

P.O. Box 1390 • 10 North Public Square • Cartersville, Georgia 30120 Telephone: 770-387-5600 • Fax: 770-387-5605 • www.cityofcartersville.org

### **MEMO**

To: BZA

From: Randy Mannino/David Hardegree/Zack Arnold

CC: Keith Lovell Date: January 11, 2023

Re: File # V22-23 Revised 1-11-23.

Summary: To allow encroachment into the City's impervious and undisturbed stream bank buffer

#### **Section 1: Project Summary**

Variance application by Kerley Family Homes, for two properties located at 21 & 23 Ashwood Drive and zoned R-20 (Single Family Residential) and P-D (Planned Development). Both properties contain approximately 0.2 acres. These lots are currently undeveloped.

The applicant wishes to construct homes on these lots that will encroach into the City's 25ft. impervious streambank buffer and the 25ft. undisturbed vegetative streambank buffer. No encroachment is proposed in the twenty-five foot (25ft) State streambank buffer.

The proposed encroachment at 21 Ashwood Drive includes 422 square feet of the home constructed in the impervious streambank buffer, and 297 square feet of disturbance in the undisturbed streambank buffer.

The proposed encroachment at 23 Ashwood Drive includes 178 square feet of the home constructed in the impervious streambank buffer, and 182 square feet of disturbance in the undisturbed streambank buffer. The applicant proposes to construct an infiltration trench (trench) as the mitigation solution for each property. This approach has never been presented as a mitigation solution to an encroachment.

All downspouts are proposed to be piped to the trench. Side slopes are proposed to be graded to drain into the trench.

### **Property Summary:**

### 21 Ashwood Drive (No plans submitted)

Total buffer encroachment: 719sf.

### 23 Ashwood Drive (Updated Plans provided)

Total buffer encroachment: 360sf.

The mitigation plan required by City ordinance may be satisfied by the trench plans; however, the proposed mitigation plan will likely be burdensome on all future property owners and city staff. Maintenance schedule provided. Inspections will be required annually. The trench must remain in place in perpetuity.

At this time, not all engineering issues have been resolved, but the applicant's engineer has been in communication with the city engineer to reach a solution. Plans will be provided for 21 Ashwood Dr. once an acceptable solution is in place for 23 Ashwood Dr. The solutions will be similar.

The development regulations for which relief is sought is 7.5-205 (a)(1) and 7.5-205 (a)(2).

#### The variance request is for the following:

- 1. For 21 Ashwood Drive, allow the home to encroach into the impervious and vegetative streambank buffers for approx. 719sf; and
- 2. For 23 Ashwood Drive, allow the home to encroach into the impervious and vegetative streambank buffers for approx. 360sf.

#### **Proposed Conditions:**

If the BZA supports the trench mitigation plans as provided, Planning and Development staff recommend the following conditions for each site. The conditions also allow additional time to address engineering concerns:

- 1) The trench mitigation plans are to be approved by the city engineer and in conjunction with the review of the Tertiary Plans;
- 2) The approved trench mitigation plans, including all required easements, are to be recorded for each parcel;
- 3) The approved trench mitigation plans are to be included with a Stormwater Maintenance Agreement to be approved by the City and recorded;
- 4) Items 1-3 are to be completed prior to issuance of a Building Permit; and,
- 5) The City Engineer is to inspect and approve compliance of the trench prior to issuance of Certificate of Occupancy.

#### **Section 2. Department Comments**

**Electric Department:** Not in Service Area

Fibercom: Not in Service Area

Fire Department: No comments received

**Gas Department:** The Gas System takes no exception to the following as shown in the attachments provided the locations of the natural gas meters are proposed outside of any of the required buffers.

Water Department: No comments received

Public Works Department: See attached comments below.

#### Section 3. Public Comments Received by Staff

11/21/22: General Inquiry. Adjacent neighbor.

### **Section 4. Variance Justification**

Please review the following findings, as stated in the Development Regulations, that are to be utilized in determining justification for approval or denial of variance request(s).

#### A. Sec. 7.5-205. - Land development requirements.

- (a) Buffer and setback requirements. All land development activity subject to this article shall meet the following requirements:
  - (1) An undisturbed natural vegetative buffer shall be maintained for fifty (50) feet, measured horizontally, on both banks (as applicable) of the stream as measured from the top of the stream bank.
  - (2) An additional setback shall be maintained for twenty-five (25) feet, measured horizontally, beyond the undisturbed natural vegetative buffer, in which all impervious cover shall be prohibited. Grading, filling and earthmoving shall be minimized within the setback.
  - (3) No septic tanks or septic tank drain fields shall be permitted within the buffer or the setback.
- (b) Variance procedures. Variances from the above buffer and setback requirements may be granted in accordance with the following provisions:
  - (1) Where a parcel was platted prior to the effective date of this article, and its shape, topography or other existing physical condition prevents land development consistent

with this article, and the City of Cartersville finds and determines that the requirements of this article prohibit the otherwise lawful use of the property by the owner, the board of appeals (BA) of the City of Cartersville may grant a variance from the buffer and setback requirements hereunder, provided such variance require mitigation measures to offset the effects of any proposed land development on the parcel.

(2) Except as provided above, the BA of the City of Cartersville shall grant no variance from any provision of this article without first conducting a public hearing on the application for variance and authorizing the granting of the variance by an affirmative vote of the BA. The City of Cartersville shall give public notice of each such public hearing in a newspaper of general circulation within the city. The City of Cartersville shall require that the applicant post a sign giving notice of the proposed variance and the public hearing. The sign shall be of a size and posted in such a location on the property as to be clearly visible from the primary adjacent road right-of-way.

Variances will be considered only in the following cases:

- a. When a property's shape, topography or other physical conditions existing at the time of the adoption of this article prevents land development unless a buffer variance is granted.
- b. Unusual circumstances when strict adherence to the minimal buffer requirements in the ordinance would create an extreme hardship.

Variances will not be considered when, following adoption of this article, actions of any property owner of a given property have created conditions of a hardship on that property.

- (3) At a minimum, a variance request shall include the following information:
- a. A site map that includes locations of all streams, wetlands, floodplain boundaries and other natural features, as determined by field survey;
- b. A description of the shape, size, topography, slope, soils, vegetation and other physical characteristics of the property;
- c. A detailed site plan that shows the locations of all existing and proposed structures and other impervious cover, the limits of all existing and proposed land disturbance, both inside and outside the buffer and setback. The exact area of the buffer to be affected shall be accurately and clearly indicated;
- d. Documentation of unusual hardship should the buffer be maintained;
- e. At least one (1) alternative plan, which does not include a buffer or setback intrusion, or an explanation of why such a site plan is not possible;
- f. A calculation of the total area and length of the proposed intrusion;
- g. A stormwater management site plan, if applicable; and

- h. Proposed mitigation, if any, for the intrusion. If no mitigation is proposed, the request must include an explanation of why none is being proposed.
- (4) The following factors will be considered in determining whether to issue a variance:
- a. The shape, size, topography, slope, soils, vegetation and other physical characteristics of the property;
- b. The locations of all streams on the property, including along property boundaries;
- c. The location and extent of the proposed buffer or setback intrusion; and
- d. Whether alternative designs are possible which require less intrusion or no intrusion;
- e. The long-term and construction water-quality impacts of the proposed variance;
- f. Whether issuance of the variance is at least as protective of natural resources and the environment.

(Ord. No. 52-06, 8-3-06)

### **David Hardegree**

From: Wade Wilson

**Sent:** Tuesday, January 10, 2023 11:18 AM

To: Shelby Thompson; Wesley Redd; David Hardegree; Zack Arnold

**Cc:** Tommy Rozier

Subject: RE: [EXTERNAL] Carter's Grove Lots J1379 & J1380 Mitigation Plans

Follow Up Flag: Follow up Flag Status: Flagged

David,

The Carter Grove Lots J1379 and J1380 has provided a mitigation plan utilizing infiltration trenches at the rear of both properties. From a design perspective, this appears to be a viable option.

However, I do feel we need to address a few concerns that should be considered prior to issuing the variance:

- 1. Since the mitigation plan utilizes a "green" stormwater BMP (Best Management Practice), maintenance and inspection will be required at both locations. This will entail a stormwater maintenance agreement being executed with the City by the current owner of the parcel. The stormwater maintenance agreement should contain a plan showing the location of the BMP, an easement accessing the BMP and an inspection and maintenance schedule.
- 2. Every year, the owner will be required to inspect the infiltration trench.
- 3. Every five years, City staff will be required to inspect the infiltration trench to verify that the BMP is functioning correctly.
- 4. If there are deficiencies at any time, then the home owner will be required to address. Due to access issues, this could be very difficult.
- 5. This type of BMP has to be completed after the site has been nearly finished. The house and yard would need to be completed prior to completing this infiltration trench. At that point, a contractor would need to access the steep slopes between the houses and install the trench and filter media. This would not be easy, but at a substantial cost could be done.

These items are just issues that Public Works sees as difficulties. BMP's such as this have been installed at other jurisdictions, but have not been installed on a single family residential lot within the City of Cartersville. Therefore, we tend to have a few reservations as to its application in regards to future maintenance and inspection. However, if approved, then our Stormwater Department will address it quite like we do all other sites within the City.

