GRAYWOOD FARMS NORTH SUBDIVISION OLD CHARLESTON RD CLEVELAND, TN 37312

STORMWATER POLLUTION PREVENTION PLAN

Prepared for Riverstone Construction, LLC. 9018 Ooltewah Georgetown Rd, Suite 126 Chattanooga, TN 37363

Prepared by

Berry Engineers, LLC 63 Broad St Cleveland, TN 37311 Tel: 423-790-5880



Benjamin M. Berry, P.E.

Table of Contents

General Information	3
Project Description	4
303(d) Special Requirements	5
Spills and Non-Storm Water Contingencies	5
Phasing of Construction	6
Sequencing of Construction	6
Notice of Intent	Appendix A
Notice of Termination	Appendix B
Inspection Report	Appendix C
Stabilization Plan	Appendix D
Site Location Map	

General Information

This Storm Water Pollution Prevention Plan (SWPPP) is developed in accordance with Tennessee General NPDES Permit (TNR 100000) for Storm Water Discharges Associated with Construction Activity (TNCGP) and is prepared using sound engineering practices.

As instructed by Part III.F of the TNCGP, this plan and all attachments are hereby submitted to the City of Cleveland Stormwater Division, along with the complete, correctly signed Notice of Intent (NOI). Construction will not be initiated prior to 30 days from the date of submittal of this document, or prior to receipt of a Notice of Coverage (NOC) from the City of Cleveland Stormwater Division.

Owner/Developer: Riverstone Construction, LLC. Phone: 423-595-6673 Email: jasonfarmertn@gmail.com

Representative of owner/devel type Jason Farmer - Owner	oper and title; print or Signature (must be signed by president, V.F. or equivalent or ranking elected official) Date 6/15/20
General Contractor:	Company: Russian & Construction
	Contact Person: Adapare Smith
	Phone: 472-627-5047
	Email: adriane @ riverstone - homes, com
I certify under penalty of law th owner/developer identified abo Plan, I believe the information s subject to NPDES permit numbo penalties for submitting false in with these permit requirements	Email: adrianc @ niverstone - homes, com at I have reviewed this document and any attachments. Based on my inquiry of the construction site ove, and/or my inquiry of the person directly responsible for assembling this Storm Water Pollution Prevention submitted is accurate. I am aware that this Plan, if approved, makes the above-described construction activity er TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant iformation, including then possibility of fine and imprisonment for knowing violations, and for failure to comply s.

telephone number is $\frac{423}{598}$ $\frac{598}{2383}$. This responsibility may be assigned to another TDEC Level 1 certified individual as the project progresses.

Current versions of this SWPPP, the NOI, and the NOC will be kept on the site for the duration of the project. These items will be available for the use of all operators and site personnel involved with erosion and sediment controls and will be available to the City of Cleveland Stormwater Division personnel visiting the site. A notice will be posted near the construction entrance during all phases of construction containing a copy of the NOC with the tracking number assigned by the City of Cleveland Stormwater Division, the name and telephone number of a contact person for

the development, and a brief description of the project.

Any new contractor on the project that has any responsibility to install, inspect, or maintain erosion or sediment control measures will sign the contractor's certification on a copy of the NOI (Appendix A) and will submit it to the City of Cleveland Stormwater Division. Any correspondence with the City of Cleveland Stormwater Division will reference the tracking number assigned to the project. The contractor will submit a Notice of Termination, (NOT, Appendix B) after the complete installation and successful establishment of the final stabilization activities at the site.

It is the intention and goal of the TNCGP and this SWPPP that any discharge from the property described in this document have no objectionable color contrast to the water body that receives it. The construction activity will be carried out in such a manner as will prevent any discharge that would cause a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of the waters on the property or downstream of the property for fish and aquatic life, livestock watering and wildlife, recreation, irrigation, navigation, or industrial or domestic water supply.

This plan may be amended for reasons described below, or for other reasons. When the plans are revised, the contractor will implement the changes to erosion protection and sediment controls within 48 hours after the need for modification is identified.

Project Description:

This project consists of constructing a subdivision with associated facilities. The site area is 21 acres and located off of Old Charleston Road in Bradley County, Tennessee. Construction will disturb approximately 21 acres. Discharges from the site enter Rattlesnake Branch, which starts just north of the site. This portion is NOT in a drainage impaired for siltation/sedimentation. Best management practices such as a stone construction exit, silt fences, inlet protection, concrete washout, stone overflow structures, and various stabilization practices are utilized in the erosion control plan. If sediment escapes the construction site, off-site accumulations of sediment that have not reached a stream must be removed at a frequency sufficient to minimize offsite impacts. Stream remediation is not authorized without consulting TDEC. Arrangements shall be made with adjoining property owners if necessary.

303(d) Special Requirements

Discharges from the project enter a body of water which is NOT 303(d) listed as being water quality limited. According to Part III.F. of the TNCGP, this plan and all attachments are being submitted to the City of Cleveland Stormwater Division, along with the completed NOI. In addition, inspections will be performed by qualified personnel at least twice every week, at least 72 hours apart. Inspections must be performed by a TNEPSC Level One certified inspector. Inspections will cover, at a minimum, all disturbed areas that have not undergone final stabilization, sediment control structures and outfall points. The inspections will be conducted with the purpose of determining whether erosion prevention and sediment control measures are effective in preventing impacts to receiving waters. If during these inspections it is discovered that repair or maintenance is required of any temporary or permanent control measure, the action taken to correct the problem will be documented.

