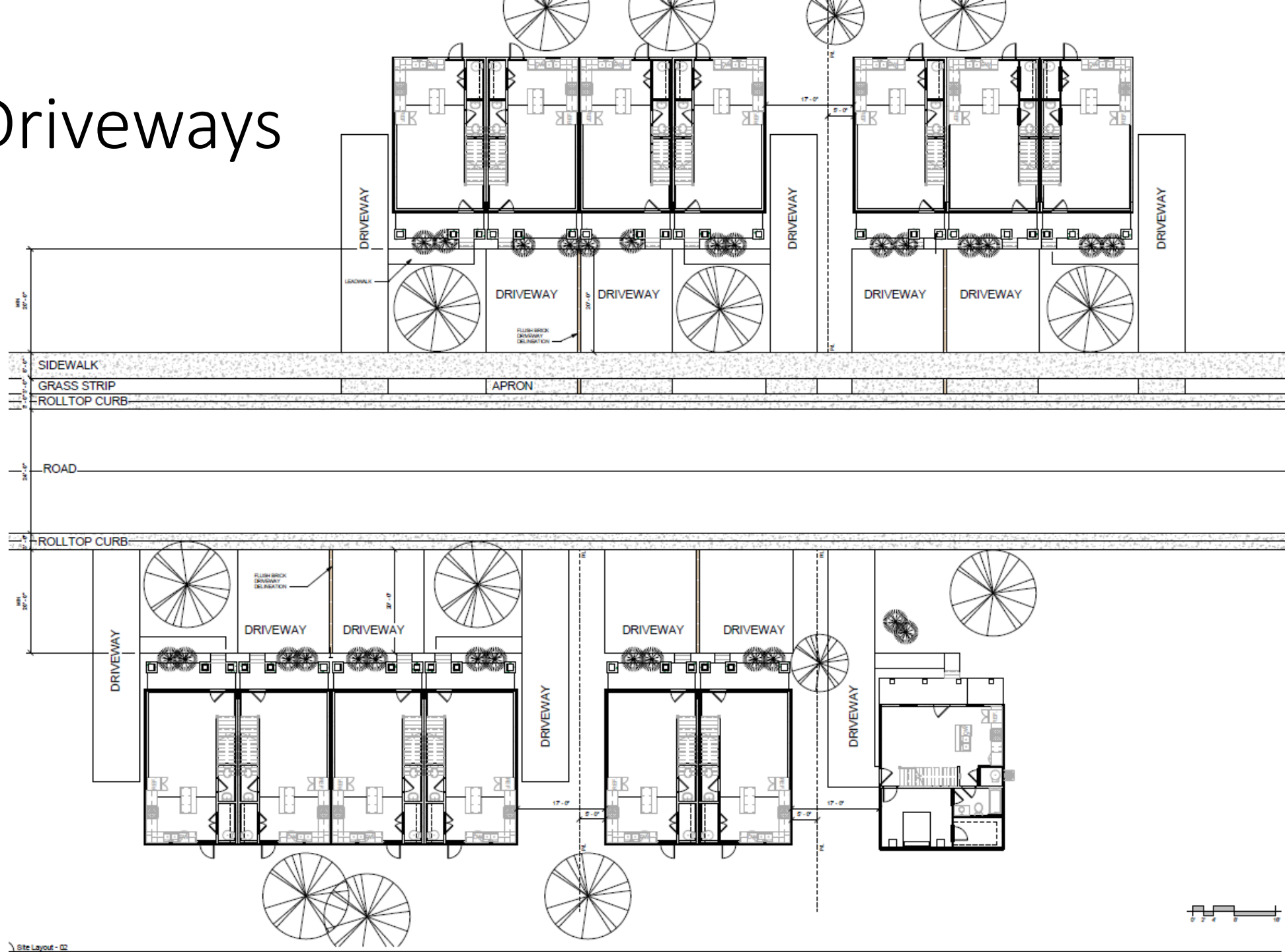


LOT 83 SCENARIO

LOT AREA: 3450 SF
 TOTAL FLOOR AREA: 2420 SF
 F.A.R.: 0.70
 TOTAL LOT COVERAGE: 1436 SF
 MAX. LOT COVERAGE: 42%

- FAR: South area Single Family = 0.7
- Remove accessory apartments
- Driveways:
 - No more than two contiguous 18' wide driveways
 - Variance to allow parking in front of building for townhouses/two-family
 - Side setback change: 17' minimum between units, 5' to lot line.
 - Solidify wording to provide 20' minimum length driveway

Driveways



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 Fax: (804) 741-0553
 eaglebova.com



DRAWN DATE:
11/23/2022
DRAFTED BY:
archi-TEO-logic
REVISED DATE:
N/A

SITE DRIVEWAY CONCEPT
 GLADE SPRINGS
 SITE CONCEPTS

A100
 CONCEPTUAL

Driveways



1 CONCEPT 02 - 3D
A101



2 CONCEPT 02 - 3D ELEV
A101



3 CONCEPT 02 - VIEW 01
A101



4 CONCEPT 02 - VIEW 02
A101



5 CONCEPT 02 - VIEW 03
A101

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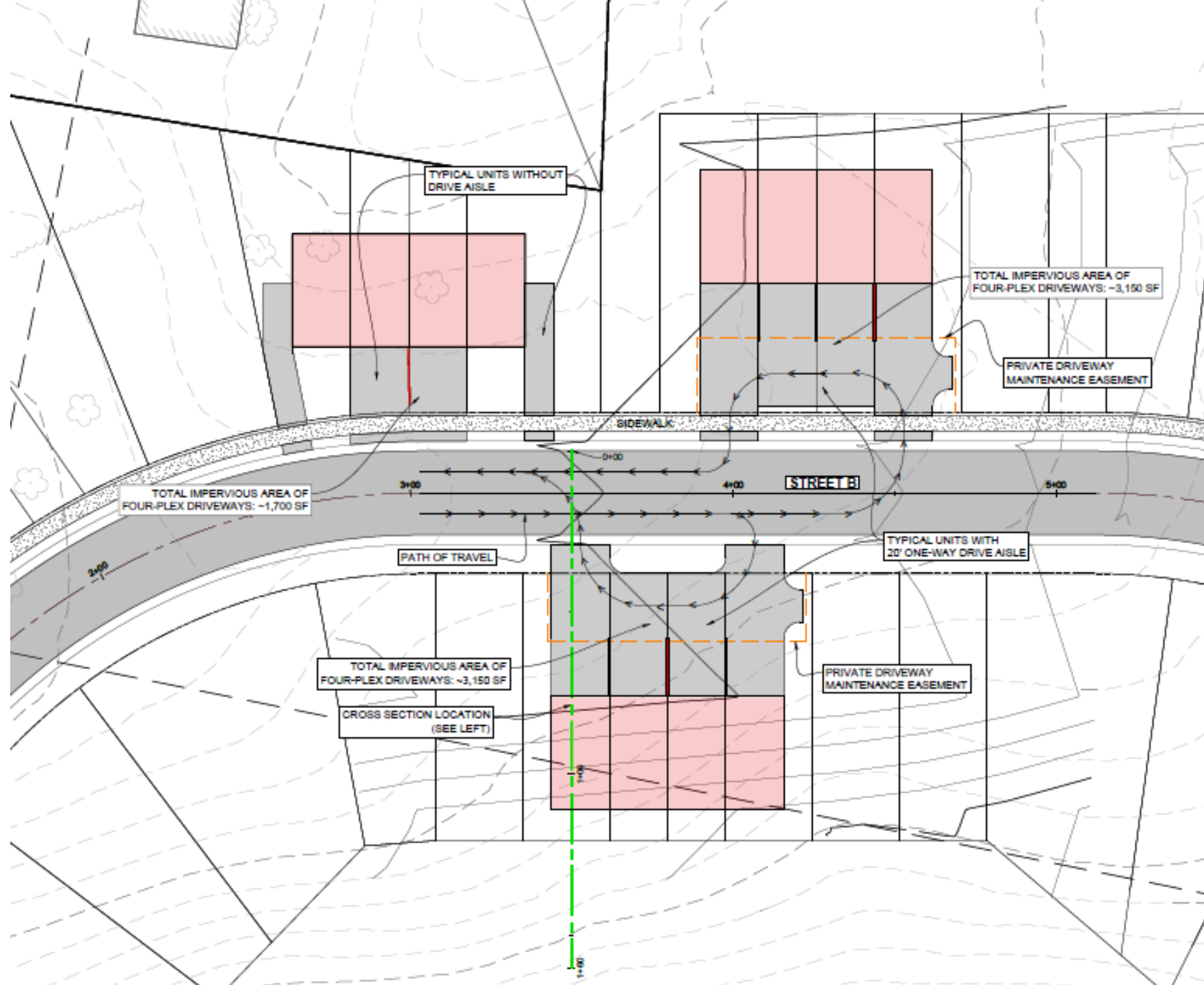


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11/23/2022
DRAFTED BY:
archi-TEC-tonic
REVISED DATE:
N/A