Thanks,

### Wade Wilson

Wade Wilson, PE, CFM City Engineer

City of Cartersville Public Works PO Box 1390/330 S. Erwin Street

Table 4.1.3-1 BMP Selection Guide

	Runoff Reduction			Stormwa	ter Managemei	nt & Treatme	nt				Site Appl	icability			Cost Cons	siderations
ВМР	RR ***	WQ <sub>v</sub> / TSS	CP <sub>v</sub>	Q <sub>p25</sub> / Q <sub>f</sub>	Total Phosphorus	Total Nitrogen	Fecal Coliform	Metals	LID/GI	Drainage Area (ac)	Space Req'd (% of Imperv. Drainage Area)	Max Site Slope	Minimum Head (Elevation Difference)	Depth to Water Table	Construction Cost	Maintenance Burden
Bioretention Basins 3,5,6	Yes	85%	Ť	Ì	80%	60%	90%	95%	Yes	5 max	3-6%	20%	3 ft	2 ft	Med-High	Med
Bioslopes 7	Yes	85%	Ť	Х	60%	25%	60%	75%	Yes	N/A	N/A	5%	N/A	2 ft	Med	Med
Downspout Disconnects <sup>2</sup>	Yes	80%	Х	Х	25%	25%	N/A**	40%	Yes	2,500 ft <sup>2</sup>	Min. length of flow path 15'	6%	N/A	No restrictions	Low	Low
Dry Detention Basins <sup>6</sup>	No	60%	Х	<b>√</b>	10%	30%	N/A**	50%	No	75 max	N/A	15%	3 ft	2 ft	Low	Low
Dry Extended Detention Basins <sup>2</sup>	No	60%	✓	✓	10%	30%	N/A**	50%	No	No restrictions	1-3%	15%	4-8 ft	2 ft	Low	Low
Dry Wells <sup>2</sup>	Yes	100%	Ť	Х	100%	100%	100%	100%	Yes	2,500 ft <sup>2</sup>	5-10%	6%	2 ft	2 ft	Med	Med
Enhanced Dry Swales <sup>1</sup>	Yes	80%	Ť	Х	50%	50%	Х	40%	Yes	5 max	10-20%	4%	3-5 ft	2 ft	Med	Low
Enhanced Wet Swales <sup>1</sup>	No	80%	Ť	Х	25%	40%	Х	20%	Yes	5 max	10-20%	4%	1 ft	Below	Med	Low
Grass Channels <sup>1</sup>	Minimal	50%	Ť	Х	25%	20%	Х	30%	Yes	5 max	10%	4%	<1 ft	2 ft	Low	Low
Gravity (oil-grit) Separators <sup>2</sup>	No	40%	Х	Х	5%	5%	N/A	N/A	No	5	N/A	6%	4 ft	2 ft	High	High
Green Roofs <sup>2</sup>	Yes	80%	Х	Х	50%	50%	N/A**	N/A**	Yes	N/A	No restrictions	25%	6-12 in	N/A	High	Low
Infiltration Trenches 10	Yes	100%	Ť	Ì	100%	100%	100%	100%	Yes	5 max	2-3%	6%	1 ft	2 ft	High	High
Multi-Purpose Detention Basins <sup>2</sup>	No	Varies	Х	Ì	N/A**	N/A**	N/A**	N/A**	No	No restrictions	1-3%	15%	4-8 ft	2 ft	Low	Low
Organic Filters <sup>2</sup>	No	80%	Ì	X	60%	40%	50%	75%	Yes	10	3-5%	6%	5-8 ft	2 ft	High	High
Permeable Paver Systems <sup>2</sup>	Yes	80%	Ì	Ť	50%	50%	N/A**	60%	Yes	N/A	No restrictions	6%	2-4 ft	2 ft	High	High
Pervious Concrete <sup>2</sup>	Yes	80%	Ì	Ť	50%	65%	N/A**	60%	Yes	N/A	No restrictions	6%	2-4 ft	2 ft	High	High
Porous Asphalt (excludes OGFC) <sup>2</sup>	Yes	80%	Ì	Ť	50%	50%	Х	60%	Yes	N/A	0%	N/A	N/A	2 ft	Med	Med
Proprietary Systems <sup>2</sup>	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	No	Varies	Varies	Varies	Varies	Varies	Varies	Varies
Rainwater Harvesting <sup>2</sup>	Based on Demand	Varies	Ť	Х	Varies	Varies	Varies	Varies	Yes	No restrictions	Varies	No restritions	N/A	N/A	Med	High
Regenerative Stormwater Conveyance 8	No	80%	Х	Х	70%	70%	N/A**	N/A**	Yes	50 max	Varies	10%	Varies	Above	High	Med
Sand Filters <sup>1</sup>	No	80%	Ì	Х	50%	25%	40%	50%	Yes	2-10 max	2-3%	6%	2-5 ft	2 ft	High	High
Site Reforestation/Revegetation <sup>2</sup>	No**	N/A**	N/A**	N/A**	N/A**	N/A**	N/A**	N/A**	Yes	N/A	10,000 ft² Min.	25%	N/A	No restrictions	Med	Low
Soil Restoration <sup>2</sup>	No**	N/A**	N/A**	N/A**	N/A**	N/A**	N/A**	N/A**	Yes	N/A	No restrictions	10%	N/A	1.5 ft	Med	Low
Stormwater Planters / Tree Boxes <sup>2</sup>	Yes	80%	Х	Х	60%	60%	80%	N/A	Yes	2,500 ft <sup>2</sup>	5%	6%	2 ft	2 ft	High	Med
Stormwater Ponds <sup>2</sup>	No	80%	✓	√	50%	30%	70%	50%	No	10-25 min	2-3%	15%	6-8 ft	2 ft (if aquifer)	Low	Low
Stormwater Wetlands – Level 1 <sup>1</sup>	No	80%	✓	✓	40%	30%	70%	50%	Yes	25 min	3-5%	8%	2-3 ft	2 ft (if aquifer)	Med	Med
Stormwater Wetlands – Level 2 <sup>4</sup>	No	85%	Х	X	75%	55%	85%	60%	Yes	5 min	3-5%	Flat	2-3 ft	2 ft (if aquifer)	Med-High	Med
Submerged Gravel Wetlands <sup>2</sup>	No	80%	Х	X	50%	20%	70%	50%	No	5	3-5%	4%	2-5 ft	No restrictions	High	High
Underground Detention <sup>2</sup>	No	0%	✓	√	0%	0%	0%	0%	No	25 max	N/A	15%	4-8 ft	2 ft	High	Med
Vegetated Filter Strips <sup>1</sup>	Yes	60%	Ì	Х	20%	20%	Х	40%	Yes	5 max	20%	6%	<1 ft	1-2 ft	Low	Low

<sup>✓ -</sup> BMP can meet the stormwater management or treatment requirement

#### Pollutant Removal References:

- 1: Original Georgia Stormwater Management
- 2: Coastal Stormwater Supplement to the Georgia Stormwater Management Manual, 2009
- 3: Bioretention Watershed Benefits. Low Impact Development Urban Design Tools. 04
- 4: The Next Generation of Stormwater Wetlands. EPA Wetlands and Watersheds Article Series (2008) Center for Watershed Protection
- 5: Bioretention Performance, Design, Construction, and Maintenance. North Carolina Cooperative Manual, 2011. Extension Service. Hunt, William. 2006
- 6: North Carolina Department of Environment and Natural Resources Stormwater Best Management Practices Manual. 2007
- 7: Washington State Department of Transportation (WSDOT) Highway Runoff
- 8: West Virginia Stormwater Management Design Guidance Manual, 2012
- 9: Georgia Department of Transportation (GDOT) Drainage Manual, 2014 10: Pollutant removal rates based on 100% infiltration with no underdrain

T - BMP may meet the stormwater management or treatment requirement depending on size, configuration, and site constraints

X - BMP may contribute but is not likely to fully meet the stormwater management or treatment requirement

 $<sup>\</sup>star$  - Minimum drainage area of ten acres is required to maintain the permanent pool (unless groundwater is present).

<sup>\*\*</sup> Helps restore pre-development hydrology, which implicitly reduces post-construction stormwater unoff rates, volumes and pollutant loads

\*\*\* - Relps restore pre-development hydrology, which implicitly reduces post-construction stormwater runoff rates, volumes and pollutant loads

\*\*\* - Runoff reduction percentages are listed in Table 4.1.3-2 (BMP Runoff Reduction Credits)

Infiltration Practice					
_		Condit			
Maintenance Item	Good	Marginal	Poor	N/A*	Comment
	Seneral I	nspection			
Access to the site is adequately maintained					
for inspection and maintenance.					
Area is clean (trash, debris, grass clippings,					
etc. removed).					
Designation of the second of t	<u>In</u>	let	Π		
Drainage ways (overland flow or pipes) to the practice are free of trash, debris, large					
branches, etc. Drainage ways are in good					
condition.					
Area around the inlet structure is mowed					
and grass clippings are removed.					
No evidence of gullies, rills, or excessive					
erosion around the inlet structure.					
Water is going through structure (i.e. no					
evidence of water going around the					
structure).					
Diversion structure (high flow bypass					
structure or underdrain) is free of trash, debris, or sediment. Comment on overall					
condition of diversion structure and list type.					
	eatment	: (choose on	e)		
Forebay – area is free of trash, debris, and					
sediment.					
Forebay – No undesirable vegetation.					
Forebay – No signs of erosion, rills, or gullies.					
Erosion protection is present on site.					
Forebay – No signs of standing water.					
Filter Strip— area is free of trash debris and sediment. Area has been mowed and grass					
clippings are removed. No evidence of					
erosion or sediment accumulation.					
Filter Strip – No signs of unhealthy grass,					
bare or dying grass. Grass height is					
maintained to a height of 6 – 15 inches.					
Filter Strip- No signs of erosion, rills, or					
gullies. Erosion protection is present on site.					
Filter Strip – No undesirable vegetation.					
Filter Strip – No signs of standing water					
(examples include: stains, odors, mosquito					
larvae, etc).					

Infiltration Practice							
		Condit					
Maintenance Item	Good	Marginal	Poor	N/A <sup>*</sup>	Comment		
Main Treatment							
Main treatment area is free of trash, debris, and sediment.							
Erosion protection is present on site (i.e. turf reinforcement mats). Comment on types of erosion protection and evaluate condition.							
Structure seems to be working properly. No settling around the structure. Comment on overall condition of structure.							
No signs of ponding water more than 48 hours after a rain storm event (examples include: stains, odors, mosquito larvae, etc).							
No undesirable vegetation growing within the practice.							
Native plants were used in the practice according to the landscaping plan.							
Observation well is capped and locked when not in use							
Flow testing has been performed on infiltration practice to determine if underdrain is clogged.							
Emergency Overflow and Outlet Structure							
Area is free of trash, debris, and sediment.							
No evidence of erosion, scour, or flooding around the structure.							
No signs of sediment accumulation.							
Grass height of 6 – 15 inches is maintained.							
	Res	ults		•			
Overall condition of Infiltration Practice:							
Ad	ditional	Comments					

**Notes:** \*If a specific maintenance item was not checked, please check N/A and explain why in the appropriate comment box.