All erosion and sediment control devices shall be designed to withstand a 2-year, 24-hour storm event. If the controls are installed and maintained correctly but are found to provide an inadequate level of protection, the Owner will make revisions to this plan and these revisions will be implemented by the contractor. The inspector will certify on a weekly basis (on the form found in Appendix C) that the inspection described above has been performed and whether or not all of the erosion and sediment control measures are installed and in working order. The record of certifications on the form will be maintained on-site until the project is complete. The inspector will maintain a rain gage and a daily log of readings. If inspections find that maintenance is required, action to correct must be taken before the next storm event, but no later than 7 days after identification. A construction sited assessment of the SWPPP shall be performed in accordance with part 3.1.2 of the Tennessee Construction General Permit within one month of construction commencement.

The table below details the existing soil types and characteristics of the site. The existing soils on the subject site are mostly Decatur silty loam (Df), Fullerton gravelly silt loam (Fe), Greendale cherty silt loam (Ga), and Dewey silty loam (Dh & Dk). These soils belong mainly to Hydrologic Soil Group B, and have moderately high potential for erosion with K-factors of 0.28-0.37 as shown in the table below.

RUSLE2 Related Attributes-Bradley County, Tennessee									
Map symbol and soil name	Pct. of	Slope	Hydrologic group	Kf	T factor	Repre	Representative value		
	map unit	(ft)				% Sand	% Silt	% Clay	
Df—Decatur silty clay loam, 5 to 12 percent slopes, eroded									
Decatur	95	180	в	.32	5	18.0	47.0	35.0	
Dh—Dewey silty clay loam, 6 to 15 percent slopes, eroded									
Dewey	90	98	в	.28	5	10.0	55.0	35.0	
Dk—Dewey silty clay loam, 2 to 6 percent slopes, eroded									
Dewey	86	98	в	.28	5	10.0	55.0	35.0	
Ea—Emory silt loam, 0 to 4 percent slopes									
Emory	85	197	в	.37	5	8.3	68.1	23.6	
Fe—Fullerton gravelly silt loam, 5 to 12 percent slopes, eroded									
Fullerton	85	108	в	.32	5	24.7	52.8	22.5	
Ga—Greendale cherty silt loam									
Greendale	100	_	в	.37	5	27.3	54.7	18.0	
Md—Minvale silt loam, eroded rolling phase									
Minvale	100	_	в	.37	5	24.0	51.0	25.0	

Spills and Non-Storm Water Contingencies

All fueling of equipment and vehicles on site will be conducted near the construction entrance. Any spillage will be removed immediately. Contaminated soils will be placed on heavy plastic and covered or placed into approved containers to prevent contact with storm water. All fuel tanks will be in the containment area. Oils, other vehicle fluids, paints, and solvents will be stored in the construction trailer. Any spill in excess of two gallons will be reported to a representative of the general contractor.

If a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period, the contractor will immediately notify permittee who shall then do the following: notify the National Response Center (NRC) (800-424-8802) and the Tennessee Emergency Management Agency (TEMA) (emergencies: 800-262-3300; non-emergencies: 800-262-3400); as well as the local Environmental Assistance Center. Also, the general contractor will prepare a revision of this document to identify measures to prevent the reoccurrence of such releases.

Concrete trucks will wash out at the designated area near the construction entrance. Each contractor is responsible to provide liter control for trash generated by this crew. A dumpster for garbage will be located near the construction trailer and is limited to garbage and paper trash only. Paint cans, oil cans, used oil, and filters will be contained and disposed of by the contractor by taking them to the Bradley County Landfill at 282 Nature Trail, McDonald, TN 37353.

Phasing of Construction

The project will be completed in one phase.

Sequencing of Construction

1. Before construction commences, the limits of clearing will be identified with flagging tape and any trees to be protected and the limits of the stream buffers will be marked with high-visibility safety fencing.

2. Prior to any land disturbing activity, silt fencing shall be installed where indicated on the erosion control plan, with Type C silt fencing being installed per the plan along with stone overflow structures. All erosion prevention and sediment control best management practices identified in this SWPPP will be installed as recommended in the Tennessee Erosion and Sediment Control Handbook. Preconstruction vegetation shall not be disturbed more than 15 days prior to any excavating activities.

3. Land-disturbing activity at the project site will begin with the installation of the perimeter measures. The construction entrance should be installed before any earthwork commences.

4. After all of the aforementioned erosion control measures have been installed, work will

commence with the clearing and grubbing operation and include preliminary earthwork necessary to accomplish this process.

5. Topsoil will then be removed and stockpiled. Stockpile area will be surrounded by filter fabric fencing and immediately seeded per the stabilization plan.

6. Cut and fill activities to prepare the portion of the property for the construction will begin at this point.

7. A construction site assessment of the SWPPP shall be performed in accordance with part 3.1.2 of the Tennessee Construction General Permit within one month of construction commencement.

8. Construction of the parking lot and utilities will be initiated at this time.

9. Storm drain inlet protection will be installed when the permanent system is in place and functioning.

10. Sediment will be removed from the silt fences before its design capacity has been reduced by 50%. Litter, construction debris, and construction chemicals exposed to storm water will be picked up prior to anticipated storm events (e.g., forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, daily pick-up, etc.). After use, silt fences will be removed or otherwise prevented from becoming a pollutant source for storm water discharges. Temporary measures may be removed at the beginning of the workday, but will be replaced at the end of the workday.

11. Seeding and mulching or other stabilization measures as identified per the Stabilization Plan (Appendix D) will occur after final grade is achieved.