DRIVEWAY CONCEPT - VISUALS
GLADE SPRINGS SITE CONCEPTS

A101
CONCEPTUAL

Driveways



1700 KRAFT DRIVE, SUITE 2350
BLACKSBURG, VIRGINIA 24050
VOICE 276-432-6231
FAX 276-432-6448

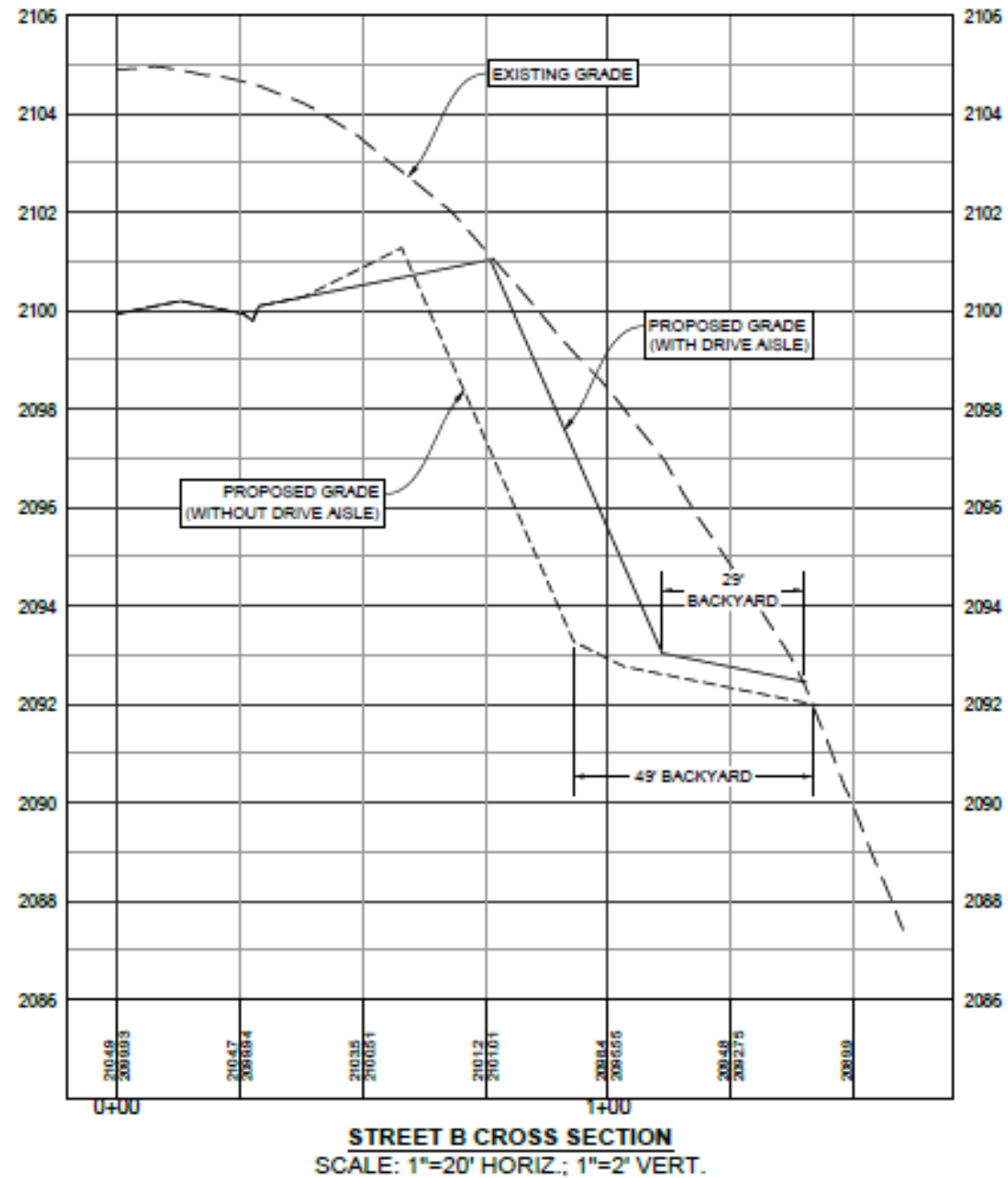
PRELIMINARY

STREET B DRIVE AISLE
EXHIBIT



DEPARTMENT OF
CROSSING
LC - TAX PARCELS
(57-45,0976 AC.
FOR DISTRICT

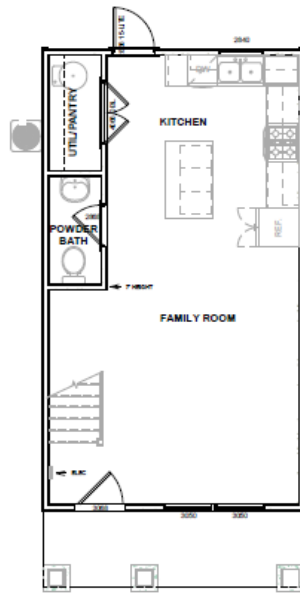
Driveways



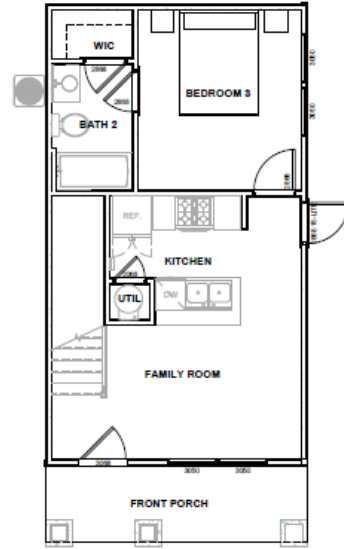
STREET B CROSS SECTION
SCALE: 1"=20' HORIZ.; 1"=2' VERT.

Other notable changes

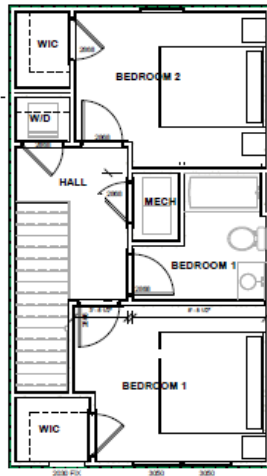
- Proffers added or altered
 - Canopy timing:
 - 5% total site canopy planted within 3 years after CO's issued in phase 1 (i.e. street trees, yard trees, existing woodland, riparian plantings)
 - 7% total site canopy planted within 3 years after CO's issued in phase 2 (i.e. street trees, managed successional plantings, riparian plantings, etc.)
 - Managed successional areas shall begin being managed by the HOA within 1-year after the conclusion of phase 2 infrastructure.
 - HERS rating maximum of 75 for all units in the development (other than the 10 affordable 60-80% AMI: Earthcraft Gold).
- Floor plans added
- Breaking up Facades on Townhomes as an alternative to staggered setbacks: No two adjacent and attached townhome units shall be identical. In order to meet this requirement, variation may be provided in exterior color, exterior materials, fenestration, and/or porch details.



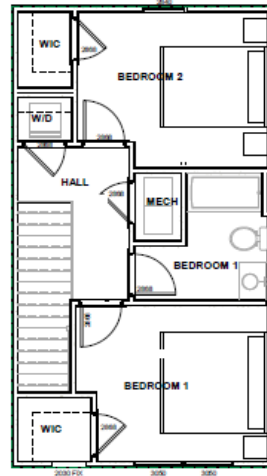
FIRST FLOOR PLAN 2 Bed, 1 1/2 Bath



FIRST FLOOR PLAN 3 Bed, 2 Bath



SECOND FLOOR PLAN 2 Bed, 1 1/2 Bath



SECOND FLOOR PLAN 3 Bed, 2 Bath



FRONT ELEVATION Coastal



FRONT ELEVATION Cottage



FRONT ELEVATION Craftsman

FIRST FLOOR: 540 SF
 SECOND FLOOR: 540 SF
 TOTAL SQ. FOOTAGE: 1,080 SF

- TWO BEDROOM, ONE AND A HALF BATH.
- THREE BEDROOM, TWO BATH.

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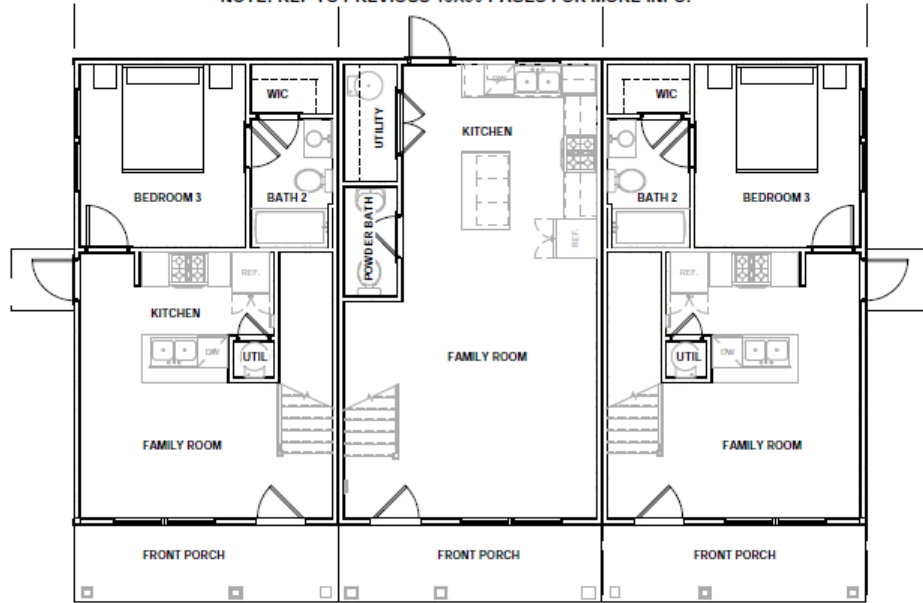
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 07/26/2021
DRAFTED BY:
 archi-TEC-logic
REVISED DATE:
 07/26/2021

SCHEMATIC FLOOR PLANS
 TWO AND THREE BEDROOM

18X30

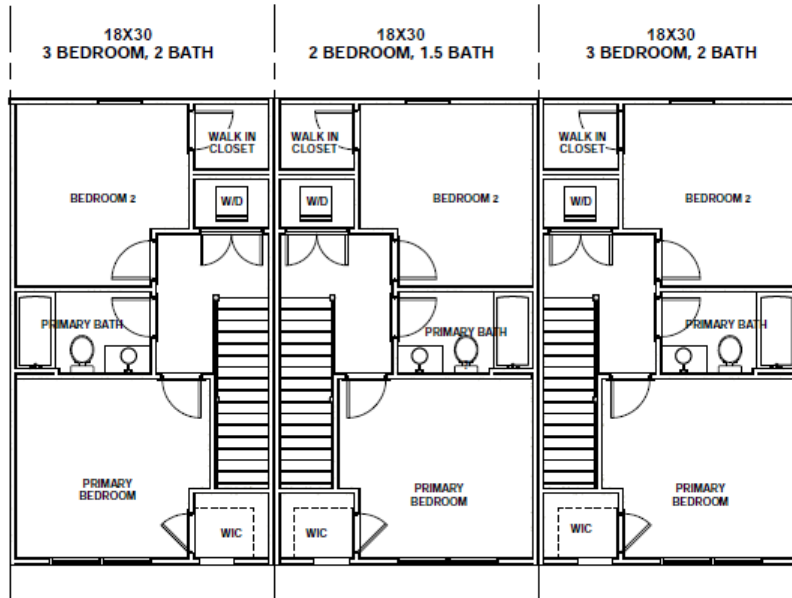
NOTE: REF TO PREVIOUS 18X30 PAGES FOR MORE INFO.



OVERALL FIRST FLOOR PLAN

- TWO BEDROOM, ONE AND A HALF BATH.
- THREE BEDROOM, TWO BATH.

**SAMPLE OF ATTACHED 18X30
NUMBER OF UNITS WILL VARY**



OVERALL SECOND FLOOR PLAN



OVERALL FRONT ELEVATION

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06/08/2021
DRAFTED BY:
archi-TEC-toric
REVISED DATE:
06/08/2021

**ATTACHED
SCHEMATIC PLANS**

**18X30
ATTACHED**

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FIRST FLOOR: 672 SF
 SECOND FLOOR: 672 SF
 TOTAL SQ. FOOTAGE: 1,344 SF

- TWO BEDROOM, TWO AND A HALF BATH.
- THREE BEDROOM, THREE BATH.

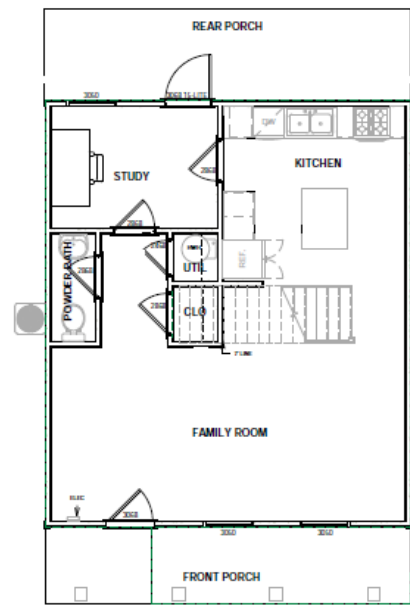
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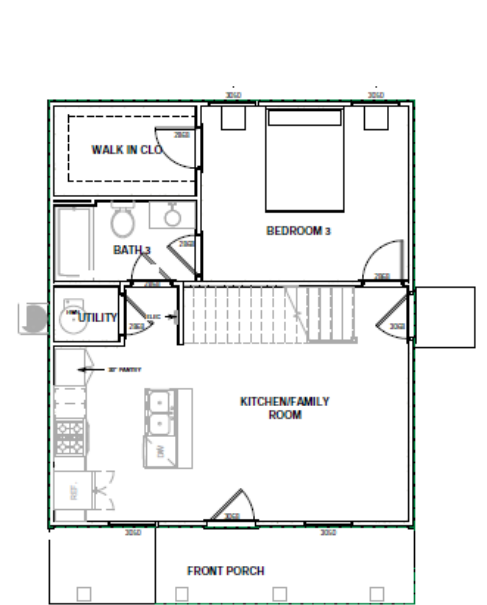
DRAWN DATE:
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SCHEMATIC FLOOR
 PLANS
 TWO AND THREE BEDROOMS