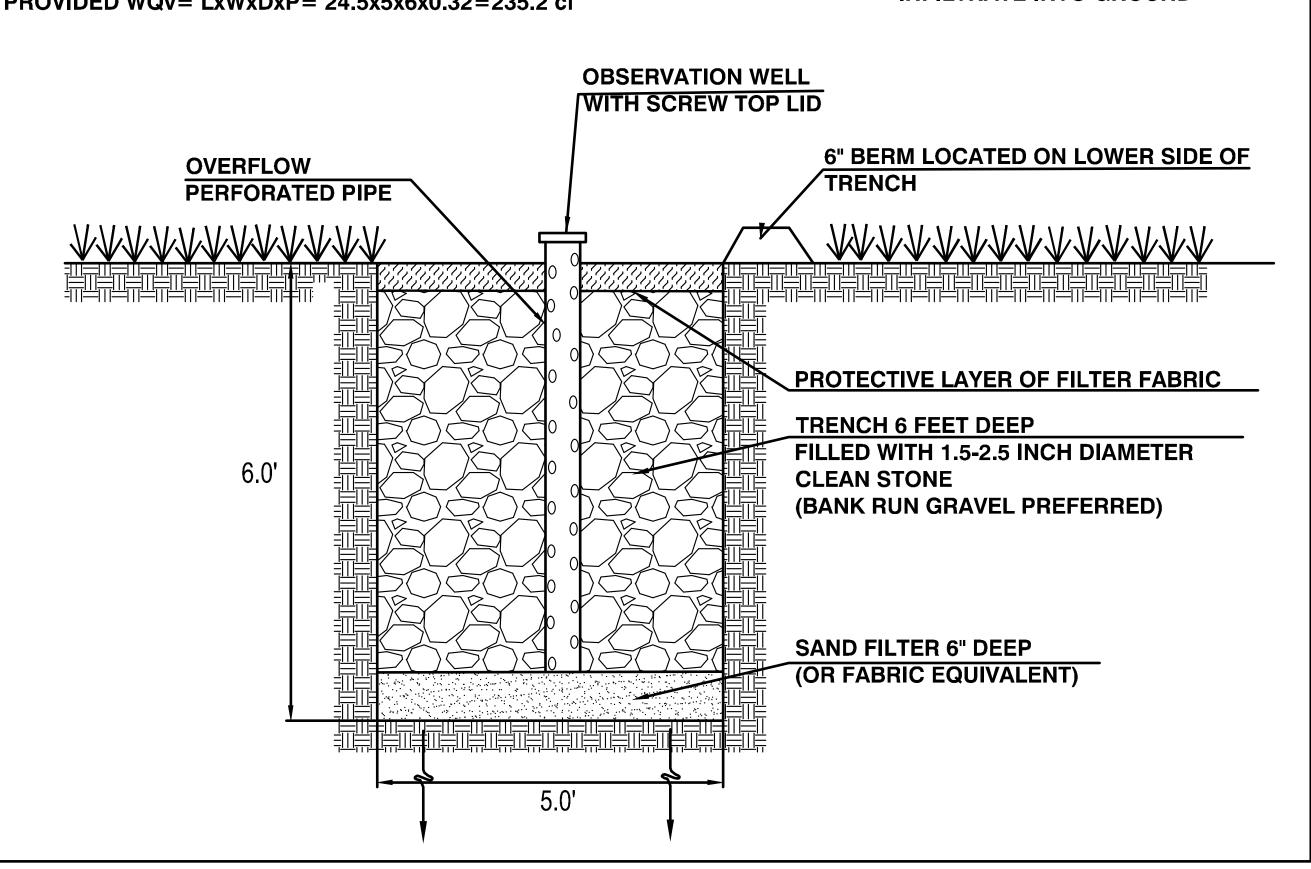
## INFILTRATION TRENCH DETAIL - PLAN VIEW

LOT AREA (SQ FT)=8,820 IMPERVIOUS AREA (SQ FT)=2,084 Rv=0.05+0.009 (I%)=0.05+0.009(24)=0.263 REQUIRED WQv= (1.2\*RV\*A)/12= (1.2\*0.263\*8,820)/12=231.66 cf LENGTH OF TRENCH REQUIRED= REQ. WQv/(WxDxP)= 231.66/(5x6x0.32)=24.1 PROVIDED WQv= LxWxDxP= 24.5x5x6x0.32=235.2 cf

**WATER QUALITY CALCULATIONS:** 

DRIVEWAY AND REAR DECK TO BE DIRECTED TRENCH USING SWALES. BERM SHALL BE INSTALLED ALONG REAR OF TRENCH TO ALLOW UNPIPED IMPERVIOUS RUNOFF TO INFILTRATE INTO GROUND

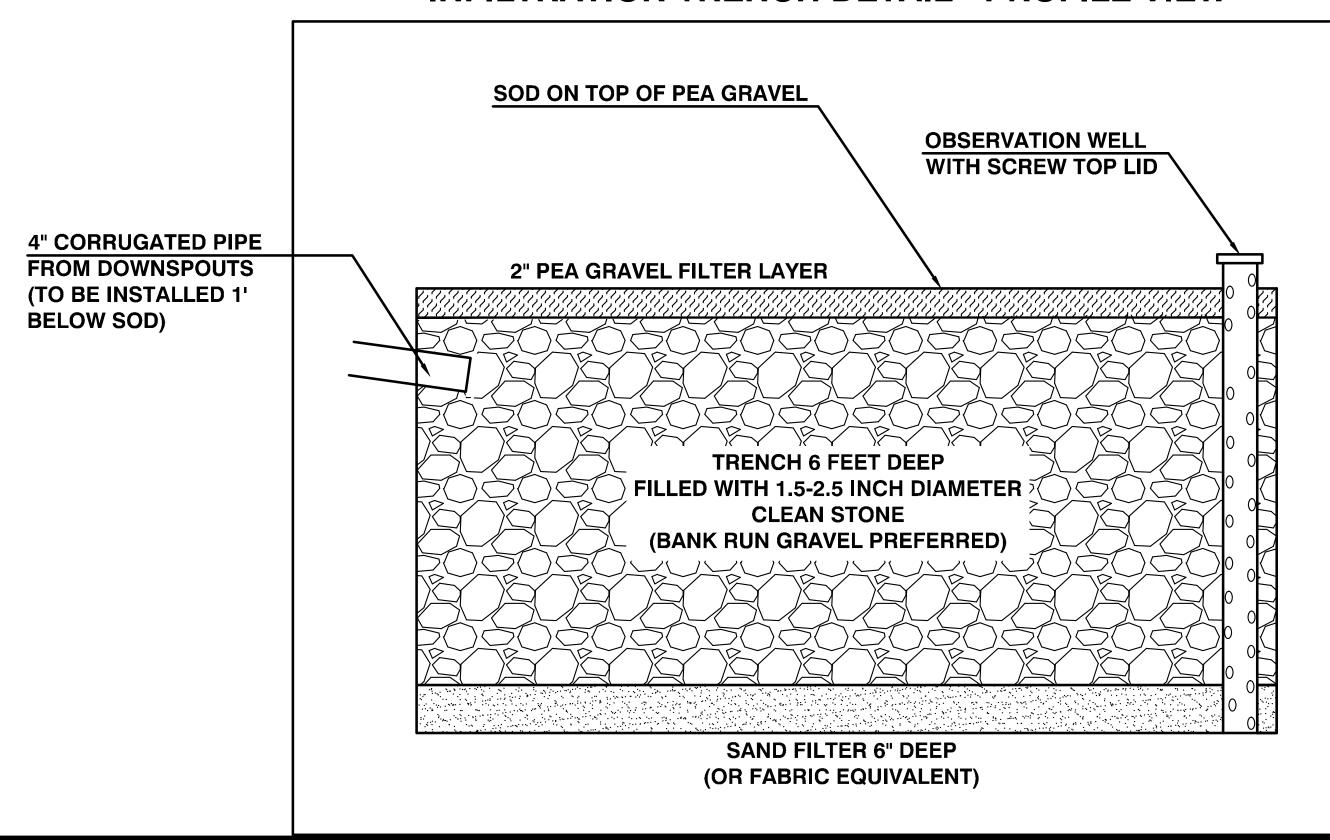
HOUSE AND FRONT PORCH TO BE PIPED TO INFILTRATION TRENCH.



EXISTING SOILS APPEAR TO HAVE AN INFILTRATION RATE BETWEEN 0.5 AND 1.0 INCHES PER HOUR, AND WILL BE UTILIZED WHENEVER POSSIBLE. AS DIRECTED BY THE ENGINEER OF RECORD, SOILS WILL BE REPLACED OR MODIFIED TO PRODUCE AN INFILTRATION RATE OF AT LEAST 0.5 INCHES PER HOUR.

ALL STONE AND SOIL LAYERS SHOULD BE PLACED IN LOOSE LIFTS, AND LIGHTLY ATER. DO NOT COMPACT (TYP).