12. Stabilization will be accomplished as soon as practicable after attainment of final grade and no later than seven days after attaining final grade. Where earth-disturbing activity has temporarily ceased, temporary stabilization will be applied within seven days if the activity will not resume within 14 days. Steep slopes (greater than or equal to 35%) shall be stabilized no later than 7 days after construction activity on these slopes has temporarily or permanently ceased. The dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated will be recorded and maintained on the site. Stabilization methods are outlined in the Stabilization Plan (Appendix D) and may include seed and mulch, or seed and erosion control blankets or sod. Sodded slopes having a slope of 3:1 or greater shall be placed in a staggered layout and pinned.

13. When all construction activity is complete and the site is stabilized, structural controls will be removed, and soils disturbed by their removal will be seeded.

USGS MAP



<u>Appendix A</u>

Notice of Intent



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-8332 (TDEC)

Notice of Intent (NOI) for General NPDES Permit for Stormwater Discharges from Construction Activities (TNR100000)

			-		•	
Site or Project Name: Gr	raywood Farms North	1		NPDES Trackin Number: TNR	ng	
Street Address 728 Old	Charloston Pd. Claur	oland TN 27212		Construction S	tart Date:	08/01/2022
or Location: 738 Old	Chaneston Ro, Clevi			Estimated End	Date:	08/01/2024
Site New single family subdivision, existing site is open familand			rmland	Latitude (dd.dd	ldd):	35.2270
Description:			mianu	Longitude (-dd	.dddd):	84.7950
County(ies): Bradley		MS4 (if applicable):		Acres Disturbe	ed:	21
Check box if a SWPPP is a	attached : 🔽 🛛 Chec	k box if a site location m	ap is attached: 🔽	Total Acres:		21
Check the appropriate box	(s) if there are streams	and/or wetlands on or a	djacent to the constru	ction site:	Streams [Wetlands
Has a jurisdictional determi	ination been made by t	he USACE or EPA ident	tifying waters of the U	nited States?:	Yes	7] No 🗌
Note: if yes, attach the juris	sdictional determinatior	ו ער די				
If an Aquatic Resource Alte	eration Permit (ARAP) ł	has been obtained for th	is site, what is the per	rmit number? NF	R(S)	
Receiving waters: Rattles	nake Branch					
Site Owner/Developer (Prover construction plans and	rimary Permittee): (Productions): Rive	ovide person, company, erstone Construction I	or entity that has oper _LC	rational or desig	n control	
For corporate entities only (an incorrect SOS control r	provide correct Tenne number may delay NOI	ssee Secretary of State processing)	(SOS) Control Numb	^{eer:} 000762146	6	
Site Owner or Developer C	contact Name: (signs th	e certification below)	Title or Position:			
Jason Farmer			Partner			
Mailing Address: 9018 Oc	oltewah-Georgetown	Rd, Suite 126	City: Ooltewah	State: TN	1	Zip: 37363
Phone: (423) 595-6673	Fax: ()		E-mail: jasonfarmertn@gmail.com			
Optional Contact:			Title or Position:			
Mailing Address:			City	State:		Zip:
Phone: ()	Fax: ()		E-mail:			
Owner/Developer(s) Cert	ification: (must be sign	ed by president, vice-pre	sident or equivalent, or	ranking elected	official) (Pr	imary Permittee)
I certify under penalty of law that best of my knowledge and be possibility of fine and imprisonm	at this document and all at lief, true, accurate, and c nent. As specified in Tenne	tachments were prepared by complete. I am aware that ssee Code Annotated Section	y me, or under my direction there are significant per con 39-16-702(a)(4), this d	on or supervision. nalties for submittin leclaration is made	The submitte ng false info under penal	ed information is to the rmation, including the type of perjury.
Owner/Developer Name (p	rint/type): Jason Farm	er	Signature:	1	Date:	5/18/201
Owner/Developer Name (p	print/type):		Signature:	0	Date:	1.9.00
Contractor Certification:	(must be signed by pre	sident, vice-president o	r equivalent, or rankin	g elected officia	I) (Second	ary Permittee)
I certify under penalty of law that owner/developer identified about accurate. I am aware that this I my activities on-site are thereby and for failure to comply with penalty of perjugy.	at I have reviewed this doc ve and/or my inquiry of the NOI, if approved, makes th y regulated. I am aware th these permit requirements	cument, any attachments, are e person directly responsible e above-described construc- at there are significant pena s. As specified in Tennesse	nd the SWPPP reference e for assembling this NO stion activity subject to NF alties, including the possi are Code Annotated Secti	d above. Based on II and SWPPP, I b PDES permit numb bility of fine and im ion 39-16- 702(a)(4	my inquiry elieve the in per TNR1000 prisonment 4), this decli	of the construction s formation submitted 00, and that certain for knowing violation aration is made und
Contractor name, address,	and SOS control num	ber (if applicable):	Signature:		Date:	/ /
1.10:	Les Stand Con	struction 2	-11		5/	18/2020
DEELCIAL STATE LIPE ONLY S	05# DONNI	2141	100		7	alone
Received Date:	Reviewer:	Field Office:	Permit Tracking Number:	TNR	Exceptional	TN Water:
Fee(s):	T & E Aquatic Flora/Fauna:	SOS Corporate Status:	Waters with Unavailable F	Parameters:	Notice of Co	overage Date:

CN-0940 (Rev. 12-16)

RDA 2366

<u>Appendix B</u>

Notice of Termination

To be completed and submitted to TDEC when all construction and stabilization activities have been completed and stabilization measures are effective, or if an operator's responsibilities at this site have ended.