24X28



FIRST FLOOR PLAN - TWO BEDROOM



FIRST FLOOR PLAN - THREE BEDROOM



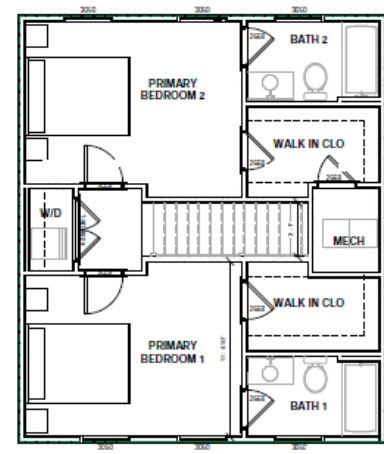
FRONT ELEVATION - TWO BEDROOM (1ST OPEN) - COASTAL



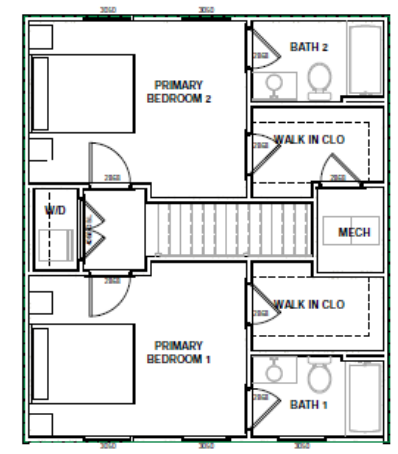
FRONT ELEVATION - ARTS AND CRAFTS



FRONT ELEVATION - CRAFTSMAN



SECOND FLOOR PLAN - TWO BEDROOM



SECOND FLOOR PLAN - THREE BEDROOM

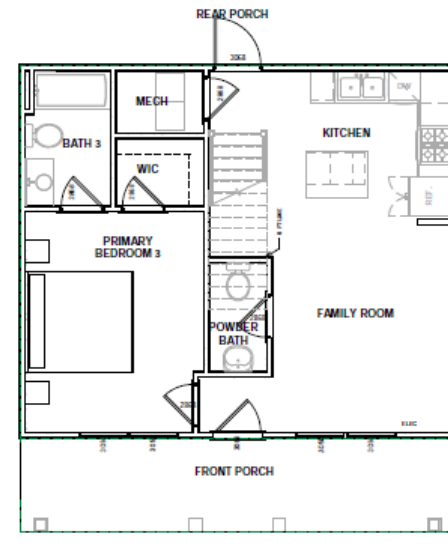
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FIRST FLOOR: 672 SF
 SECOND FLOOR: 672 SF
 TOTAL SQ. FOOTAGE: 1,344 SF

- TWO BEDROOM, TWO AND A HALF BATH.
- THREE BEDROOM, THREE AND A HALF BATH.



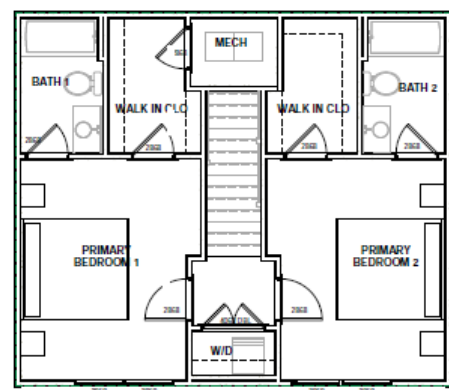
FIRST FLOOR PLAN - TWO BEDROOM



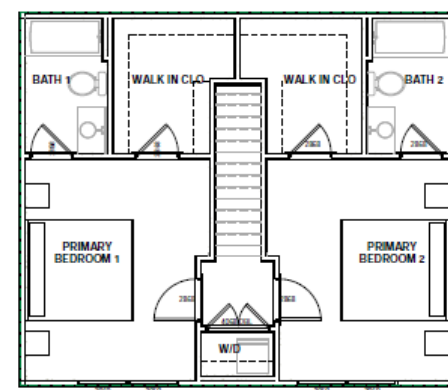
FIRST FLOOR PLAN - THREE BEDROOM



FRONT ELEVATION - TRADITIONAL



SECOND FLOOR PLAN - TWO BEDROOM



SECOND FLOOR PLAN - THREE BEDROOM



FRONT ELEVATION - ARTS AND CRAFTS

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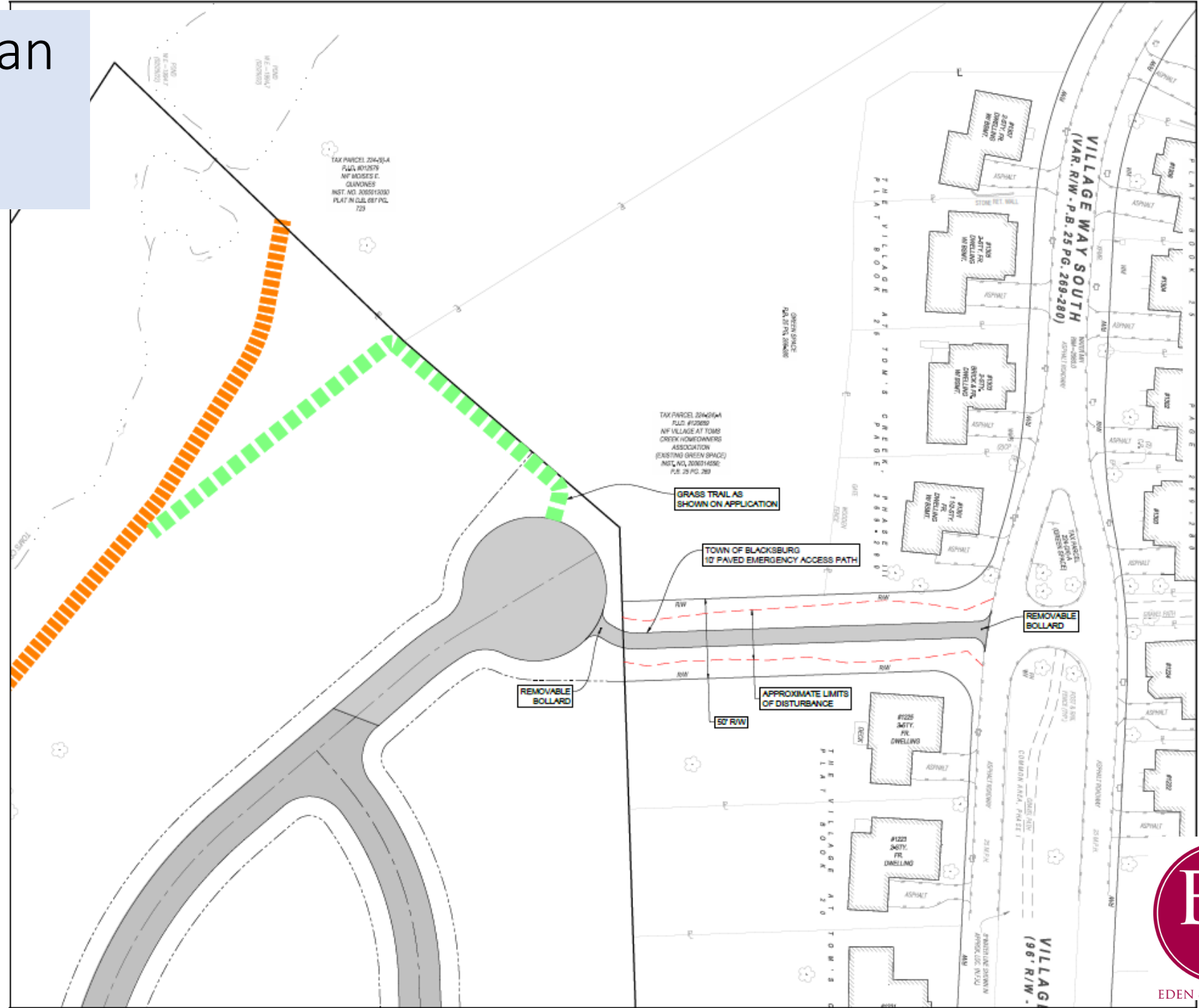
SCHEMATIC FLOOR PLANS
 TWO AND THREE BEDROOMS

28X24

Alternative Road Plan

Concept: based on neighborhood feedback

- Pros
 - No traffic issues through the Village at Tom's Creek
 - Reduces traffic pressure on Glade/Old Glade
 - No safety sacrifice
 - Less costly
 - Retain density
 - Provide pedestrian connectivity "out of the street"
 - Eliminates landing and slope variances for public road
 - Less traffic along Road A in GSC
 - No need to construct outside right-of-way
- Cons
 - Variance for No access to adjoining property
 - Variance for culdesac length
 - Carbon emissions, gas use, travel time increase.



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 ENGINEERING • PLANNING • ENVIRONMENT
 1700 KRAFTORNE, SUITE 2030
 BLACKSBURG, VIRGINIA 24040
 VOICES: 753-632-0281
 FAX: 753-632-0446

EA

PRELIMINARY

STREET A CUL DE SAC
 CONCEPT EXHIBIT

PROPOSED DEVELOPMENT OF
 E SPRING CROSSING
 (OF GLADE HGTS. LLC - TAX PARCELS
 1, 2, 25-A-1, & 25-A-157, 46,0976 AC.
 W/ OF BLACKSBURG - PARCELS 100% IN DISTRICT
 MONROE COUNTY, VIRGINIA)

EA

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Managed Successional Areas

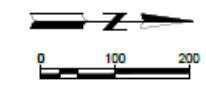
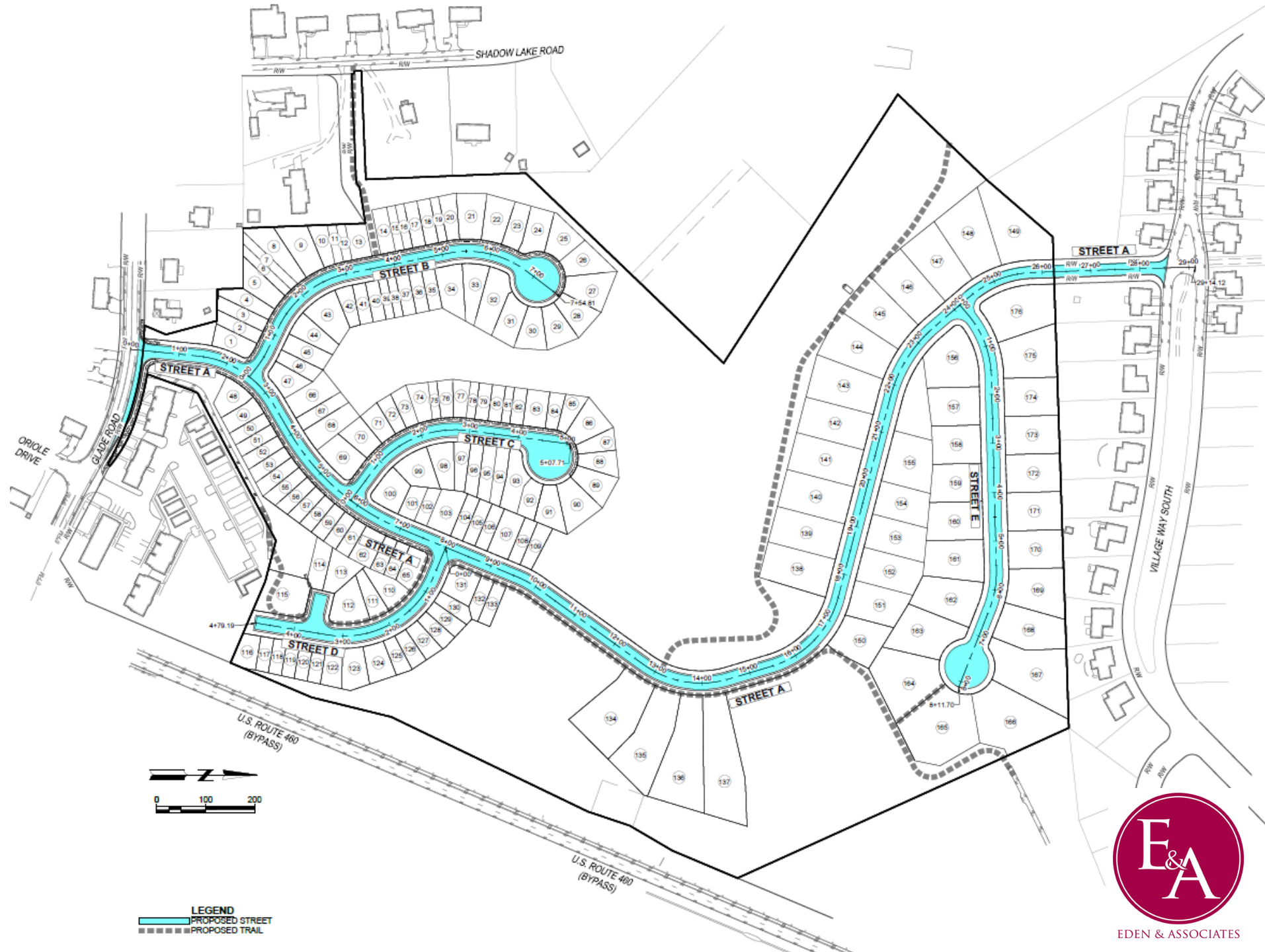
Traffic/Transportation Issues