# **INFILTRATION TRENCH DETAIL - PROFILE VIEW**



# INFILTRATION TRENCH MAINTENANCE SCHEDULE

MAINTENANCE SHALL BE PERFORMED IN GENERAL ACCORDANCE WITH THE GSMM GUIDELINES AS SHOWN ON THIS BELOW

# Table 3.2.4-2 Typical Maintenance Activities for Infiltration Trenches (Source: EPA, 1999)

	Activity	Schedule
•	Ensure that contributing area, facility and inlets are clear of debris.  Ensure that the contributing area is stabilized.  Remove sediment and oil/grease from pretreatment devices, as well as overflow structures.  Mow grass filter strips should be mowed as necessary. Remove grass clippings.	Monthly
•	Check observation wells following 3 days of dry weather. Failure to percolate within this time period indicates clogging. Inspect pretreatment devices and diversion structures for sediment build-up and structural damage. Remove trees that start to grow in the vicinity of the trench.	Semi-annual Inspection
•	Replace pea gravel/topsoil and top surface filter fabric (when clogged).	As needed
•	Perform total rehabilitation of the trench to maintain design storage capacity.  Excavate trench walls to expose clean soil.	Upon Failure

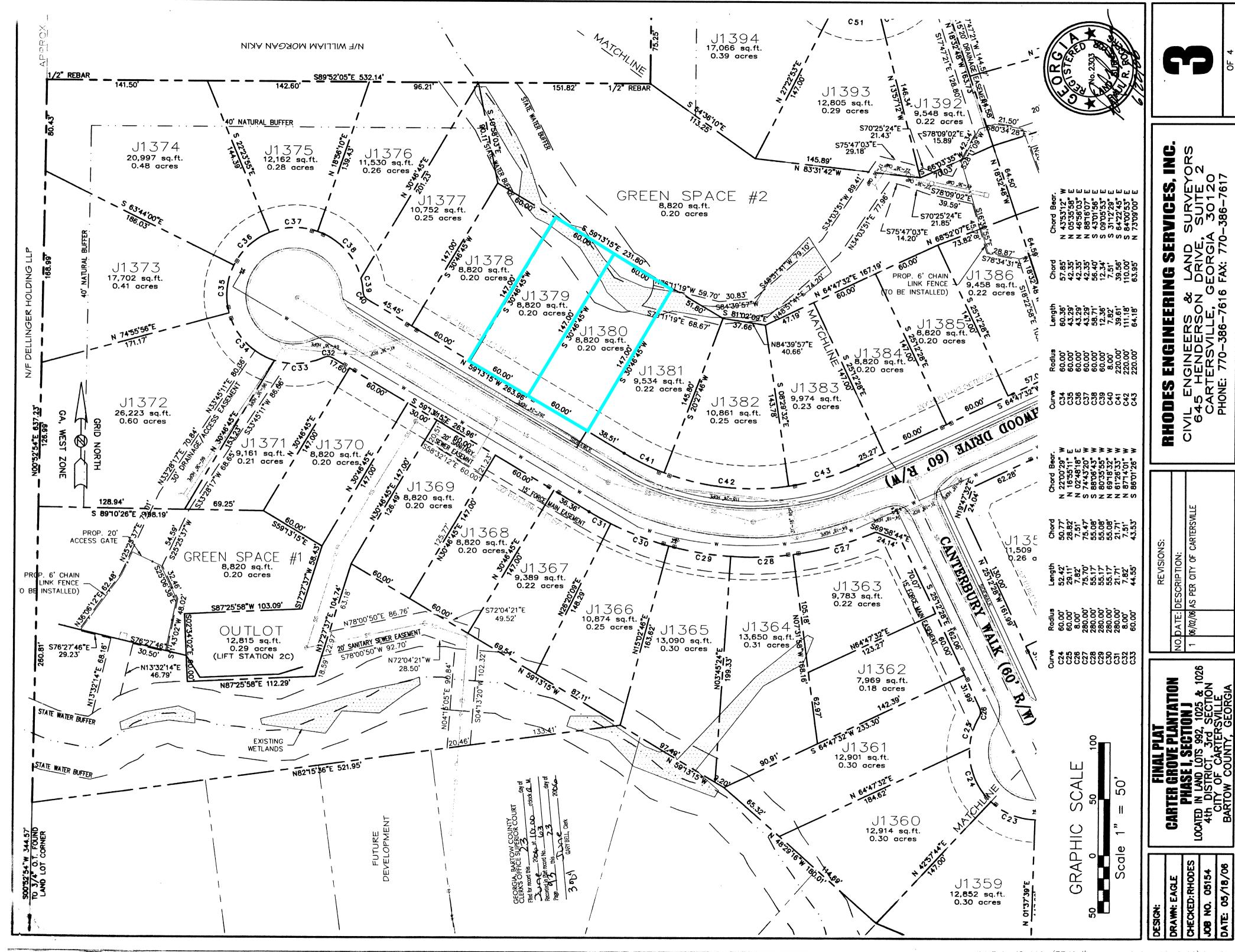
# Additional Maintenance Considerations and Requirements

- A record should be kept of the dewatering time of an infiltration trench to determine if maintenance is necessary.
- Removed sediment and media may usually be disposed of in a landfill.

Regular inspection and maintenance is critical to the effective operation of infiltration trench facilities as designed. Maintenance responsibility for a infiltration trench should be vested with a responsible authority by means of a legally binding and enforceable maintenance agreement that is executed as a condition of plan approval.

The following is required per the Stormwater Maintenance Agreement;

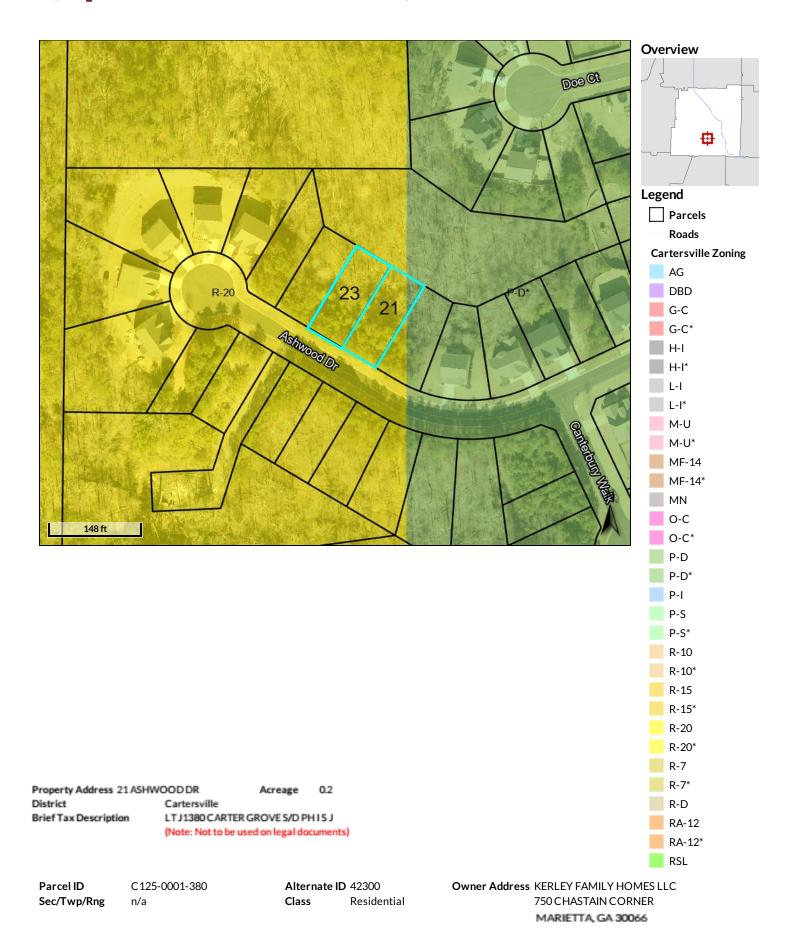
- The homeowner must hire qualified personnel to conduct a yearly inspection and correct any deficiencies.
- The City is required to conduct an inspection every 5 years, as mandated by GA EPD.



0 SURVEY SUITE > 3012C EORE EORE EVENT

F 1026 TION F GIA

### **QPublic.net** Bartow County, GA



# **QPublic.net** Bartow County, GA



Alternate ID 42300

Residential

Owner Address KERLEY FAMILY HOMES LLC

750 CHASTAIN CORNER

MARIETTA, GA 30066

Overview

Legend Parcels Roads

₩

Parcel ID C125-0001-380 Sec/Twp/Rng Property Address 21 ASHWOOD DR

District Cartersville

**Brief Tax Description** LT J1380 CARTER GROVE S/D PH I S J

(Note: Not to be used on legal documents)

Class

Acreage

Date created: 12/2/2022 Last Data Uploaded: 12/1/2022 10:34:58 PM



### City of Cartersville Application for Variance

**Board of Zoning Appeals** 

Hearing Date: 1-12-23 5:30pm	n Application Number: <u>V22-23 REVISED</u>
	Date Received: 1-9-23
Applicant Shelby Thompson (printed name)	Office Phone 770-792-5500 ext 117
Address 3957 South Main St	Mobile/ Other Phone 770-864-6600
City Acworth State GA	Zip 30101 Email sthompson@kerleyfamilyhomes.com
Representative's printed name (if other than applicant)	Phone (Rep)
The property of the state of th	Email (Rep)
Representative Signature	Applicant Signature
Signed, sealed and delivered in presence of:	My commission expires: 6-2-20250 JUNE
Lyan Bolin	2025
Notafy Public	10088 COUNT
	ARY PULL
* Titleholder Kerley Family Homes (titleholder's printed name)	Phone 770-792-5500
Address 3957 South Main St Acworth GA 30101	sthompson@kerleyfamilyhomes.com
Signature Mary & Ken	WILLIAM BOUNT
Signed, sealed, delivered in presence of:	My commission expires: 6-2-2023
Lyan Bolin	JUNE ES
Notally Public	<b>2</b> 02 2025 3
	1 ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °
Present Zoning District	O A DV DUBY
Acreage J1350 - 0.20 AC Land Lot(s) 992,1025 &1026	5 District(s) 4th Section(s) 3rd
	ville GA 30120 and J1380 - 21 Ashwood Drive Cartersville GA 30120
(street address, nearest inters Zoning Section(s) for which a variance is being requested	
Summary Description of Variance Request: Encroachment in	nto city's undisturbed creek buffer as well as construction in the 25' impervious buffer
J1379 - Right corner of the home is 8' over the huffer but	with the addition of the covered deck it is a total of 13' over the buffer. with the addition of the covered deck it is a total of 20' over the buffer.
(Additional detail	I can be provided on Justification Letter)

<sup>\*</sup> Attach additional notarized signatures as needed on separate application pages.