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)



DIVISION OF WATER RESOURCES (DWR) William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor Nashville, Tennessee 37243 1-888-891-TDEC (8332)

NOTICE OF TERMINATION (NOT) FOR GENERAL NPDES PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES (CGP)

This form is required to be submitted when requesting termination of coverage from the CGP. The purpose of this form is to notify the TDEC that either all stormwater discharges associated with construction activity from the portion of the identified facility where you, as an operator, have ceased or have been eliminated; or you are no longer an operator at the construction site. Specifically, this means that all disturbed soils at the portion of the construction site where the operator had control have been permanently stabilized, the temporary erosion and sediment control measures have been removed, and/or subsequent operators have obtained permit coverage for the site or portions of the site where the operator had control. Submission of this form shall in no way relieve the permittee of permit obligations required prior to submission of this form.

Submit this form to the local DWR Environmental Field Office (EFO) address (see table below) or using MyTDEC Forms electronic submittal process. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC).

Site or Project	NPDES Tracking
Name:	Number: TNR
Street Address or Location:	County(ies):

Name of Permittee Requesting Termination of Coverage:					
Permittee Contact Name:	Title or Position:				
Mailing Address:	City:	State:	Zip:		
Phone:	E-mail:				

Check the reason(s) for termination of permit coverage: (check only one)

	teck the reason(s) for termination of permit coverage. (check only one)
	Primary permittee termination: all requirements for termination under Permit Part 9.1.1. a) through c)
	have been met. This includes, but is not limited to, for areas the primary permittee has control all earth-
	disturbing activities at the site are complete and permanent stabilization as defined in Part 10 of the
	CGP has been achieved. (attach photo documentation)
	When applicable, and you are a primary permittee seeking termination, list who is responsible for
	ongoing maintenance of stormwater controls left on the site subject for long-term use following
	termination of coverage:
	Secondary permittee termination: all requirements for termination under Permit Part 9.2.1. have been
	met (no longer an operator at the construction site).

Certification and Signature:

(must be signed by president, vice-president or equivalent ranking elected official)

I certify under penalty of law that either: (a) all stormwater discharges associated with construction activity from the portion of the identified facility where I was an operator have ceased or have been eliminated or (b) I am no longer an operator at the construction site. I understand that by submitting this notice of termination, I am no longer authorized to discharge stormwater associated with construction activity under this general permit, and that discharging pollutants in stormwater associated with construction activity to waters of the state is unlawful under the Tennessee Water Quality Control Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Tennessee Water Quality Control Act. I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

· · · ·		
Permittee name (print or type):	Signature:	Date:

EFO	Address	EFO	Street Address
Memphis	8383 Wolf Lake Drive, Bartlett, TN 38133	Cookeville	1221 South Willow Ave., TN 38506
Jackson	1625 Hollywood Drive, TN 38305	Chattanooga	1301 Riverfront Parkway, Ste. 206, TN 37402
Nashville	711 R S Gass Boulevard, TN 37243	Knoxville	3711 Middlebrook Pike, TN 37921
Columbia	1421 Hampshire Pike, TN 38401	Johnson City	2305 Silverdale Road, TN 37601

CN-1175 (Rev. 02-22)

RDA 2366

<u>Appendix C</u>

Inspection Report

To be kept on-site and available for inspection as requested.



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) DIVISION OF WATER RESOURCES William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor Nashville, Tennessee 37243 1-888-891-8332 (TDEC)

General NPDES Permit for Stormwater Discharges from Construction Activities (CGP) Construction Stormwater Inspection Certification (Inspection Form)

Site or Project Name:		NPDES Tracking Number: TNR
Primary Permittee Name:		Date of Inspection:
Current approximate	Has rainfall been	Name of Inspector:
<u>disturbed</u> acreage:	checked/documented daily?	
	🗌 Yes 🗌 No	
Current weather/ground	Rainfall total since last	Inspector's TNEPSC
conditions:	inspection:	Certification Number:
Site Assessment	Assessor's TN PE registration	Assessor's TNEPSC Level II/CPESC number:
Yes No	number:	

Check the	Check the box if the following items are on-site:			
	Notice of Coverage (NOC)			
	Stormwater Pollution Prevention Plan (SWPPP)			
	Weekly inspection documentation			
	Site contact information			
	Rain Gage			
Off-site Ref	erence Rain Gage Location			

Best Management Practices (BMPs):

Are to If "No	the Erosion Prevention and Sediment Controls (EPSCs) functioning correctly? o," describe below in Comment Section			
1.	Are all applicable EPSCs installed and maintained per the SWPPP per the current phase?		☐ Yes	□ No
2.	Are EPSCs functioning correctly at all disturbed areas/material storage areas? (permit sec 5.5.3)	tion	☐ Yes	□ No
3.	Are EPSCs functioning correctly at outfall/discharge points such that there is no objection color contrast in the receiving stream, and no other water quality impacts? (permit sectio 5.5.3.5 and 6.3.2)	able n	☐ Yes	□ No
4.	Are EPSCs functioning correctly at ingress/egress points such that there is no evidence of track-out? (permit section 5.5.3.1)		☐ Yes	□ No
5.	If applicable, have discharges from dewatering activities been managed by appropriate controls? (permit section 4.1.3) If "No," describe below the measure to be implemented to address deficiencies.	□ N/A	☐ Yes	□ No
6.	If construction activity at any location on-site has temporarily/permanently ceased, was the area stabilized within 14 days? (permit section 5.5.3.4) If "No," describe below each location and measures taken to stabilize the area(s).	□ N/A	☐ Yes	□ No
7.	Have pollution prevention measures been installed, implemented, and maintained to minimize the discharge of pollutants from wash waters, exposure of materials and discharges from spills and leaks per section 4.1.4? If "No," describe below the measure to be implemented to address deficiencies.	□ N/A	☐ Yes	□ No