GLADE SPRING



Transportation Circulation



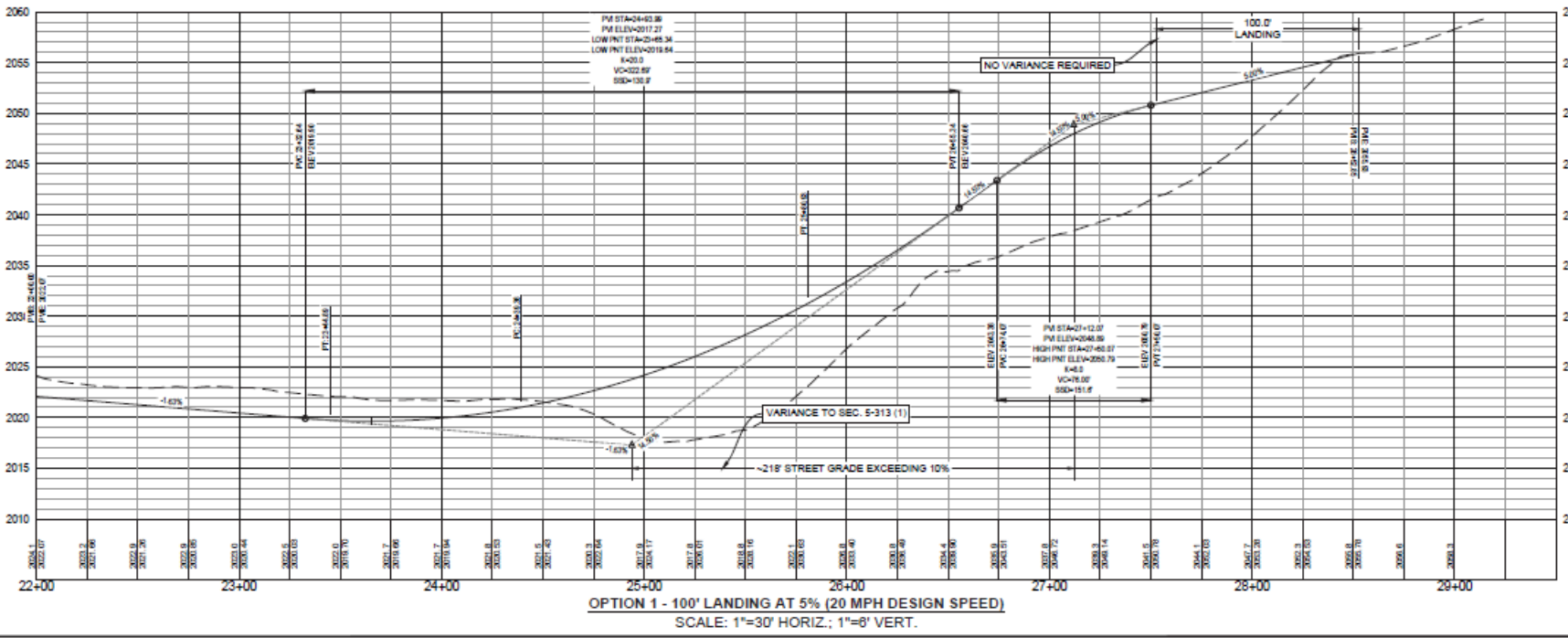
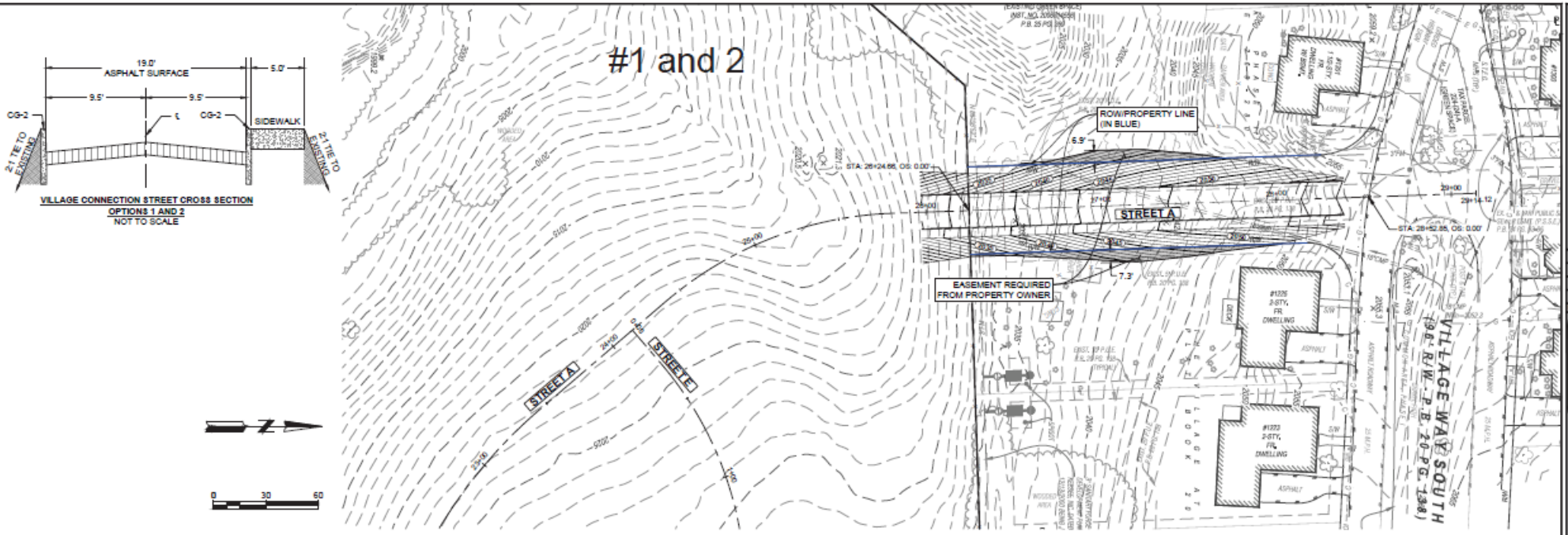
LEGEND
PROPOSED STREET
PROPOSED TRAIL



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Slope/Landing Variance at VWS intersection

- Sidewalk, landing by code



10/16/2022 11:51:00 AM

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 BLACKSBURG, VIRGINIA 24000
 VOICE 757-432-4231
 FAX 757-432-3446

PRELIMINARY

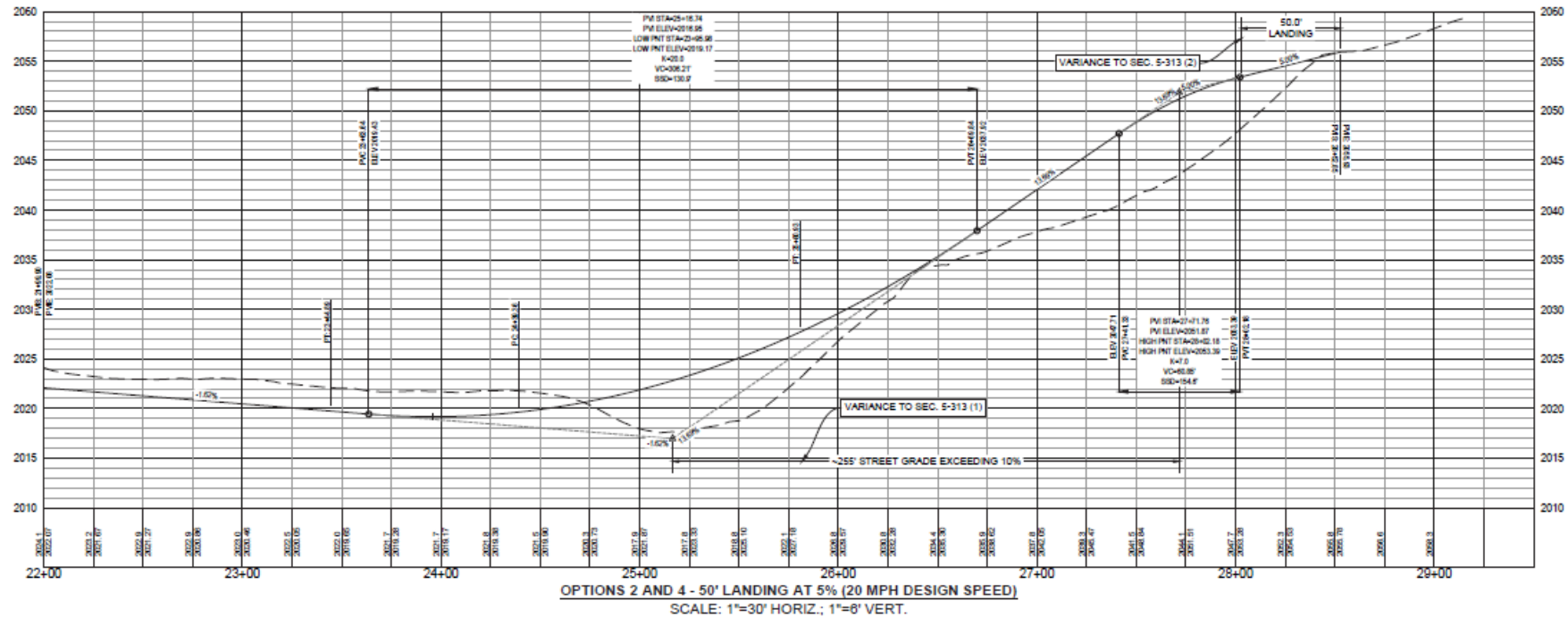
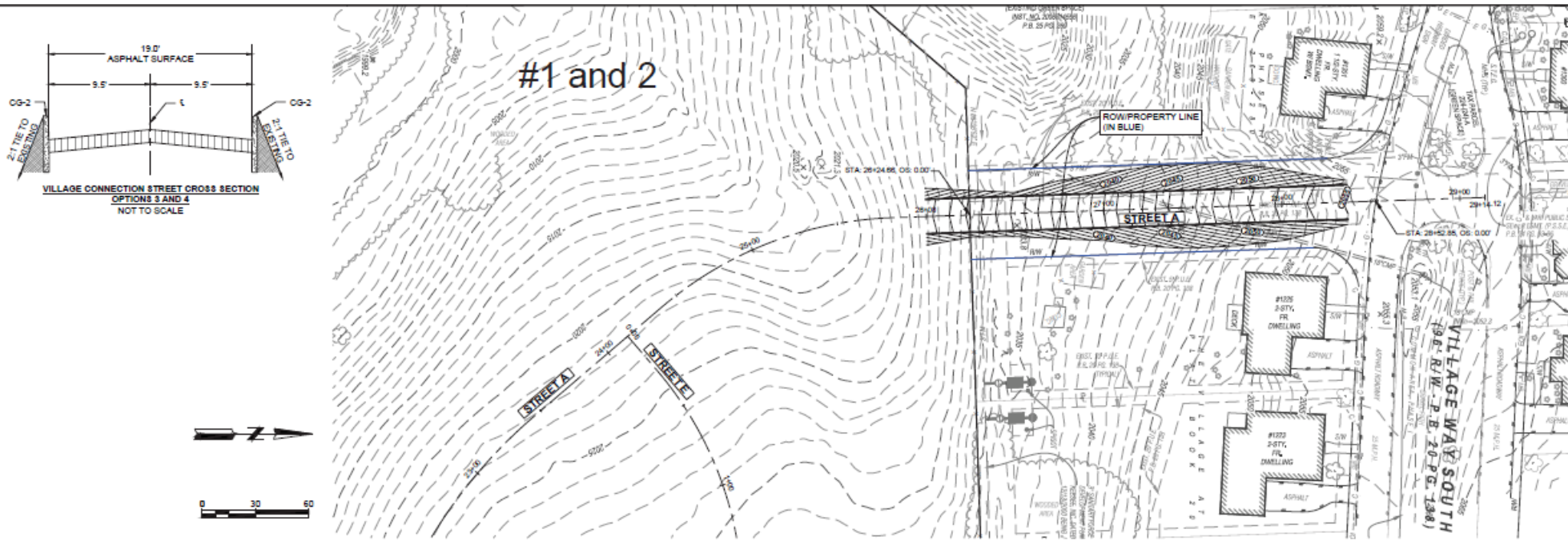
STREET A - VILLAGE WAY S.
 INTERSECTION EXHIBIT
 (OPTION 1)