#### **CONDITIONS VERIFICATION**

List the Article(s), Section(s) and Subsection(s) of the Zoning Ordinance for which a variance is

requested.								
Article7.	5-205	Section_	(a)	Subsection	(2)			
Article 7.5	5-205	Section_	(a)	Subsection	(1)			
Article		Section_		Subsection	<u> </u>			
any order, requ the zoning ordi	uirement, decision inance. The Boar	on, or deter d has the p	mination made by tho ower to hear request	e zoning admini s for variances f	e it is alleged there is e strator in the enforcen from the provisions of tion pertaining to cond	nent of the		
			peals in the analysis o your variance reque		pplication, please ched	ck all of		
1	1 The property is exceptionally narrow, shallow or unusually shaped,							
2X	The property contains exceptional topographic conditions,							
3	The property contains other extraordinary or exceptional conditions; and							
4	4 There are other existing extraordinary or exceptional circumstances; and							
5X	The strict application of the requirements of this ordinance would result in practical difficulties to, or undue hardship upon, the owner of this property;							
6 The requested variance relief may be granted without substantially impairing the intent and purpose of this ordinance								
Additional Comments by Applicant:								
The combination of the buffers and the set back requirements limit the location the proposed								
houses are able to sit on the lots; with the current setbacks/buffers the homes would need to be approximately								
20' in depth. A mitigation plan has been provided but an alternative plan is not possible and a variance is being requested.								
At this time both lots are spec homes however the footprint of the lot is not lickely to change when a contract is in place.								
** Storm water advised to wait to submit the ESPC plan until variance was approved								

# LIST OF ADJACENT PROPERTY OWNERS (Not required if City mails public notices)

The following are all of the individuals, firms, or corporations owning property on the sides, rear, and in front of (across street from) the subject property:

	NAME		ADDRESS	
1.	Kerley Family Homes	J1378	25 Ashwood Drive	
2.	Kerley Family Homes	J1369	22 Ashwood Drive	
3.	Kerley Family Homes	J1368	20 Ashwood Drive	
4.	2 <del></del>			
5.				
6.				
7.	3			
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

Attach additional names if necessary.

(Indicate property owned by the above persons on plat accompanying this application.)





To Whom It May Concern,

Kerley Family Homes has purchased the below lots in the Carter Grove Plantation Subdivision.

J1379 - 23 Ashwood Drive Cartersville GA 30120 and J1380 - 21 Ashwood Drive Cartersville GA 30120

We are requesting a variance to build on these two lots as the proposed homes will encroach on the additional impervious buffer as well as the limits of disturbance that is in effect due to a state water running through these lots.

For lot J1379 – The back right corner of the proposed home and the deck encroach a total of 13.1' on the 25' impervious buffer. The limits of disturbance encroach on the 25' city buffer.

For lot J1380 – The back of the proposed home and the deck encroach a total of 18.2' on the 25' impervious buffer. The limits of disturbance encroach on the 25' city buffer.

Thank you in advance for your consideration.

Shelby Thompson Permitting Coordinator

3957 South Main Street Acworth GA, 30101 Office: 770-792-5500 Ext.117

Fax: 770-792-5503

www.kerleyfamilyhomes.com

### **GENERAL NOTES**

OWNER/BUILDER:

KERLEY FAMILY HOMES 3957 SOUTH MAIN STREET ACWORTH, GEORGIA 30101

24 HOUR EMERGENCY CONTACT:

DAVE MERRILL 770-367-0411

**ENGINEER/SURVEYOR:** 

FALCON DESIGN CONSULTANTS, LLC 235 CORPORATE CENTER DRIVE STOCKBRIDGE, GA 30281 PH. 770-389-8666 FAX 770-389-8656

THE PURPOSE OF THIS PLAN IS TO SHOW THE MEASURES THAT NEED TO BE INSTALLED IN ORDER TO MITIGATE THE DISTURBANCE CAUSED BY HOME CONSTRUCTION. THE PROPOSED INFILTRATION TRENCH SHOWN WILL ALLOW EXCESS RUNOFF FROM IMPERVIOUS AREA TO BE PIPED INTO THE TRENCH AND INFILTRATED INTO THE GROUND TO PREVENT AN EXCESS EROSION FROM OCCURRING AFTER THE HOUSE IS COMPLETED.

5. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS BEFORE BEGINNING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE PROJECT ENGINEER FOR JUSTIFICATION AND/OR CORRECTION BEFORE PROCEEDING WITH THE WORK. CONTRACTOR TO ASSUME RESPONSIBILITY FOR DISCREPANCIES WHICH ARE NOT REPORTED. ALL DIMENSIONS SHOULD BE CALCULATED OR READ.

6. THE CONTRACTOR SHALL COORDINATE ANY AND ALL UTILITY RELOCATION WITH THE APPROPRIATE UTILITY COMPANY PRIOR TO THE START OF ANY UTILITY WORK.

7. BOUNDARY AND OTHER PERTINENT INFORMATION WAS TAKEN FROM: FINAL PLAT FOR CARTERS GROVE PLANTATION, RECORDED IN PLAT BOOK 63, PAGE 98 OF BARTOW COUNTY RECORDS.

FALCON DESIGN CONSULTANTS.

9. ACCORDING TO THE F.I.R.M. OF BARTOW COUNTY, PANEL NUMBER 13015C0355G, DATED 10/05/2018, THIS LOT IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA.

10. A COPY OF THESE PLANS ARE TO BE KEPT ON SITE DURING THE DURATION OF THE PROJECT.

THE OWNERS CONTRACTOR WILL BE RESPONSIBLE FOR INVESTIGATION/INSPECTION/REHABILITATION AND LOCATION OF ALL WATER SERVICE(S) INCLUDING METER BOX(S) & SEWER STUB OUT PRIOR TO THE PREPARATION OF THIS LOT(S). OWNER WILL BE RESPONSIBLE FOR ANY DAMAGES TO ANY WATER SERVICE(S).BOX(S) OR SEWER STUB OUT AT ANY TIME.

"THE OPERATION AND MAINTENANCE OF THE STORM WATER 8. TOPOGRAPHIC INFORMATION SHOWN HEREON IS FIELD RAN TOPO RAN BY MANAGEMENT FACILITIES AND ASSOCIATED CONVEYANCE STRUCTURES/PRACTICES(i.e., detentention ponds, pipes not within public right of way, inlets, outlets, riprap, ext) WILL BE SOLE RESPONSIBILTY OF THE PROPERTY OWNER. THESE FACILITIES AND STRUCTURES SHALL BE KEPT CLEAR OF TRASH, DEBRIS, OR ANY OBSTRUCTIONS THAT WOULD PREVENT PROPER FUNCTION OF THE DRAINAGE SYSTEM".



NOTE: LOTS J1379 AND J1380 SHALL HAVE A RECORDED 15' ACCESS EASEMENT TO ALLOW FOR **INSTALLATION AND FUTURE MAINTENANCE OF** INFILTRATION TRENCHES ONCE HOUSES ARE CONSTRUCTED. SAID EASEMENT SHALL BE CLEAR OF ANY IMPERVIOUS SURFACES, FENCES, WALLS OR ANY SIMILAR OBJECTS THAT WILL AFFECT ACCESS TO THE INFILTRATION TRENCHES.

25' IMPERVIOUS

BUFFER DISTURBANCE

(178 SQ FT IMPERVIOUS

AREA INSIDE OF

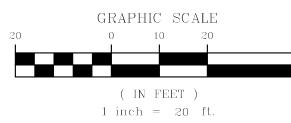
8,820 SQ.FT. **MAGNOLIA-AA BSMNT** 

F.F.E.858.0

**DISTURBANCE** 

**LOT J1379** C125-0001-379 **#23 ASHWOOD DRIVE IMPERVIOUS AREA: LOT J1379: 2,084 SQ FT** 

TAX ID:



25' ADDITIONAL

DISTURBANCE 182 SQ FT

DISTURBANCE

**ESMNT** 

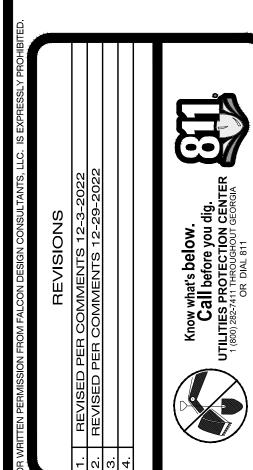
INFILTRATION TRENCH

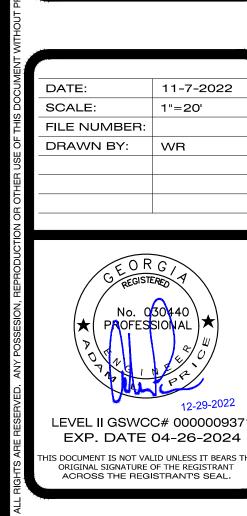
LANDSCAPE

MANAGEMENT

FALCON DESIGN

CONSULTANTS





**INFILTRATION TRENCH DETAIL - PLAN VIEW** HOUSE AND FRONT PORCH TO BE PIPED TO INFILTRATION TRENCH. WATER QUALITY CALCULATIONS LOT AREA (SQ FT)=8,820 DRIVEWAY AND REAR DECK TO BE MPERVIOUS AREA (SQ FT)=2.084 DIRECTED TRENCH USING SWALES BERM SHALL BE INSTALLED ALONG REAR OF TRENCH TO ALLOW Rv = 0.05 + 0.009 (1%) = 0.05 + 0.009(24) = 0.263REQUIRED WQv= (1.2\*RV\*A)/12= (1.2\*0.263\*8,820)/12=231.66 cf LENGTH OF TRENCH REQUIRED = REQ. WQv/(WxDxP) = 231.66/(5x6x0.32) = 24. ROVIDED WQv= LxWxDxP= 24.5x5x6x0.32=235.2 cf 6" BERM LOCATED ON LOWER SIDE OF PROTECTIVE LAYER OF FILTER FABRIC TRENCH 6 FEET DEEP
FILLED WITH 1.5-2.5 INCH DIAMETER (BANK RUN GRAVEL PREFERRED SAND FILTER 6" DEEP (OR FABRIC EQUIVALENT)

> EXISTING SOILS APPEAR TO HAVE AN INFILTRATION RATE BETWEEN 0.5 AND 1.0 INCHES PER HOUR, AND WILL BE UTILIZED WHENEVER POSSIBLE. AS DIRECTED BY THE ENGINEER OF RECORD, SOILS WILL BE REPLACED OR MODIFIED TO PRODUCE AN INFILTRATION RATE OF AT LEAST 0.5 INCHES PER HOUR

ALL STONE AND SOIL LAYERS SHOULD BE PLACED IN LOOSE LIFTS, AND LIGHTLY CONSOLIDATED BY SOAKING WITH WATER. DO NOT COMPACT (TYP).

