Stormwater Pollution Prevention Plan

for

Detention Pond Construction

Robinson Stave Company, Inc.
1812 Hwy 3434
East Bernstadt, KY 40729

20 September 2018

SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION.

1.1 Facility Information

Robinson Stave Company
1812 HWY 3434
East Bernstadt, KY 40729
Laurel County

AI No.	2591
KPDES No:	KYR003792
Primary Industrial Activity SIC Code:	2421
Latitude:	37.18792
Longitude:	-84.10776

Construction area exposed to stormwater: 3.0+/- acres

Receiving waters:

- Little Raccoon Creek (east side: Stave Mill, Barrel Shop, etc.)
- Gillis Branch (west side: Cooperage)

The facility does not discharge stormwater to a municipal separate storm sewer system. This facility does not discharge stormwater to any segment of an "impaired water." This facility does not discharge stormwater to a receiving water designated as a Tier 2, Tier 2.5 or Tier 3.

Stormwater discharges at this facility may be subject to effluent limitation guidelines in 2015 MSGP Table 1-1, including discharges resulting from spray down or intentional wetting of logs at wet deck storage areas. ELGs stipulate that there shall be "no debris discharged and the pH shall be within the range of 6.0 to 9.0."

SWPPP Primary Contact:
William Larkey
Robinson Stave Company
1812 HWY 3434
East Bernstadt, KY 40729
Office: 606-843-2740
Cell: 606-682-7712
william@robinsonstave.com

SWPPP Secondary Contact:
Paul Rodgers
Cedar Creek Engineering, Inc.
325 A Tierney Way
Winchester, KY
859-227-7061
paul.rodgers@cedarcreekengineering.com

1.3 Stormwater Pollution Prevention Team.

Personnel	Title	Individual Responsibilities
William Larkey	Operations Manager	Overall responsibility for compliance with stormwater management; semi-annual sample collection; DMR submittals
Paul Rodgers	Environmental Engineer, PE	Monthly inspections; BMP design improvements; employee training. Compliance management support.

1.4 Facility Description

Robinson Stave Company is a manufacturer of barrels for the bourbon, whiskey, and wine industries. The East Bernstadt facility covers approximately 67 acres in Laurel County, Kentucky, and includes nine principal buildings, including sawmills, cooperages, kilns, boiler houses, and maintenance buildings.

Raw logs are delivered to the site via independent carriers. They are stored on land surrounding the plant, then transferred to one of two stations, at either the Stave Mill or the Saw Mill, where they are debarked and sawn to length. The cut wood then passes through a series of saws at the mills to produce rough staves. Rough staves are also stored outdoors.

Rough staves are dried in indoor kilns and delivered to one of two cooperages, the Barrel Shop, in the older part of the plant, or the Cooperage, a facility scheduled to begin operation in late 2017. In the cooperages, rough staves are planed and trimmed, assembled into barrels, and the barrels charred. The barrels are then shipped to customers.

Figure 1, included in the attachments, depicts the location of the facility. Figure 2 is a site plan showing he facility layout, including topographic lines, and stormwater outfalls.

Four new detention ponds are to be constructed on the facility at the locations shown on Figure 3. This SWPPP is written specifically to address potential stormwater pollution arising from these construction activities.

SECTION 2: POTENTIAL POLLUTANT SOURCES – CONSTRUCTION/EARTHWORK

Potential storm water pollutants associated with construction and earthwork at the facility include principally:

- soils and sediment exposed by excavation
- wood waste from plant operation, including bark and sawdust
- fuel, lubricants, hydraulic oil , antifreeze and other chemicals used by construction equipment
- cement, plastic, paper, metal, and other construction materials and waste

SECTION 3: STORMWATER CONTROL MEASURES.

3.1 Erosion and sediment control measures and works shall include, but are not limited to, the following:

Staging of earthwork activities – The excavation and moving of soil materials shall be scheduled to minimize the size of areas disturbed and unprotected from erosion for the shortest reasonable time.