PROPOSED DEVELOPMENT OF
 GLADE SPRING CROSSING
 PROPERTY OF GLADE HGTS. LLC - TAX PARCELS
 225(A)-3, 225(A)-4, & 224(A)-57, 45,2876 AC.
 TOWN OF BLACKSBURG-PRINCE GEORGE STREET
 MONTGOMERY COUNTY, VIRGINIA

Drawn By:	MSP	Scale:	AS SHOWN
Checked By:		Date:	10/18/2022
Sheet No.:	1 of 4		EX1

Slope/Landing Variance at VWS Connection

- With sidewalk and landing variance



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 ENGINEERING • PLANNING • CONSULTING
 100 KRAVITZ DRIVE SUITE 2500
 WILSONVILLE, OR 97150
 VOICE 503-632-2031
 FAX 503-632-3448

EA

PRELIMINARY

STREET A - VILLAGE WAY S.
 INTERSECTION EXHIBIT
 (OPTION 4)

PROPOSED DEVELOPMENT OF
GLADE SPRING CROSSING
 PROPERTY OF GLADE HGTS, LLC - TAX PARCELS
 225(A)-3, 225(A)-4, & 224(A)-57, 45,0876 AC.
 TOWN OF WASHINGTON COUNTY, OREGON

Drawn By: MSF
 Scale: AS SHOWN

Checked By: [Signature]
 Date: 10/18/2022

Sheet No. 4 of 4
EX4

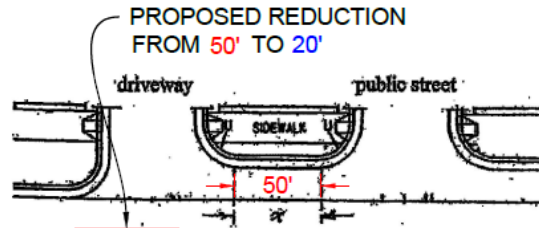
Walnut Dr: Givens Farm

Similar to our connection >12% grade non-standard landing



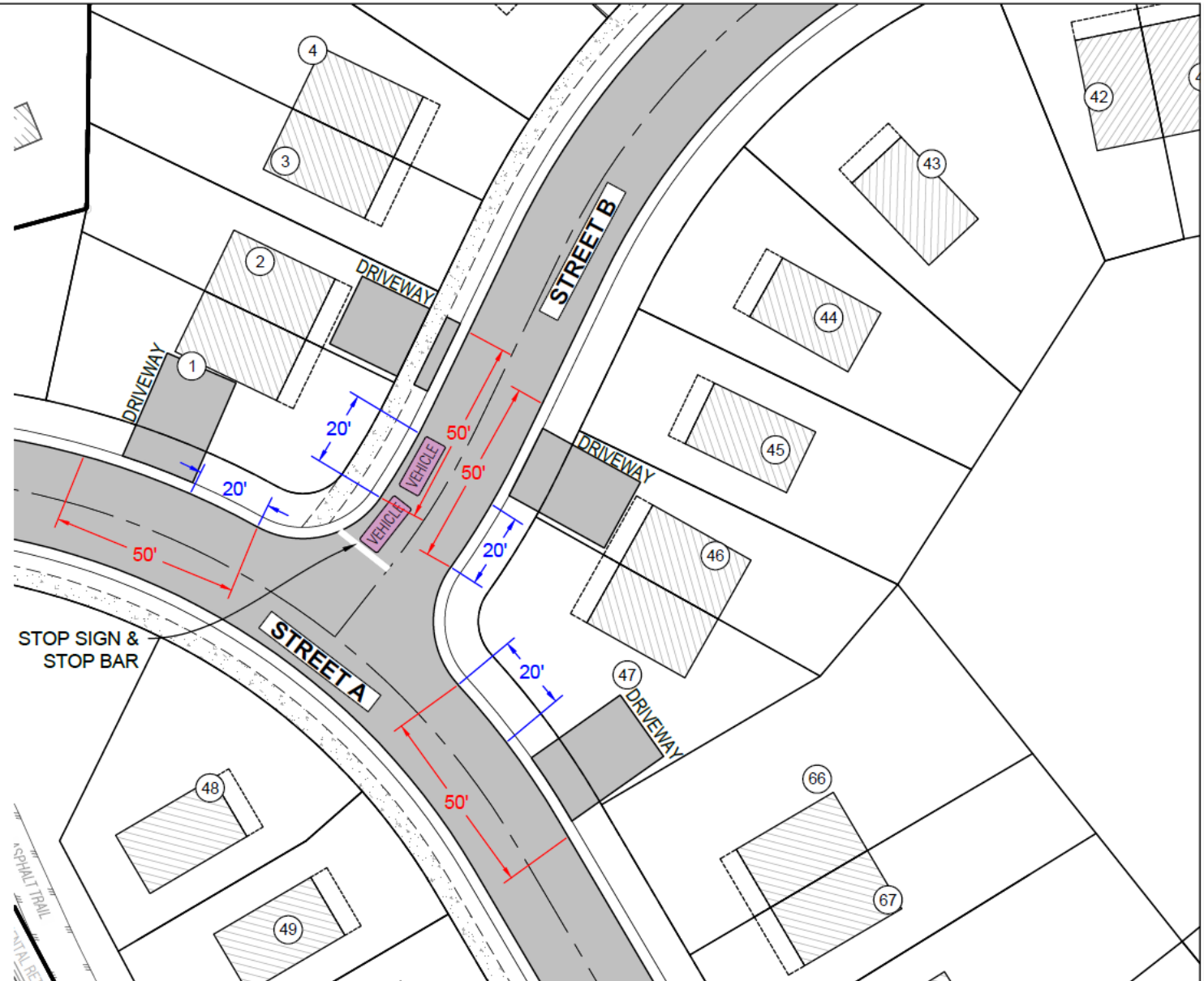
Driveway variance

#9 Driveways



x = 50 feet = driveways on local or collector street
x = 75 feet = driveways on arterial street

"DRIVEWAY MEASUREMENTS DIAGRAM"
PER SEC.5-318(d) OF SUBDIVISION
ORDINANCE



EDEN & ASSOCIATES
engineering • planning • development
1700 KRAFT DRIVE, SUITE 2350
BLACKSBURG, VIRGINIA 24060
PHONE 276-652-6231
FAX 276-652-0648



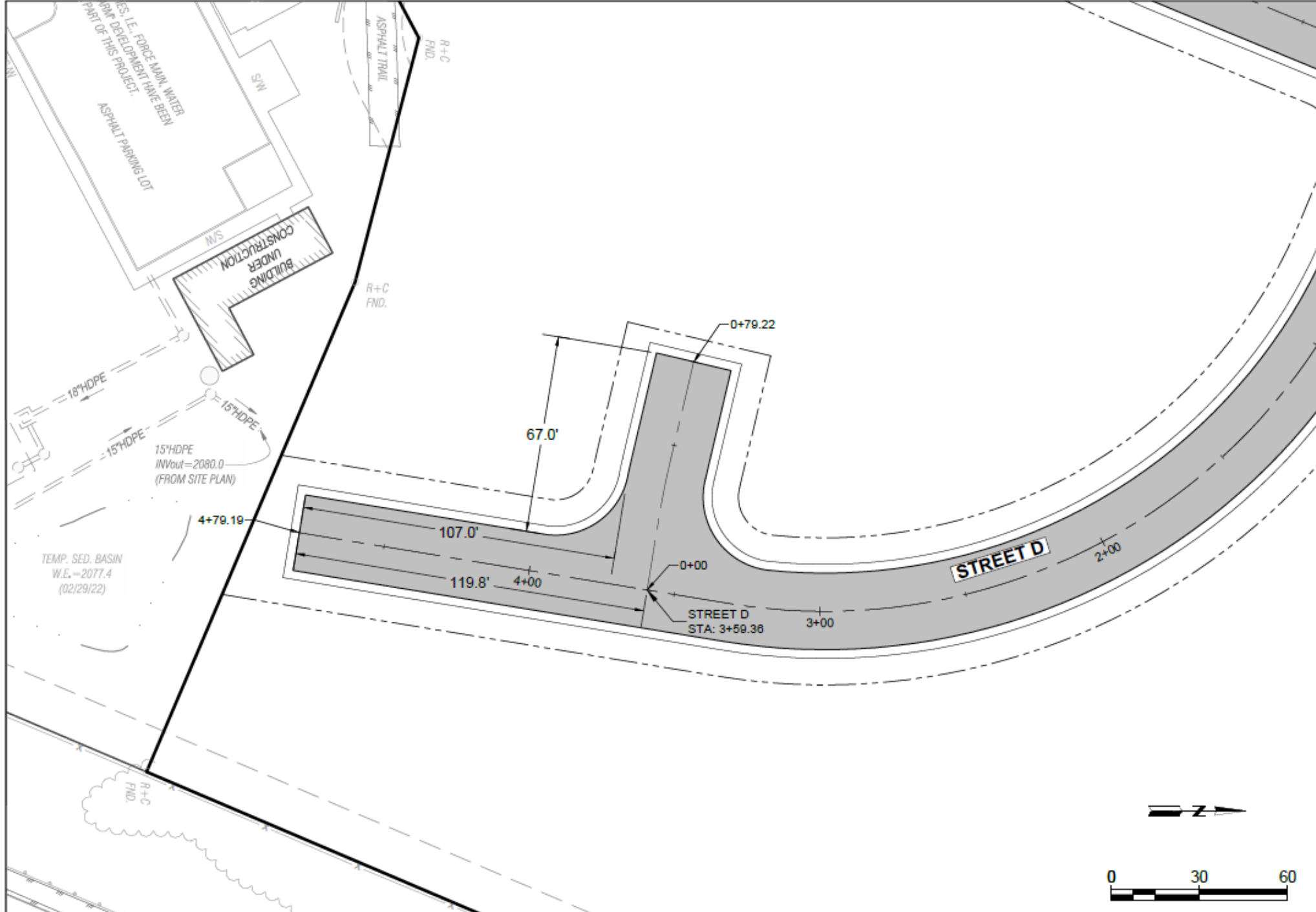
PRELIMINARY

DRIVEWAY VARIANCE EXHIBIT

PROPOSED DEVELOPMENT OF
SPRING CROSSING
F. GLADE HGTS. LLC - TAX PARCELS
25-(A)-4, & 224-(A)-57, 45.0876 AC.
BLACKSBURG-PRICES FORK DISTRICT
MONTGOMERY COUNTY, VIRGINIA