Site or Project Name:		NPDES Tracking Number: TNR				
Primary Permittee Name: Date of Inspection:						
8.	If a concrete washout facility is located on site, is it clearly identified on the project and maintained? If "No," describe below the measures to be implemented to address deficiencies. (permit section 1.2.2)			□ N/A	☐ Yes	□ No
9.	Have all previous deficiencies been addressed? If "No deficiencies in the Comments section. Check if deficiencies/corrective measures have be	o," desc een rep	ribe the remaining orted on a previous form.	□ N/A	□ Yes	□ No
comment Section. If the answer is "No" for any of the above, describe the problem and summarize corrective actions to be taken. Otherwise, describe any pertinent observations:						
Correl						1 (-)
and 8	3.7.2 of the CGP)	ieu irisp	lector and the permittee per	Section	5 5.5.5.1	i (g)
I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.						
Inspe	ector Name and Title :	Signat	ure:	Date:		
Prima	ary Permittee Name and Title:	Signat	ure:	Date:		

(Instructions on next page)

Construction Stormwater Inspection Certification Form (Inspection Form)

Purpose of this form / Instructions

An inspection, as described in subsection 5.5.3.9. of the General Permit for Stormwater Discharges from Construction Activities ("Permit"), shall be performed at the specified frequency and documented on this form. Inspections shall be performed at least 72 hours apart. Where sites or portion(s) of construction sites have been temporarily stabilized, or runoff is unlikely due to winter conditions (e.g., site covered with snow or ice), such inspection only has to be conducted once per month until thawing results in runoff or construction activity resumes.

Inspections can be performed by:

- a) a person with a valid certification from the "Fundamentals of Erosion Prevention and Sediment Control Level I" course,
- b) a licensed professional engineer or landscape architect,
- c) a Certified Professional in Erosion and Sediment Control (CPESC), or
- d) a person who has successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course.

Qualified personnel, as defined in subsection 5.5.3.10 of the Permit (provided by the permittee or cooperatively by multiple permittees) shall inspect disturbed areas of the construction site that have not been permanently stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, locations where vehicles enter or exit the site, and each outfall.

Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the site's drainage system. Erosion prevention and sediment control measures shall be observed to ensure that they are operating correctly.

Outfall points (where discharges leave the site and/or enter waters of the state) shall be inspected to determine whether erosion prevention and sediment control measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event if possible, but in no case more than 7 days after the need is identified.

Based on the results of the inspection, the site description identified in the SWPPP in accordance with section 5.5.1 of the Permit and pollution prevention measures identified in the SWPPP in accordance with section 5.5.2 of the Permit, shall be revised as appropriate, but in no case later than 7 days following the inspection. Such modifications shall provide for timely implementation of any changes to the SWPPP, but in no case later than 14 days following the inspection.

All inspections shall be documented on this Construction Stormwater Inspection Certification form. Alternative inspection forms may be used as long as the form contents and the inspection certification language are, at a minimum, equivalent to the Division's form and the permittee has obtained a written approval from the Division to use the alternative form. Inspection documentation will be maintained on site and made available to the Division upon request. Inspection reports must be submitted to the Division within 10 days of the request.

Trained certified inspectors shall complete inspection documentation to the best of their ability. Falsifying inspection records or other documentation or failure to complete inspection documentation shall result in a violation of this permit and any other applicable acts or rules.

CN-1173 (Rev. 03/22)

RDA 2366

<u>Appendix D</u>

Stabilization Plan

Seeding Dates	Grass Seed	Percentages
	Kentucky 31 Fescue	80%
February 1 to July 1	Korean Lespedeza	15%
	English Rye	5%
	Kentucky 31 Fescue	55%
lupo 1 to August 15	English Rye	20%
Julie 1 to August 15	Korean Lespedeza	15%
	German Millet	10%
April 15 to August 15	Bermudagrass (hulled)	70%
April 13 to August 13	Annual Lespedeza	30%
	Kentucky 31 Fescue	70%
August 1 to December 1	English Rye	20%
	White Clover	10%
	Kentucky 31 Fescue	70%
February 1 to December 1	Crown Vetch	25%
	English Rye	5%

Permanent Cover Seeding Mixtures

Source: TDOT Standard Specifications

Table 1

Temporary Cover Seeding Mixtures

Seeding Dates	Grass Seed	Percentages
	Italian Rye	33%
January 1 to May 1	Korean Lespedeza	33%
۵. ا	Summer Oats	34%
May 1 to July 15	Sudan - Sorghum	100%
May 1 to July 15	Starr Millet	100%
July 15 to January 1	Balboa Rye	67%
July 15 to January 1	Italian Rye	33%

Table 1

Source: TDOT Standard Specifications



GRAYWOOD FARMS NORT RESIDENTIAL SUBDIVION

OLD CHARLESTON RD CLEVELAND, TN 37312

DEVELOPER:

RIVERSTONE CONSTRUCTION LLC 9018 OOLTEWAH-GEORGETOWN RD SUITE 126 OOLTEWAH, TN 37363

CIVIL ENGINEER:



63 BROAD ST NW CLEVELAND, TN 37311

(423) 790-5880

CALL BEFORE YOU DIG UTILITIES PROTECTION CENTER TENNESSEE 1-800-351-1111 THREE WORKING DAYS BEFORE YOU DIG

IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION AS THE LOCATION OF UTILITIES SHOWN ON THIS PLAT ARE APPROXIMATE AND POSSIBLY INCOMPLETE. THEREFORE CERTIFICATION TO THE LOCATION OF ALL UNDERGROUND UTILITIES IS WITHHELD.