Seeding – Seeding to protect undisturbed areas shall occur as soon as reasonably possible following completion of that earthwork activity.

Mulching – Mulching to provide temporary protection of the soil surface from erosion.

Diversions – Diversions to divert water from work areas and to collect water from work areas for treatment and safe disposition.

Stream Crossings – Culverts or bridges where equipment must cross streams. and shall be removed and the area restored to its near original condition when the crossings are no longer required or when permanent measures are installed.

Sediment Basins – Sediment basins shall be used if necessary to prevent sediment from impacting streams below the construction site.

Sediment Filters – Straw bales or geotextile sediment fences trap sediment from areas of limited runoff. Sediment filters shall be properly anchored to prevent erosion under or around them.

Gravel Entrances – Gravel shall be placed at access points from public roadways to the construction site to prevent dirt from being tracked onto the road.

Stormwater control measures installed for construction are temporary and shall be removed and the area restored to its near original condition when the diversions are no lone required or when permanent measures are installed.

3.2 Chemical Pollution

On-site storage of fuel, lubricants, hydraulic oil , antifreeze and other such liquids is discouraged. If necessary, these materials shall be properly stored in designated areas, in labeled containers constructed of compatible materials. Storage areas shall be maintained clean, level and easily accessible. If a fuel storage tank is to be maintained on site, its installation must be approved by Robinson Stave.

Concrete mix washwater or other byproducts of construction materials shall be collected in sumps or catchments that prevent the material from entering waterways. Upon completion of work, all waste materials shall be removed from the work site and the area returned to its near-original condition.

Sanitary facilities, such as chemical toilets or septic tanks, shall not be located next to live streams, wells or springs. They shall be located at a distance sufficient to prevent contamination of any water source. At the completion of construction activities, facilities shall be disposed of properly.

3.3 Good Housekeeping and Maintenance

The site will maintained trash and litter-free and free from debris. Robinson Stave will conduct inspections to identify areas where potential pollutants may come in contact with storm water. Stormwater control devices and flow channels will be inspected to verify they are operational and free from debris. Corrective action will be taken as necessary.

3.4 Spill Prevention and Response.

Small drips and spills shall be cleaned up promptly by on-site crews. Spill response materials including, at a minimum, 500 pounds of sorbent material (“Oil Dri”), 100 pads of sorbent pads (PIG® Oil-Only Absorbent Mat Pad, or similar), and 100 feet of 3-in oil sorbent boom shall be maintained on site at all times.

In the event of a larger spill, an outside cleanup contractor will be utilized. Contact information for two contractors is given below:

PECCO
250 Etter Drive
Nicholasville, KY 40356
859-887-5508

ECO Tech USA, LLC
London, KY 40741
(606) 864-3013
(800) 890-7888

Robinson Stave shall be notified immediately in the event of any spill greater than 5 gallons, or any spill that cannot be cleaned up in 15 minutes or less.

SECTION 4: SCHEDULES AND PROCEDURES

4.1 Notifications

Field work shall not begin until a Kentucky Pollution Discharge Elimination System (KPDES) Notice of Intent (application) for a General Permit for Stormwater Discharges Associated with Construction Activities (KYR10) has been filed with the Kentucky Division of Water.

4.2 Inspections and Maintenance

Stormwater inspections will be conducted by Robinson Stave on a periodic basis, and will include completion of the Stormwater Inspection Checklist, included in the attachments. Maintenance of stormwater control structures will be performed on as as-needed basis.

4.2 Sediment Control

Control of sediment resulting from construction activities will be accomplished using BMPs identified in either a) a project-specific SWPPP prepared in conjunction with a KYR10 Stormwater Construction Permit (land disturbance 1 acre or more); or b) BMPs identified on an Erosion Control Plan (<1 acre).

4.3 Training

Contractor employees will receive training upon start of field work. The training will consist of a review of the items detailed in this SWPPP.