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EA

1700 GREAT DRIVE, SUITE 2050
BLACKSBURG, VIRGINIA 24040
PHONE: 703-660-9031
FAX: 703-660-9046

PRELIMINARY

**STREET D BRANCH
TURNAROUND EXHIBIT**

PROPOSED DEVELOPMENT OF
GLADE SPRING CROSSING
PROPERTY OF GLADE LIGHTS, LLC - TAX PARCELS
225-A-1, 225-A-4, & 224-A-1-17, 45.0876 AC.
TOWN OF BLACKSBURG, WEST VIRGINIA

Drawn By: MSF	Scale: AS SHOWN
Checked By: -	Date: 11/15/2022
Sheet No. 1 of 1	EX1



Transportation Circulation

- Traffic Study: of trip generated by the development
 - AM peak hour: 5 cars entering from V@TC 1 car in 12 minutes
 - AM peak hour: 14 cars exiting to V@TC 1 car in 4 minutes
 - PM peak hour: 16 cars entering from V@TC
 - PM peak hour: 10 cars exiting to V@TC

Land Use (ITE Land Use Code)	Size	Weekday Daily Traffic (vpd)		AM Peak Hour (vph)		PM Peak Hour (vph)	
		Enter	Exit	Enter	Exit	Enter	Exit
Single Family Detached Housing (210)	180 units	867	867	33	94	109	64

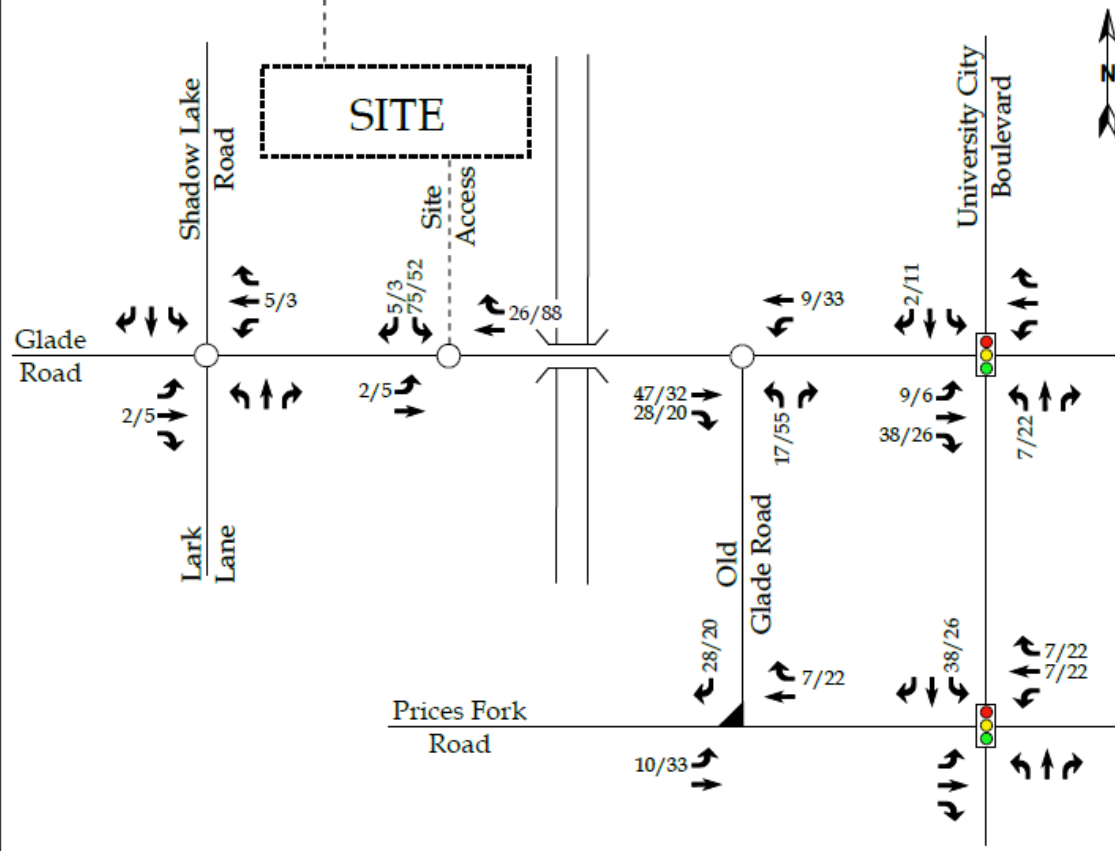
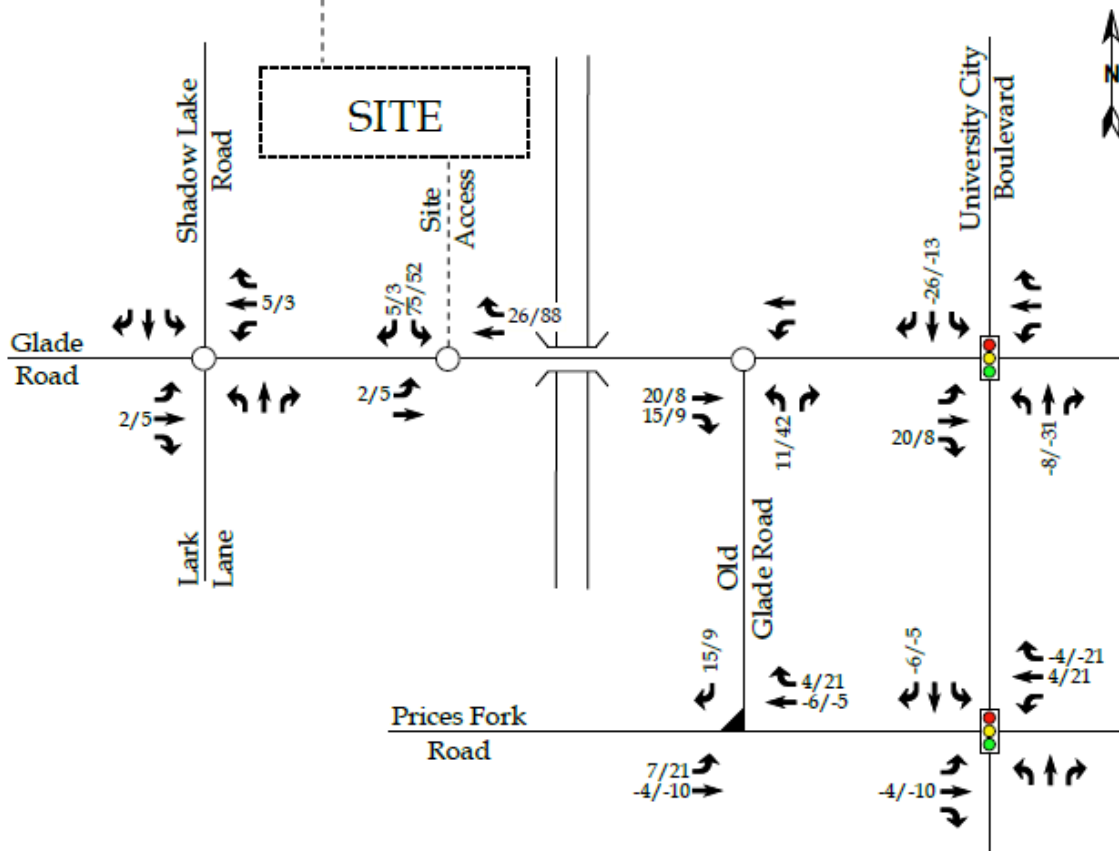
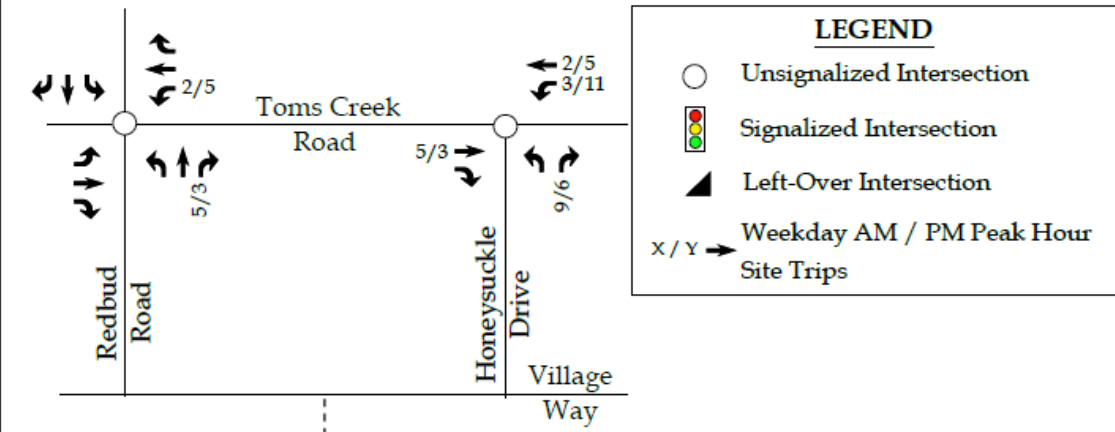
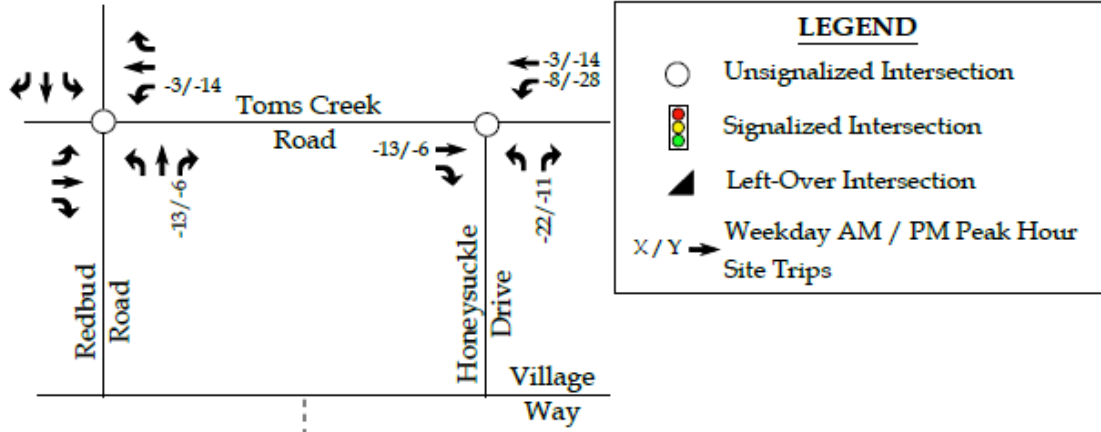
Site Trip Distribution

The following site trip distribution was applied based on a review of the existing traffic volumes, the adjacent roadway network, and engineering judgement:

- 10% to / from the north on University City Boulevard
- 40% to / from the east on Prices Fork Road
- 30% to / from the west on Prices Fork Road
- 5% to/from the west on Glade Road
- 15% to/from the east on Toms Creek Road

Through coordination with the Town, it was determined that 30% of the existing traffic utilizing Honeysuckle Drive or Redbud Road to access the Village neighborhood to the north of the proposed site would utilize the proposed interconnectivity to access Glade Road instead of continuing to utilize the Toms Creek Road.