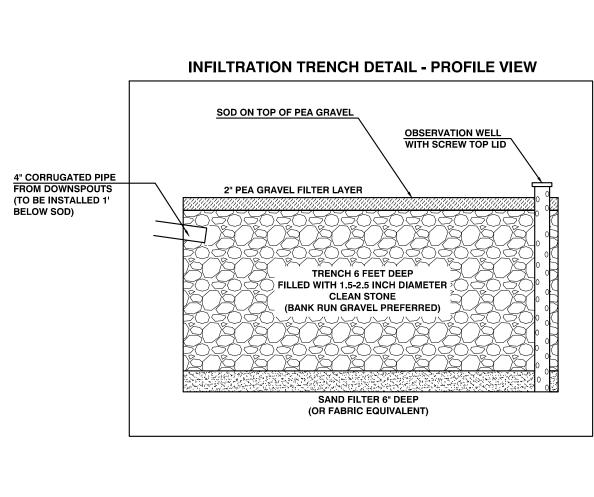
### INFILTRATION TRENCH MAINTENANCE SCHEDULE MAINTENANCE SHALL BE PERFORMED IN GENERAL ACCORDANCE WITH THE GSMM **GUIDELINES AS SHOWN ON THIS BELOW**

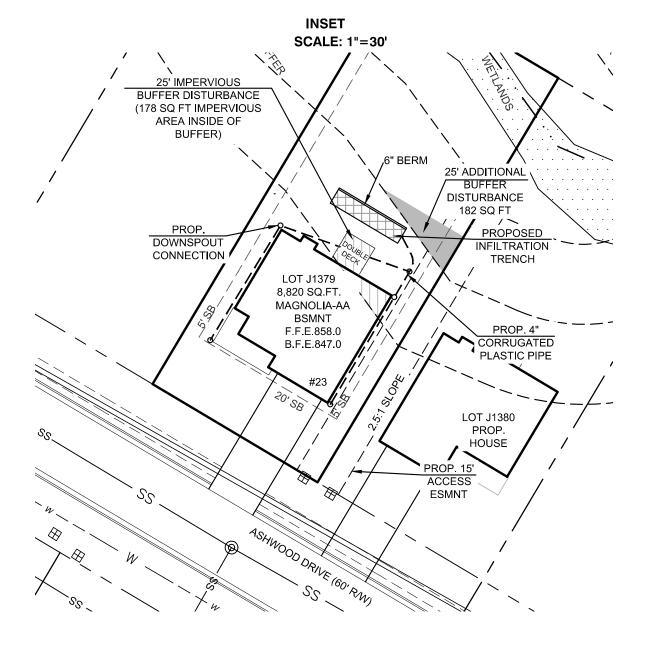
	Activity	Schedule
•	Ensure that contributing area, facility and inlets are clear of debris. Ensure that the contributing area is stabilized. Remove sediment and oil/grease from pretreatment devices, as well as overflow structures. Mow grass filter strips should be mowed as necessary. Remove grass clippings.	Monthly
	Check observation wells following 3 days of dry weather. Failure to percolate within this time period indicates clogging.  Inspect pretreatment devices and diversion structures for sediment build-up and structural damage.  Remove trees that start to grow in the vicinity of the trench.	Semi-annual Inspection
	Replace pea gravel/topsoil and top surface filter fabric (when clogged).	As needed
	Perform total rehabilitation of the trench to maintain design storage capacity.  Excavate trench walls to expose clean soil.	Upon Failure

A record should be kept of the dewatering time of an infiltration trench to determine if

Removed sediment and media may usually be disposed of in a landfill.

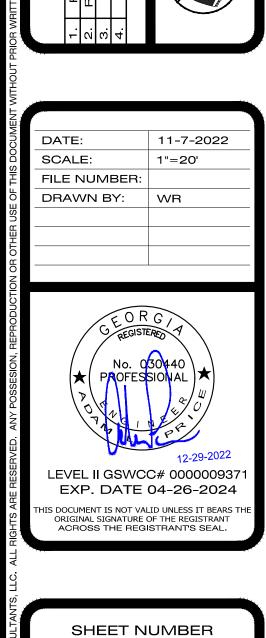
Regular inspection and maintenance is critical to the effective operation of infiltration trench facilities as designed. Maintenance responsibility for a infiltration trench should be vested with a responsible authority by means of a legally binding and enforceable maintenance agreement that is executed as a condition of plan approval.



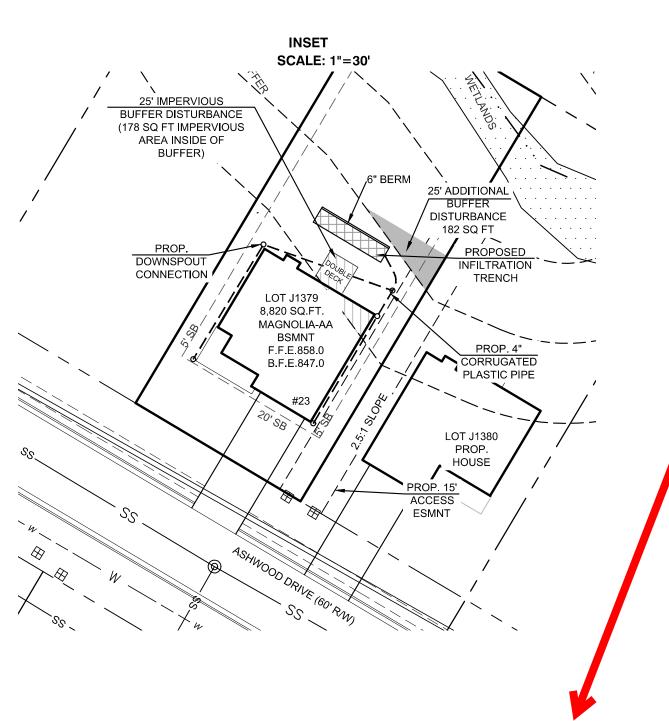


	Summary by Map Unit	— Bartow County, Georgia (GA015)		
Summary by Map Unit	— Bartow County, Georgia (GA015)			@
Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
FtE	Fruithurst-Tallapoosa complex, 15 to 25 percent slopes	6.1029 (0.865 ln/Hr)	1.0	61.6%
TaF	Tallapoosa-Fruithurst complex, 25 to 60 percent slopes	3.7577 (0.533 ln/Hr)	0.6	38.4%
Totals for Area of In	terest	<u>''</u>	1.6	100.0%

\*\*DATA SHOWN ABOVE BASED ON WEB SOILS SURVEY BY USDA



RESPONSIBILTY OF THE PROPERTY OWNER. THESE FACILITIES AND STRUCTURES SHALL BE KEPT CLEAR OF TRASH, DEBRIS, OR ANY OBSTRUCTIONS THAT WOULD PREVENT PROPER FUNCTION OF THE DRAINAGE SYSTEM"...



NOTE: LOTS J1379 AND J1380 SHALL HAVE A RECORDED 15' ACCESS EASEMENT TO ALLOW FOR INSTALLATION AND FUTURE MAINTENANCE OF INFILTRATION TRENCHES ONCE HOUSES ARE CONSTRUCTED. SAID EASEMENT SHALL BE CLEAR OF ANY IMPERVIOUS SURFACES, FENCES, WALLS OR ANY SIMILAR OBJECTS THAT WILL AFFECT ACCESS TO THE INFILTRATION TRENCHES.

A SHOWN ABOVE BASED ON WEB SOILS SURVEY BY USDA

**TAX ID: LOT J1379** C125-0001-379 GRAPHIC SCALE #23 ASHWOOD DRIVE CONSTRUCTED. SAID EASEMENT SHALL BE CLEAR OF ANY IMPERVIOUS SURFACES, FENCES, WALLS OR ANY **IMPERVIOUS AREA:** LOT J1379: 2,084 SQ FT ( IN FEET ) 25' IMPERVIOUS **BUFFER DISTURBANCE** (178 SQ FT IMPERVIOUS AREA INSIDE OF ,6" BERM > 25' ADDITIONAL BUFFER **DISTURBANCE** 182 SQ FT LIMITS OF **PROPOSED** DISTURBANCE **INFILTRATION** LOT J1379 8,820 SQ.FT. MAGNOLIA-AA **BSMNT** F.F.E.858.0 B.F.E.847.0 -842-LIMITS OF DISTURBANCE PROP. HOUSE PROP. 15' **ACCESS ESMNT** ASHWOOD DRIVE (60' RW)

LOT J1379

ARTER GROVE PLANTATIC

PHASE I, SECTION J

BARTOW COUNTY, GEORGIA

Bamford and Company

REVISION FROM FALCON DESIGN CONSULTANTS, LLC. IS EXPRESSLY PROHIBITED

REVISED PER COMMENTS 12-3-2022
3.

Know what's below.

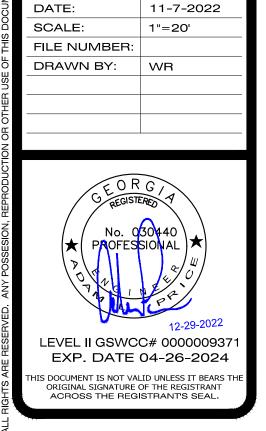
Call before you dig.

Call before you dig.

Call before you dig.