	INE
<u>CIVIL ENGI</u>	NEERING
C-00	CO
C-01	EXI
C-02	RO
C-03.	0 OVE
C-03.	1 R0/
C-03.	2 R0/
C-03.	3 RO/
C-03.	4 DET
C-04.	1 ER0
C-04.	2 ERG
C-04.	3 ERG
C-05	UTI
C-06	SIT
C-07	SIT
C-08	SIT
C-09	SIT

BRADLEY COUNTY BENTLY THOMAS PHONE: 423-728-BRADLEY COUNTY RON WILSON PHONE: 423-728-

		CIVIL ENGINEER: CIVIL ENGINEER: CONDECTION CLEVELAND, TN 3731 CLEVELAND, TN 3731
DEX OF SHEETS		DEVELOPER: RIVERSTONE CONSTRUCTION,LLC 9018 OOLTEWAH-GEORGETOWN RD SUITE 126 OOLTEWAH, TN 37363
<u>G PLANS</u> OVER SHEET (ISTING CONDITIONS DADWAY & LOT LAYOUT PI VERALL GRADING & DRAIN DADWAY PLAN & PROFILE DADWAY PLAN & PROFILE DADWAY PLAN & PROFILE DADWAY PLAN & PROFILE ETENTION BASIN PLAN ROSION CONTROL PLAN (F ROSION CONTROL PLAN (F ROSION CONTROL PLAN (F ROSION CONTROL PLAN (F TILITY PLAN TE DETAILS TE DETAILS TE DETAILS	AGE PLAN PHASE 1) PHASE 2) PHASE 3)	PROJECT: CRAYWOOD FARMS NORTH SUBDIVISION OLD CHARLESTON RD DLD CHARLESTON RD BRADLEY COUNTY, TN
OCAL CONTACTS – PLANNING – 7107 – BUILDING –7106	WATER & SEWER CLEVELAND UTILITIES BRIAN SELLS PHONE: 423–472–4521 EXT. 372 <u>ELECTRICITY</u> VEC MELVIN FLOWERS PHONE: 423–476–6571 EXT.7542 <u>NATURAL GAS</u> CHATTANOOGA NATURAL GAS JANA HALL PAPA PHONE: 423–490–4315 JPAPA@SOUTHERNCO.COM	Image: Constraint of the second se
		DATE: 05/10/2022

CHECKED BY: BMB **PROJECT NO.:** 22006

SHEET NUMBER:

C-00



THRUMOND 124 DB 2371 PG 124

EROSION CONTROL NOTES

NO TREES ARE TO BE REMOVED AND/OR VEGETATION DISTURBED EXCEPT AS

- NECESSARY FOR GRADING PURPOSES. 2. TOPSOIL IS TO BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED, AND REDISTRIBUTED OVER ALL GRADED AREAS TO A MINIMUM OF 4". ALL AREAS NOT COVERED BY BUILDINGS OR PAVING TO RECEIVE TOPSOIL. 3. ALL GRADED AREAS INCLUDING SLOPES ARE TO BE STABILIZED WITHIN 14 DAYS AFTER GRADING IS COMPLETED. COORDINATE WITH LANDSCAPING DRAWINGS AS TO TYPE OF PERMANENT GROUND COVER TO BE USED. AT A MINIMUM, ALL DISTURBED AREAS ARE TO BE SEEDED AND MULCHED. 4. CUT AND FILL SLOPES ARE NOT TO EXCEED 4:1 UNLESS OTHERWISE NOTED. 5. CONSTRUCT EROSION CONTROL DEVICES AS SHOWN AND WHERE DESIGNATED BY THE ENGINEER. 6. ALL NEW STRUCTURES AND EXISTING STRUCTURES SHALL HAVE ALL SEDIMENT
- REMOVED PRIOR TO ACCEPTANCE. ALL DIMENSIONS AND LOCATIONS OF TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES SHALL BE SUBJECT TO ADJUSTMENT AS NECESSARY TO BE
- EFFECTIVE. WHEN THE TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES ARE NO LONGER REQUIRED FOR THE INTENDED PURPOSE THEY SHALL BE REMOVED. SILT FENCES ARE TO BE REPLACED WHEN EFFECTIVENESS IS SIGNIFICANTLY REDUCED, 9.
- OR AS DIRECTED. 10. EROSION CONTROL MEASURES SHALL MEET OR EXCEED MINIMUM CRITERIA, STANDARDS AND SPECIFICATIONS SET BY THE CITY OF CLEVELAND.