Glade Heights
Blacksburg, VA

Rerouted Village
Existing Traffic

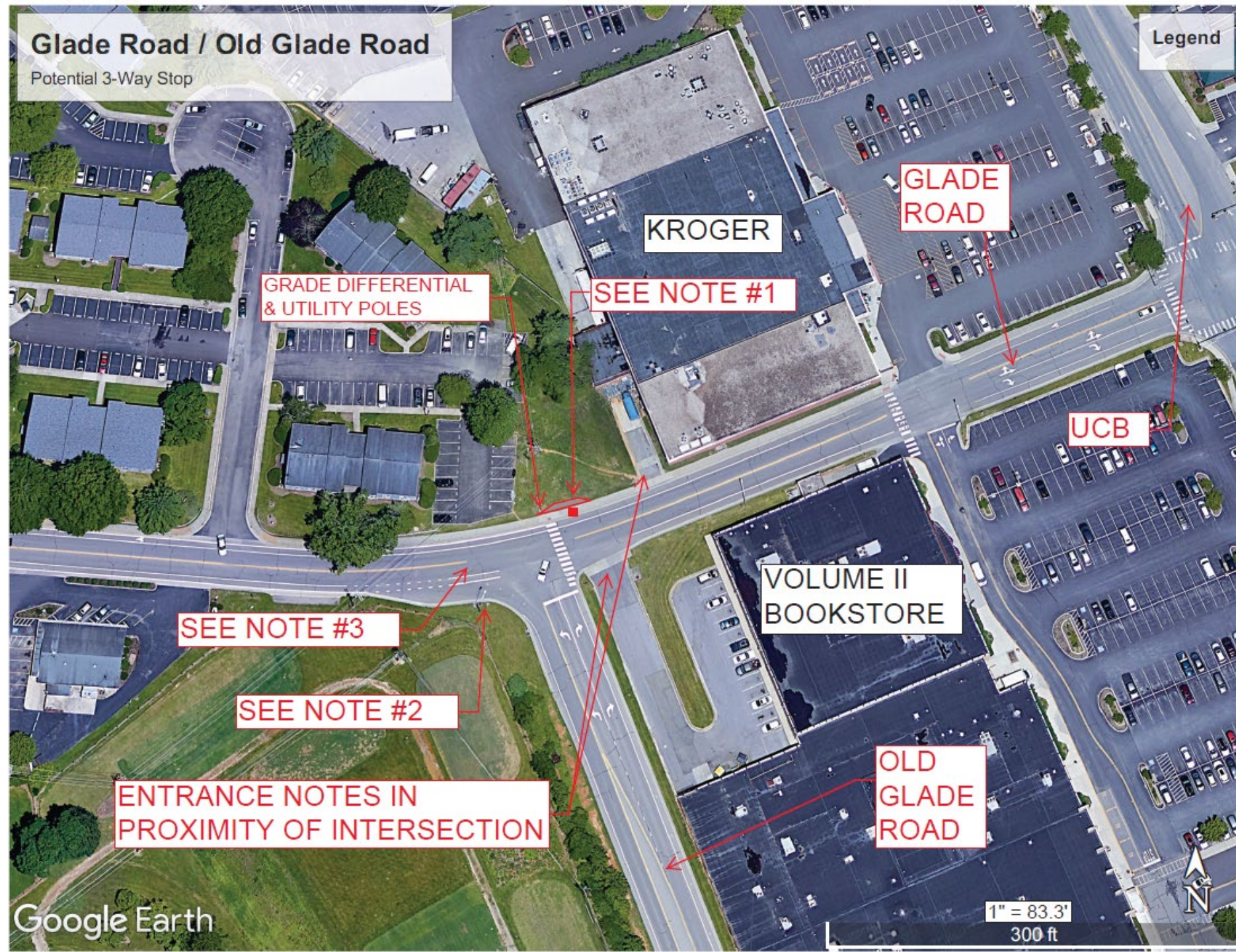


Glade Heights
Blacksburg, VA

Site Trip Assignment

Glade/Old Glade

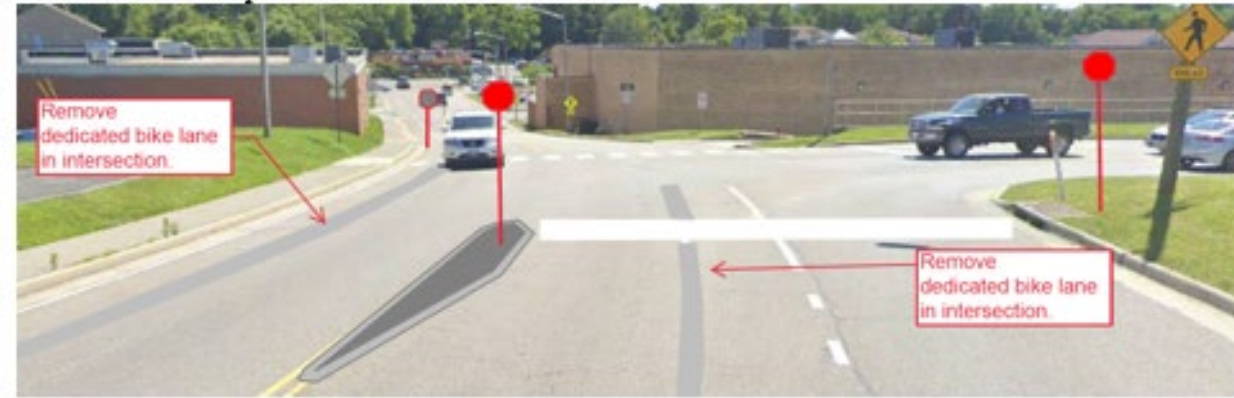
- Issue: LOS F on Northbound Left turn
- Traffic Signal not warranted
- 3-way stop warranted in no-build condition (NOW)



Potential image in the westbound direction.



Recommended improvements in the eastbound direction.



Visibility concerns in the eastbound direction.



• Westbound

- Least intrusive fix
- Island in ex. Bicycle lane, stop sign and stop bar
- Modify dedicated bicycle lane
- Provide adequate traffic control measures during construction
- \$50-60k does not include pedestrian crossing problems, lack of landing on Glade.

• Eastbound

- Island to separate through lanes and place two stop signs and stop bars
- Stop ahead sign at Citgo



3-way stop: Pros and Cons

- Improve LOS on Old Glade
- Worsen LOS on Glade (major collector)
- Maximum queues do not reach the Kroger driveways to the east. Stop about 150 feet short of the intersection
- An all-way stop with multiple lanes on multiple approaches decreases in safety and creates more confusion.
 - Commercial entrance (Vol 2)
 - Kroger loading dock
- \$50-60k

OTHER OPTIONS?

- Roundabout?
- Traffic signal cheaper?

Table 5: Level-of-Service Summary for Old Glade Road & Glade Road

CONDITION	LANE GROUP	AM PEAK HOUR				PM PEAK HOUR			
		Lane LOS	Lane Delay (sec)	Lane Queue (ft)	Overall LOS (Delay)	Lane LOS	Lane Delay (sec)	Lane Queue (ft)	Overall LOS (Delay)
Existing (2022) Conditions	EBT	--	--	--	N/A ³	--	--	--	N/A ³
	EBR	--	--	--		--	--	--	
	WBL/T ²	A	9	10		A	8	10	
	NBL ¹	B	15	20		D	28	103	
	NBR ¹	A	10	13		A	10	15	
No-Build (2026) Conditions	EBT	--	--	--	N/A ³	--	--	--	N/A ³
	EBR	--	--	--		--	--	--	
	WBL/T ²	A	9	10		A	8	10	
	NBL ¹	B	15	20		E	37	135	
	NBR	A	10	13		A	10	15	
Build (2026) Conditions	EBT	--	--	--	N/A ³	--	--	--	N/A ³
	EBR	--	--	--		--	--	--	
	WBL/T ²	A	9	10		A	8	13	
	NBL ¹	C	17	33		F	133	378	
	NBR	B	10	13		B	10	15	
Build (2026) Conditions (All-Way Stop)	EBT	B	11	40	B (11)	B	13	40	C (20)
	EBR	B	10	40		B	11	28	
	WBL/T	B	11	30		C	24	145	
	NBL	B	12	25		D	27	148	
	NBR	A	10	15		B	11	25	

1. Level of service for minor approach
2. Level of service for major-street left-turn movement
3. HCM methodology does not provide lane group or overall LOS, delay, and queue lengths for major street through movements or right turns at unsignalized intersections.





Open Space Management Land Use Plan

LEGEND

1. PROFESSIONALLY MANAGED LANDSCAPE AREAS

- VEGETATED EMBANKMENT
- ENTRANCE
- GATHERING AREAS

2. MANAGED TURF OPEN SPACE

3. BACKYARD TRANSITIONAL ZONE

4. EXISTING WOODLAND RETAINED

5. STORMWATER POND (WET, SWM MAINTENANCE AREA)

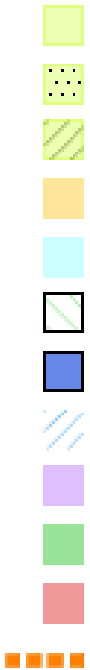
6. STORMWATER POND (DRY)

7. MANAGED SUCCESSIONAL

8. POND EDGE SHADE TREE & SUCCESSIONAL AREA

9. RECREATION AREA

10. PUBLIC TRAILS



1700 KRAFT DRIVE, SUITE 2050
 BLACKSBURG, VIRGINIA 24060
 VOICE 757-652-0281
 FAX 757-652-0648

PRELIMINARY

**OPEN SPACE MANAGEMENT
 LAND USE EXHIBIT**

PROPOSED DEVELOPMENT OF

GLADE SPRING CROSSING
 PROPERTY OF GLADE HEIGHTS, LLC - TAX PARCELS
 225-A-3, 225-A-4, & 224-A-07, 450,976 AC.
 TOWN OF BLACKSBURG - PRINCE EDWARD COUNTY, VIRGINIA