UTILITIES PROTECTION CENTER

1 (800) 282-7411 THROUGHOUT GEORGIA
OR DIAL 811



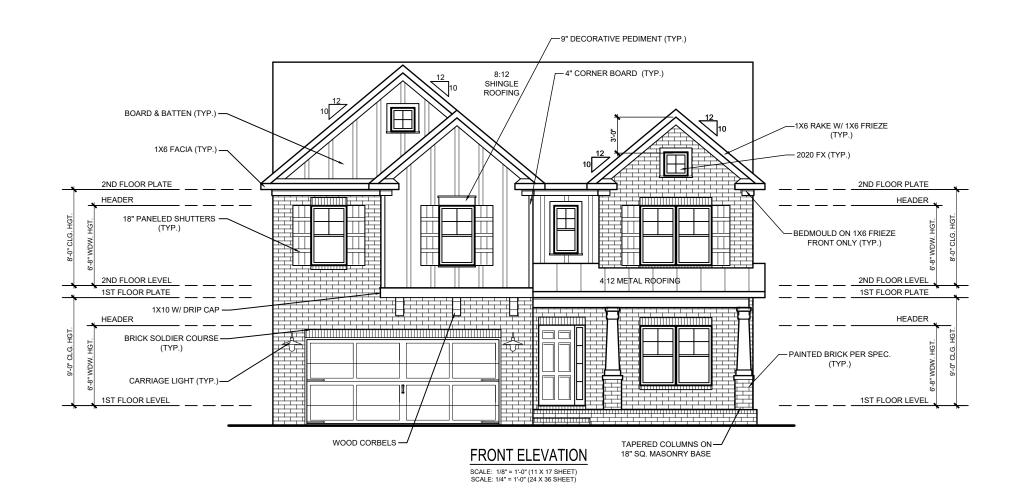
SHEET NUMBER

1 OF 1

CG Lot J-1380

PLAN	REVISIONS
DATE	DESCRIPTION
03/16/2022	Site Specific
03/17/2022	Removed cof. clg.
03/29/2022	Added masonry
06/24/2022	Added subbasemen
07/21/2022	Added brick
08/02/2022	Revised brick

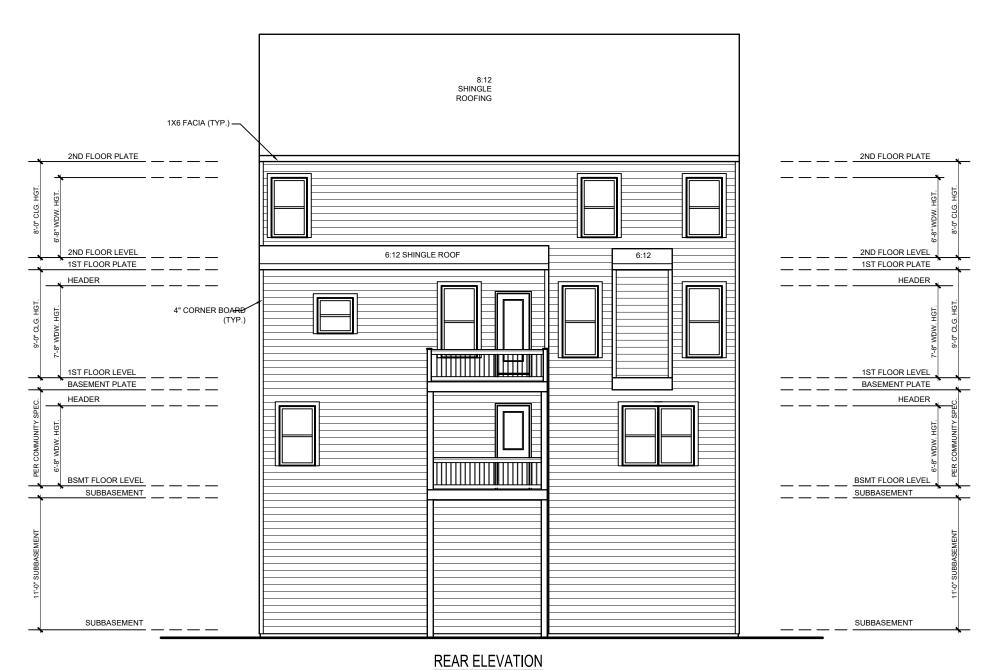
sheet# A-1



REAR ELEVATION

CG Lot J-1380

PLAN	REVISIONS
DATE	DESCRIPTION
03/16/2022	Site Specific
03/17/2022	Removed cof. clg.
03/29/2022	Added masonry
06/24/2022	Added subbasemen
07/21/2022	Added brick
08/02/2022	Revised brick
•	

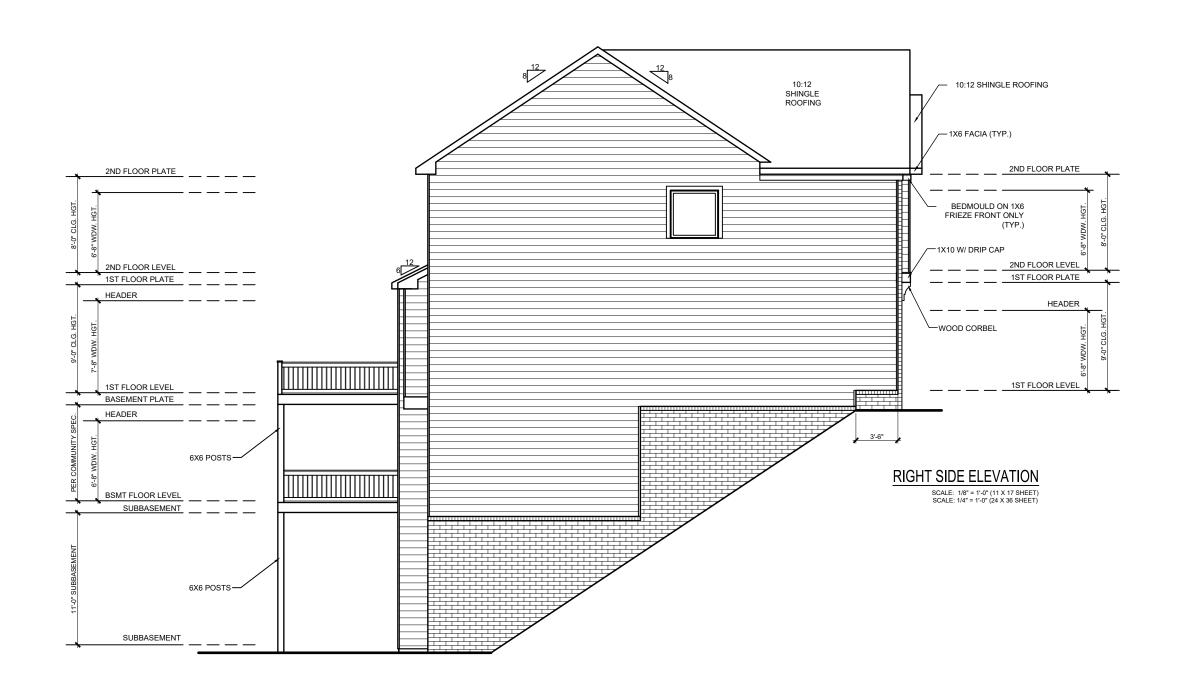


SCALE: 1/8" = 1'-0" (11 X 17 SHEET) SCALE: 1/4" = 1'-0" (24 X 36 SHEET)

LEFT SIDE ELEVATION

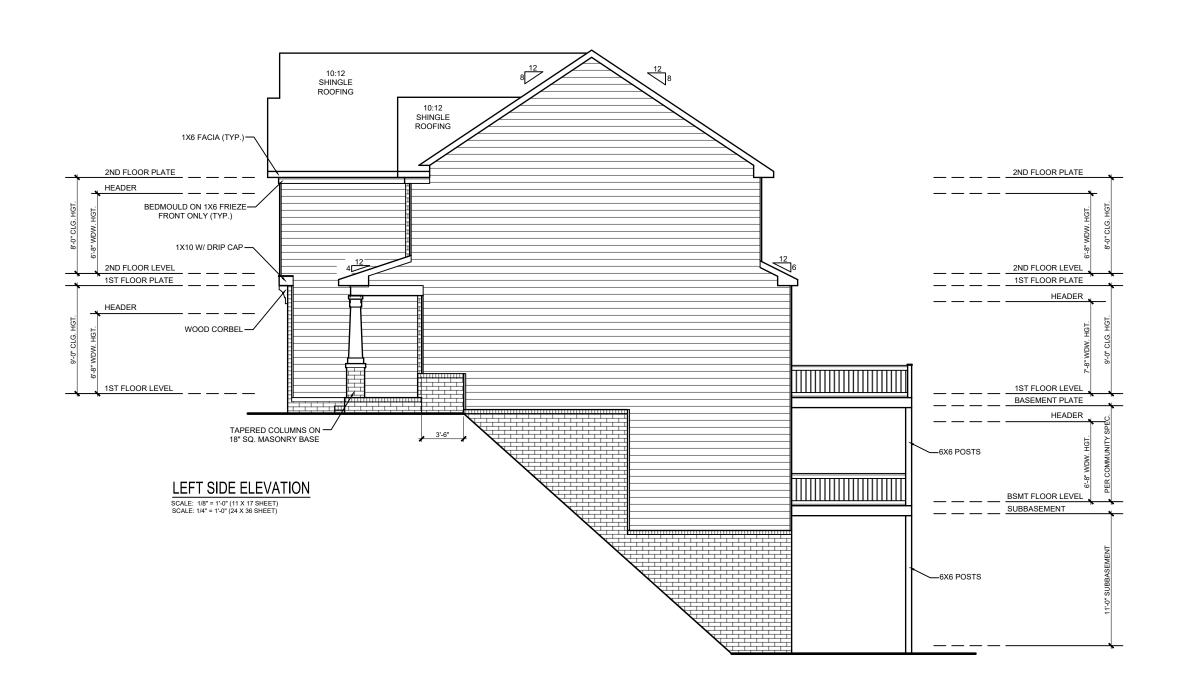
CG Lot J-1380

PLAN	REVISIONS
DATE	DESCRIPTION
03/16/2022	Site Specific
03/17/2022	Removed cof. clg.
03/29/2022	Added masonry
06/24/2022	Added subbaseme
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08/02/2022	Revised brick