Han

 $\nabla \Gamma$

 \sim

- 11. CONTRACTOR SHALL ENSURE THAT ANY EROSION CONTROL MEASURES DO NOT CAUSE WATER TO ENTER ONTO ROADWAY. 12. CONTRACTOR IS RESPONSIBLE TO PERFORM ALL REQUIRED INSPECTIONS AND TO SUBMIT ALL REQUIRED DOCUMENTATION TO THE LOCAL AUTHORITY.
- TOPSOIL MATERIAL AND SEEDING
 A. TOPSOIL MATERIAL HAS BEEN SAVED FOR USE IN FINISH GRADING. AFTER SIFTING OUT ALL PLANT GROWTH, RUBBISH, AND STONES, USE FOR AREAS DESIGNATED TO RECEIVE GRASS. IF STOCKPILED TOPSOIL IS NOT SUFFICIENT QUANTITY TO COMPLETE WORK, FURNISH ACCEPTABLE TOPSOIL FOR GRASS AREAS UNLESS NOTED OTHERWISE ON THE DRAWINGS. GRASS AREAS SHALL BE DEFINED AS THAT GRADED AREA DISTURBED DURING CONSTRUCTION NOT TO BE
 - PAVED OR BUILT UPON. B. ACCEPTABLE TOPSOIL MATERIAL SHALL BE DEFINED AS NATURAL FERTILE, AGRICULTURAL SOIL, CAPABLE FOR SUSTAINING VIGOROUS PLANT GROWTH, UNIFORM COMPOSITION THROUGHOUT, WITHOUT ADMIXTURE OF SUBSOIL, FREE OF
 - STONES, LUMPS, PLANTS AND THEIR ROOTS, STICKS, OR OTHER EXTRANEOUS MATTER; DO NOT DELIVER WHILE IN A FROZEN OR MUDDY CONDITION. C. GRASS SEED SHALL BE OF THE PREVIOUS SEASON'S CROP AND THE DATE OF ANALYSIS SHOWN ON EACH BAG FOR TESTING. GRADING CONTRACTOR SHALL HIRE A QUALIFIED LANDSCAPE CONTRACTOR TO PREP FOR AND PERFORM ALL
 - PERMANENT SEEDING. THE SEED SHALL COMPLY WITH ALL PROVISIONS OF THE U.S. DEPARTMENT OF AGRICULTURE AS TO LABELING, PURITY, AND GERMINATION. D.
 - PERMANENT STAND OF GRASS SHALL BE ESTABLISHED 30 DAYS PRIOR TO GRAND OPENING. ALL WATERING, MAINTENANCE, MOWING, ETC. SHALL BE PERFORMED Ε. BY THE SITE CONTRACTOR WITH ACCEPTANCE BY OWNER.

14. SEE SHEET C-09 FOR ADDITIONAL DETAILS ON EROSION AND SEDIMENT CONTROL.

	EROSION CONTROL LI	EGEND
CE	TEMPORARY GRAVEL CONSTRUCTION EXIT	
SF-A SF-C	SILT FENCE (TYPE A, NON-WIRE BACKED) - (TYPE C, WIRE BACKED)	x x
RR	RIP RAP (6"ø PERMANENT)	REFERENCE A
FR	INLET PROTECTION FILTER RING	
MAT	EROSION CONTROL MATTING	
IP	INLET PROTECTION	
CW	CONCRETE TRUCK WASH OUT AREA	
	LIMITS OF DISTURBANCE (21± ACRES)	





PROJECT NO.: 22006

C-04.1

SHEET NUMBER:



EROSION CONTROL LEGEND TEMPORARY GRAVEL CONSTRUCTION EXIT CE SF-ASILT FENCE
(TYPE A, NON-WIRE BACKED)SF-C(TYPE C, WIRE BACKED) RIP RAP (6"Ø PERMANENT) RR FR INLET PROTECTION FILTER RING MAT EROSION CONTROL MATTING IP INLET PROTECTION CW CONCRETE TRUCK WASH OUT AREA LIMITS OF DISTURBANCE (21± ACRES)

STABILIZATION TABLE

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	EXEMPTIONS
Perimeter dikes, swales, ditches, & slopes	5 days	none
High Quality Water Zones (HQW)	5 days	none
Slopes Steeper than 3:1	5 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50 feet in length
All other areas with slopes flatter than 4:1	14 days	none (except for perimeters and HQW zones

***Extensions of time may be approved by the permitting authority based on weather or other site-specific conditions that make compliance impracticable.

STABILIZATION TABLES

Nov 1 - Mar 1

Mar 1 - Apr 15 Tall Fescue

MA

ALL

P

 \cap

FOR SLOPES BETWEEN 2:1 AND 3:1				
Date	Туре	Planting Rate		
Mar 1 - June 1	Sericea Lespedeza (scarified) and	50 lbs./acre		
Mar 1 - Apr 15	Add Tall Fescue or	120 lbs./acre		
Mar 1 - June 30	Add Hulled Common Bermudagrass	25 lbs./acre		
June 1 - Sept 1	***Tall Fescue <u>and</u> ***Browntop Millet <u>or</u> ***Sorghum-Sudan Hybrids	120 lbs./acre 35 lbs./acre 30 lbs./acre		
Sept 1 - Mar 1	Sericea Lespedeza (unhulled/unscarified) and Tall Fescue	70 lbs./acre 120 lbs./acre		
Nov 1 - Mar 1	Add Abruzzi Rye	25 lbs./acre		
FOR ALL OTHER AREAS				
Date	Туре	Planting Rate		
Aug 15 - Nov 1	Tall Fescue	300 lbs./acre		

Tall Fescue and Abruzzi Rye

Apr 15 - June 30 Hulled Common Bermudagrass

July 15 - Aug 15 Tall Fescue <u>and</u> ***Browntop Millet <u>or</u> ***Sorghum-Sudan Hybrids

***<u>Temporary</u> - Reseed according to optimum season for desired permanent vegetation. Do not allow temporary cover to grow over 12 inches in height before mowing to keep fescue from being shaded out.