EDEN & ASSOCIATES

Landscaping

LEGEND

STREET TREES



EXISTING WOODLAND
RETAINED



MANAGED TURF AREAS



MANAGED SUCCESSIONAL
LANDSCAPE

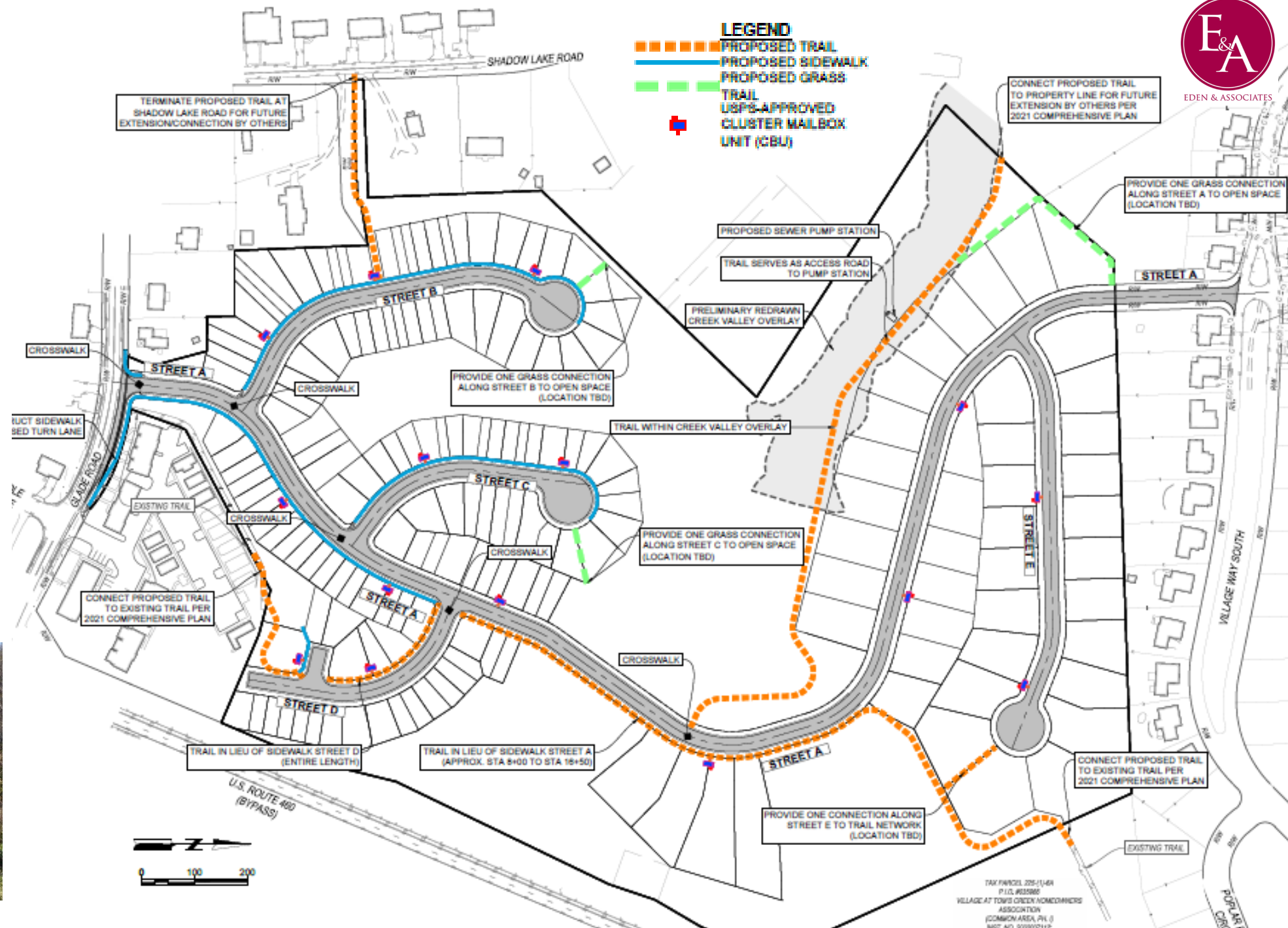


STORMWATER AREAS

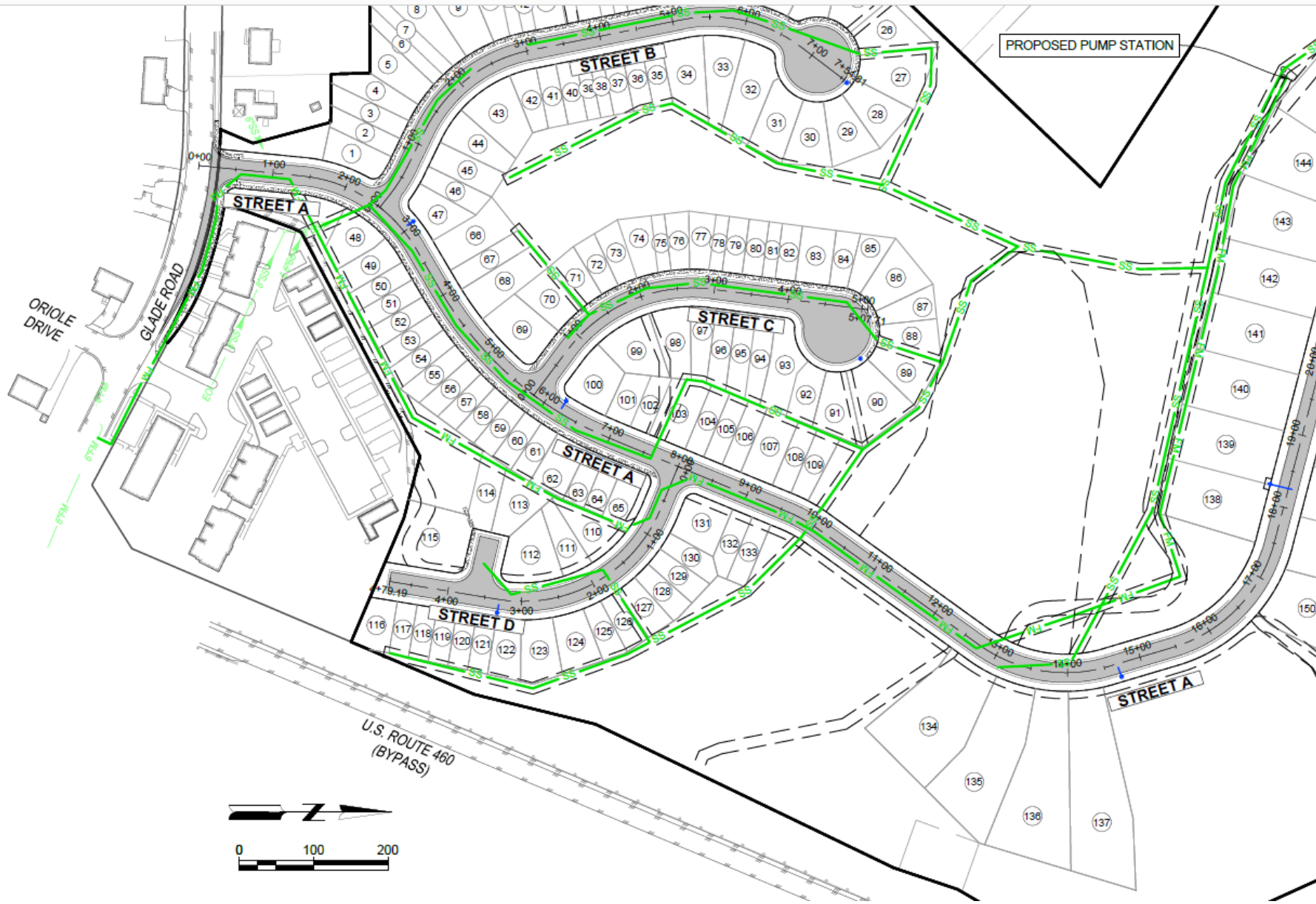


Sidewalk and Trails

- 4000 feet trail
- 2000 feet sidewalk
- grass trails



Downstream Sewer Capacity

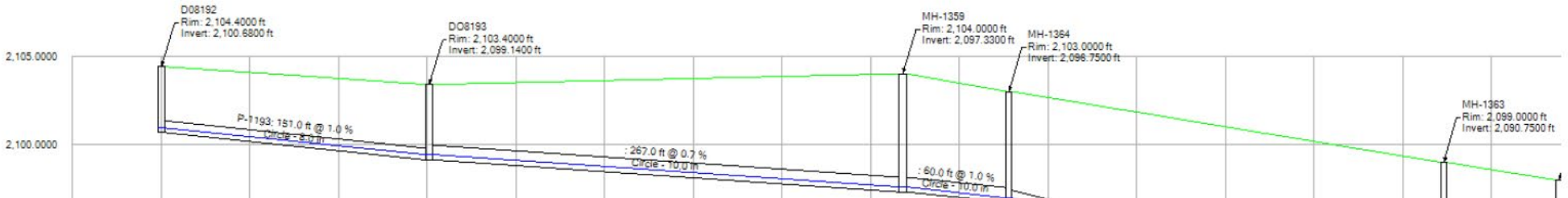


- Karr Heights pump station upgrades
- Force Main replacement
- Sewer reroute to alleviate Univ. City Blvd. capacity

Downstream Sewer Capacity



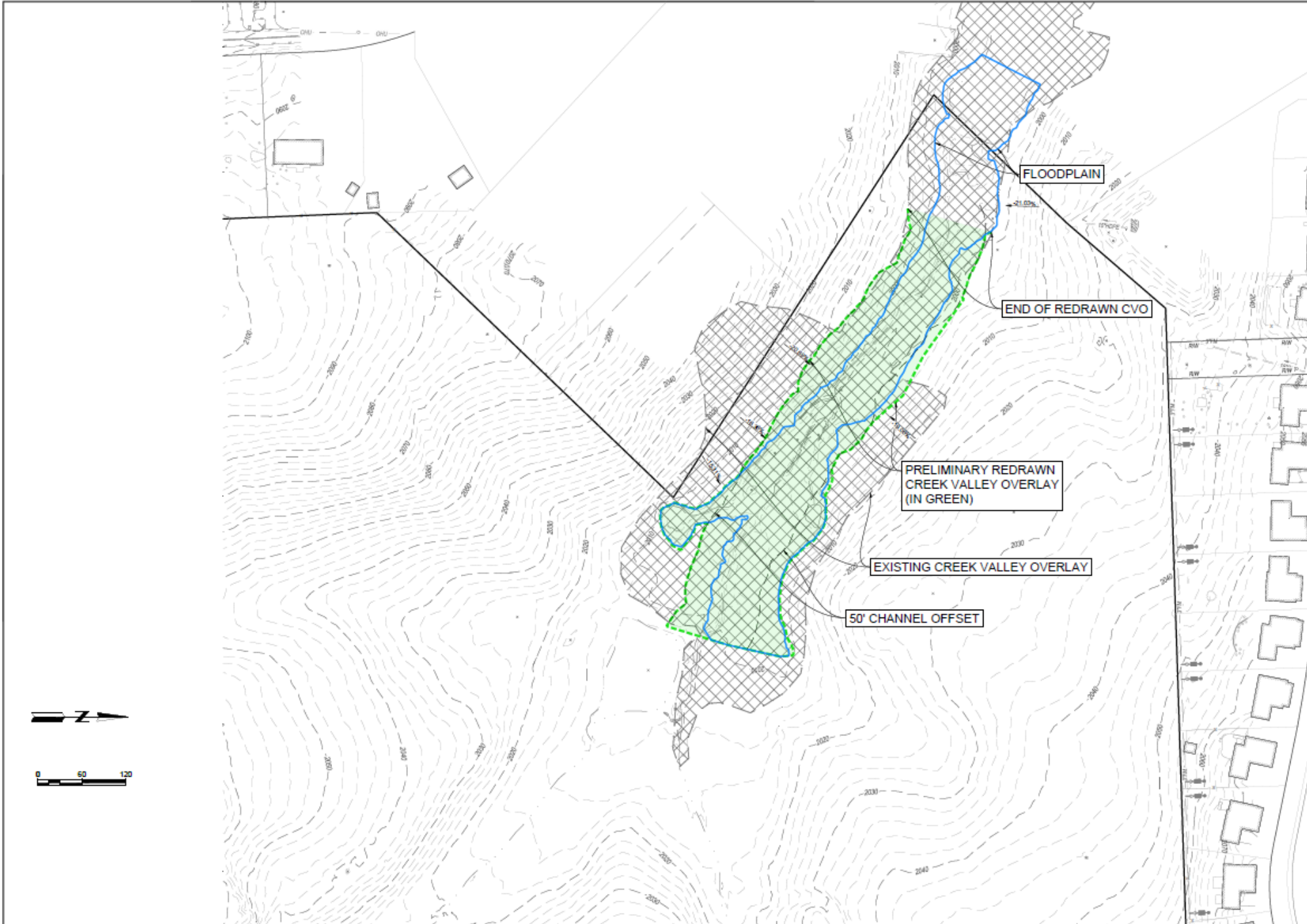
- Karr Heights pump station upgrades
- Force Main replacement
- Sewer reroute to alleviate Univ. City Blvd. capacity





Downstream Sewer Capacity



Creek Valley Overlay



 <p>EDEN & ASSOCIATES engineering • planning • development 1700 KRAFT DRIVE, SUITE 200 WOODBRIDGE, VIRGINIA 22190 PHONE: 703-596-1181 FAX: 703-596-3448</p>	
	
<p>PROPOSED CREEK VALLEY OVERLAY MODIFICATION EXHIBIT</p>	
<p>PROPOSED DEVELOPMENT OF GLADE SPRING CROSSING PROPERTY OF GLADE HGTS, LLC - TAX PARCELS 225-A-1, 225-A-4, & 224-A-157, 45.0376 AC. <small>TOWN OF BRIDGEWATER, PRINCE GEORGE COUNTY, VIRGINIA</small></p>	
<p>Drawn By: MSF</p>	<p>Scale: AS SHOWN</p>
<p>Checked By: -</p>	<p>Date: 10/12/2022</p>
<p>Sheet No. 1 of 1</p>	<p>1</p>