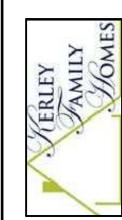


RIGHT SIDE ELEVATION

sheet#







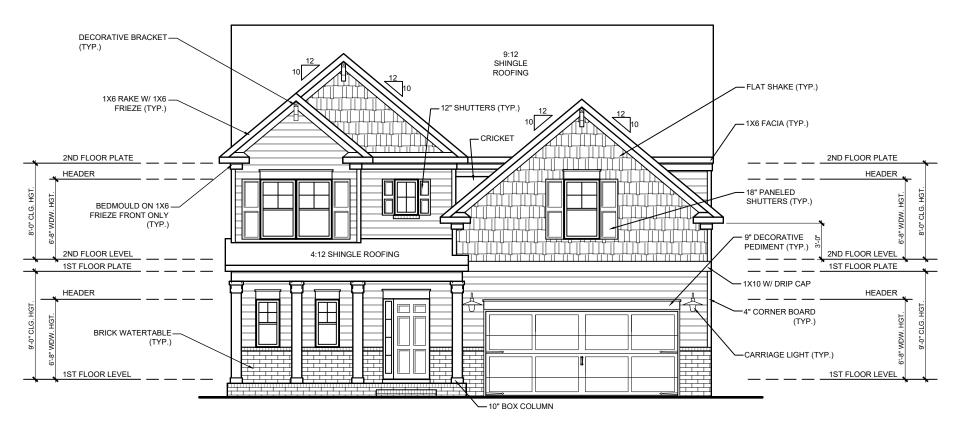
The Magnolia

ELEVATION

**CG Lot J-1379** 

PLAN REVISIONS	
DATE	DESCRIPTION
03/16/2022	Site Specific
03/17/2022	Removed cof. clg.
03/30/2022	Added masonry
06/24/2022	Added subbasement
07/21/2022	Added brick
08/02/2022	Revised brick
08/16/2022	Revised ped. sink
	•

sheet# A-1



### FRONT ELEVATION

SCALE: 1/8" = 1'-0" (11 X 17 SHEET) SCALE: 1/4" = 1'-0" (24 X 36 SHEET)



REAR ELEVATION

SCALE: 1/8" = 1'-0" (11 X 17 SHEET) SCALE: 1/4" = 1'-0" (24 X 36 SHEET)

NOTE: ALL IDEAS, ARRANGEMENTS AND PLANS INDICATED ARE OWNED BY, AND THE PROPERTY OF KERLEY FAMILY HOMES. THEY ARE PROTECTED BY THE CURRENT ARCHITECTURAL WORKS COPYRIGHT PROTECTION ACT, AND OTHER APPLICABLE LAWS. THESE DRAWINGS WERE CREATED AND DEVELOPED FOR USE ON AND IN CONNECTION WITH THE SPECIFIED PROJECT, NONE OF SUCH IDEAS, DESIGN ARRANGEMENTS, OR PLANS SHALL BE USED OR DISCLOSED TO ANY PERSON, FIRM OR CORPORATION, FOR ANY PURPOSE WHATSOEVER, WITHOUT THE WRITTEN PERMISSION OF KERLEY FAMILY HOMES. THESE DRAWING ARE NOT VALID FOR CONSTRUCTION PURPOSES UNLESS EXPRESSLY CERTIFIED BY KERLEY FAMILY HOMES FOR CONSTRUCTION ONLY.

# 23 Ashwood Dr

The Magnolia

ELEVATION

REAR

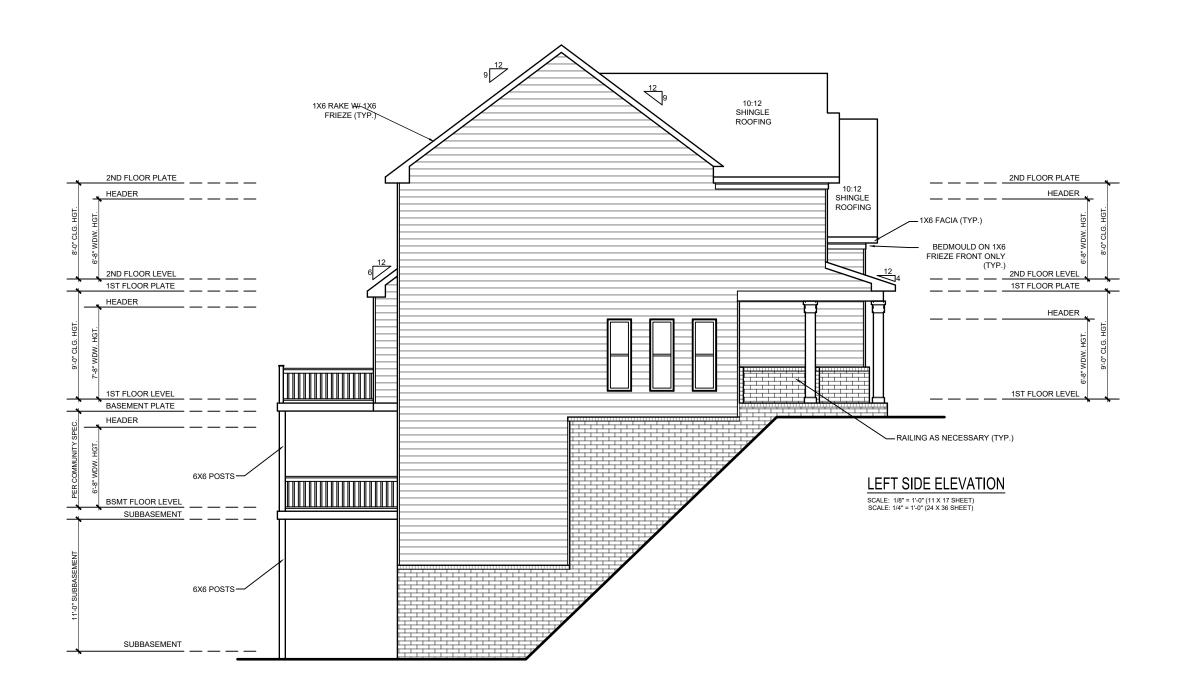
**CG Lot J-1379** 



PLAN REVISIONS	
DATE	DESCRIPTION
03/16/2022	Site Specific
03/17/2022	Removed cof. clg.
03/30/2022	Added masonry
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07/21/2022	Added brick
08/02/2022	Revised brick
08/16/2022	Revised ped. sink
	•

PLAN REVISIONS		
DATE	DESCRIPTION	
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06/24/2022	Added subbaseme	
07/21/2022	Added brick	
08/02/2022	Revised brick	
08/16/2022	Revised ped. sink	
	•	

sheet#
A-1b

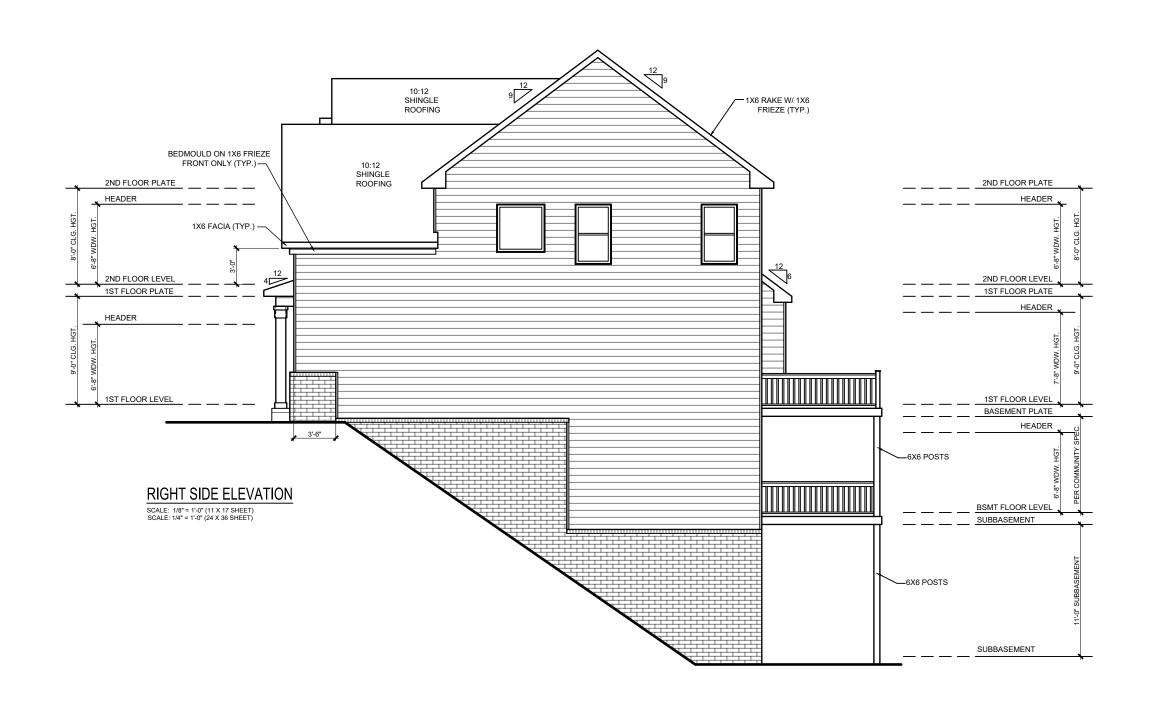


**CG Lot J-1379** 

RIGHT SIDE ELEVATION

PLAN	REVISIONS
DATE	DESCRIPTION
03/16/2022	Site Specific
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03/30/2022	Added masonry
06/24/2022	Added subbaseme
07/21/2022	Added brick
08/02/2022	Revised brick
08/16/2022	Revised ped. sink

sheet#



### IMAGES TAKEN 11-18-22



### Property is heavily wooded. No development has occurred.