300 lbs./acre

300 lbs./acre

25 lbs./acre

35 lbs./acre

STABILIZATION PRACTICES

- 1. Contractor shall provide temporary and permanent stabilization to all disturbed areas not otherwise covered by buildings or parking area.
- 2. Temporary stabilization is required as soon as possible after final grade is achieved, but no later than 5 days for slope areas and 14 days for all other areas. Temporary stabilization includes mulching and seeding.
- 3. The seeded areas will be checked regularly to ensure that a good stand is maintained. Areas should be fertilized and re-seeded as needed.
- SEE THIS SHEET FOR TEMPORARY SEEDING SCHEDULE





			CIVIL ENGINEER.	BROAD ST NW TEL: (423 790-5880 CLEVELAND, TN 3731
STABIL RR RIP RAP (6"¢ MAT EROSION CON PERMANENT S (mATES)	ZATION LEGEN PERMANENT) TROL MATTING	D	DEVELOPER.	RIVERSTONE CONSTRUCTION,LLC 9018 OOLTEWAH-GEORGETOWN RD SUITE 126 OOLTEWAH, TN 37363
SITE AREA DESCRIPTION Perimeter dikes, swales, ditches, & slopes High Quality Water Zones (HQW) Slopes Steeper than 3:1 Slopes 3:1 or flatter All other areas with slopes flatter than 4:1	STABILIZATION TAE STABILIZATION TIME FRAME 5 days 5 days 5 days 14 days 14 days	EXEMPTIONS EXEMPTIONS none none If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed 7 days for slopes greater than 50 feet in length none (except for perimeters and HQW zones	PROIECT.	GRAYWOOD FARMS NORTH SUBDIVISION OLD CHARLESTON RD BRADLEY COUNTY, TN
***Extensions of time may be a other site-specific conditions th <u>STABILIZATION TABLES</u> <u>FOR SLOPES BETWEEN 2:</u> <u>Date Type</u> Mar 1 - June 1 Sericea L	approved by the permitt nat make compliance im <u>1 AND 3:1</u> espedeza (scarified)	ing authority based on weather or practicable. <u>Planting Rate</u> 50 lbs./acre		AMIN M. OF THE AGE OF

 \sum

7/

Date	Туре	Planting Rate
Mar 1 - June 1	Sericea Lespedeza (scarified) and	50 lbs./acre
Mar 1 - Apr 15	Add Tall Fescue or	120 lbs./acre
Mar 1 - June 30	Add Hulled Common Bermudagrass	25 lbs./acre
June 1 - Sept 1	***Tall Fescue <u>and</u> ***Browntop Millet <u>or</u> ***Sorghum-Sudan Hybrids	120 lbs./acre 35 lbs./acre 30 lbs./acre
Sept 1 - Mar 1	Sericea Lespedeza (unhulled/unscarified) and Tall Fescue	70 lbs./acre 120 lbs./acre
Nov 1 - Mar 1	Add Abruzzi Rye	25 lbs./acre
FOR ALL OTHER	RAREAS	
Date	Туре	Planting Rate
Aug 15 - Nov 1	Tall Fescue	300 lbs./acre
Nov 1 - Mar 1	Tall Fescue and Abruzzi Rye	300 lbs./acre

Apr 15 - June 30	Hulled Common Bermudagrass	25 lbs./acre
July 15 - Aug 15	Tall Fescue and ***Browntop Millet	
	<u>or</u> ***Sorghum-Sudan Hybrids	35 lbs./acre
***Temporary - Re	eseed according to optimum season for	desired permanent veget

Mar 1 - Apr 15 Tall Fescue

etation. Do not allow temporary cover to grow over 12 inches in height before mowing to keep fescue from being shaded out.

300 lbs./acre

STABILIZATION PRACTICES

- 1. Contractor shall provide temporary and permanent stabilization to all disturbed areas not otherwise covered by buildings or parking area.
- 2. Temporary stabilization is required as soon as possible after final grade is achieved, but no later than 5 days for slope areas and 14 days for all other areas. Temporary stabilization includes mulching and seeding.
- 3. The seeded areas will be checked regularly to ensure that a good stand is maintained. Areas should be fertilized and re-seeded as needed.
- SEE THIS SHEET FOR TEMPORARY SEEDING SCHEDULE

TT . No. 112363. REVISIONS SHEET NAME: EROSION CONTROL PLAN (PHASE 3) 05/10/2022 DATE: DRAWN BY: CMB CHECKED BY: BMB **PROJECT NO.:** 22006 sheet number: C-04.3





FW: Graywood Farms North CGP application

Jason Dees <Jason.Dees@tn.gov> Tue 6/14/2022 11:00 PM To: Cali Dobbins <Cali.Dobbins@tn.gov> Upload please.

From: Ben Berry <ben@berryengineers.com>
Sent: Tuesday, June 14, 2022 5:37 PM
To: Jason Dees <Jason.Dees@tn.gov>
Cc: riverstonellc@yahoo.com
Subject: [EXTERNAL] RE: Graywood Farms North CGP application

*** This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. ***

Attached are the plans and the updated SWPPP with the corrected signature page.

Benjamin Berry, P.E. Berry Engineers, LLC (423) 790-5880

From: Jason Dees <<u>Jason.Dees@tn.gov</u>>
Sent: Tuesday, June 14, 2022 2:04 PM
To: Ben Berry <<u>ben@berryengineers.com</u>>; riverstonellc@yahoo.com
Subject: Graywood Farms North CGP application

Ben – Mr. Farmer needs to sign the correct SWPPP certification language. We also didn't get a PDF of the plan sheets. Thank you,



Jason Dees | Environmental Consultant Division of Water Resources/Chattanooga Environmental Field Office 1301 Riverfront Parkway, Suite 206 Chattanooga, TN 37402 p. 423-497-6125 Jason.Dees@tn.gov tn.gov/environment