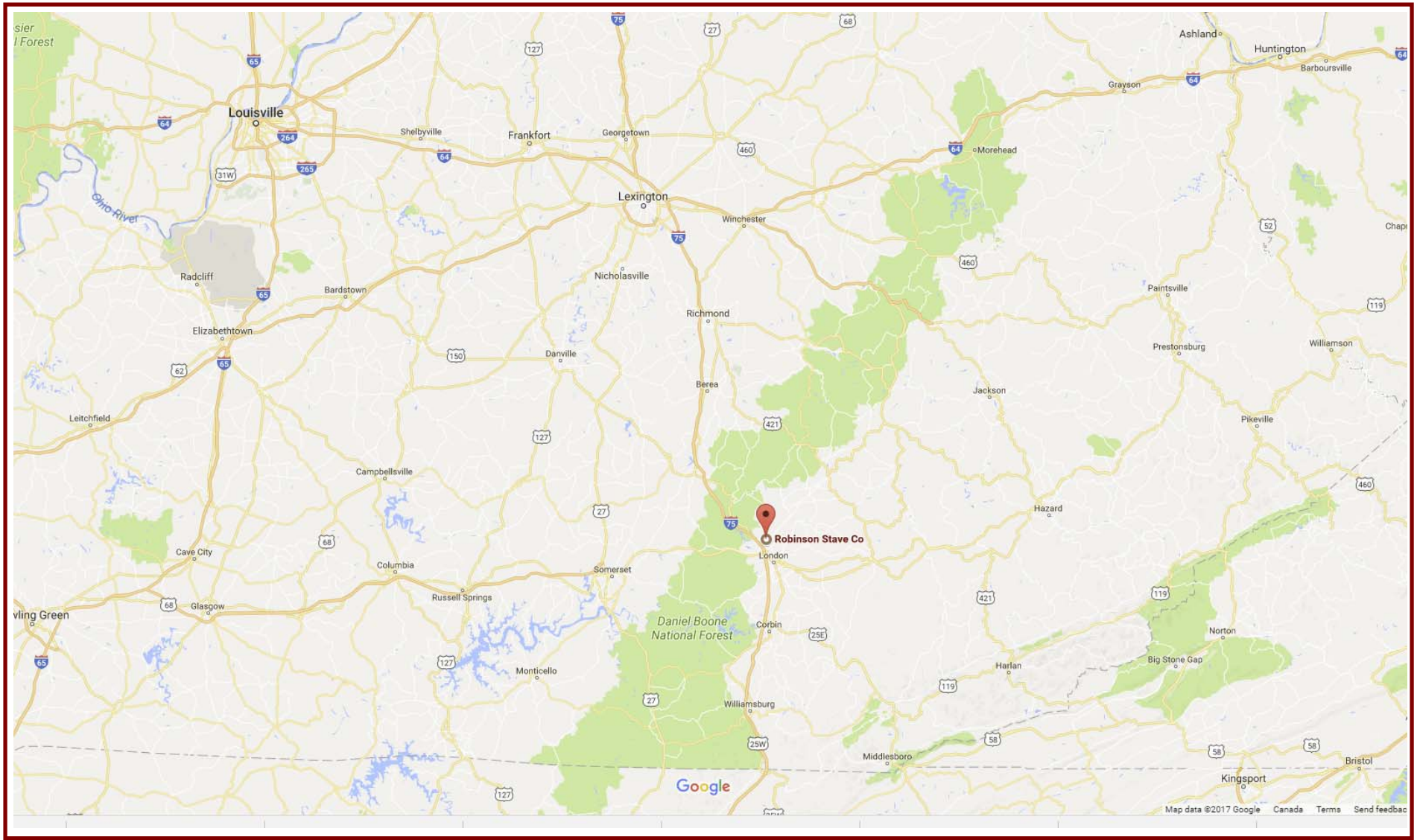
SECTION 5: SWPPP CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted 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 for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

ATTACHMENTS



CEDAR CREEK ENGINEERING INC

Winchester, Kentucky

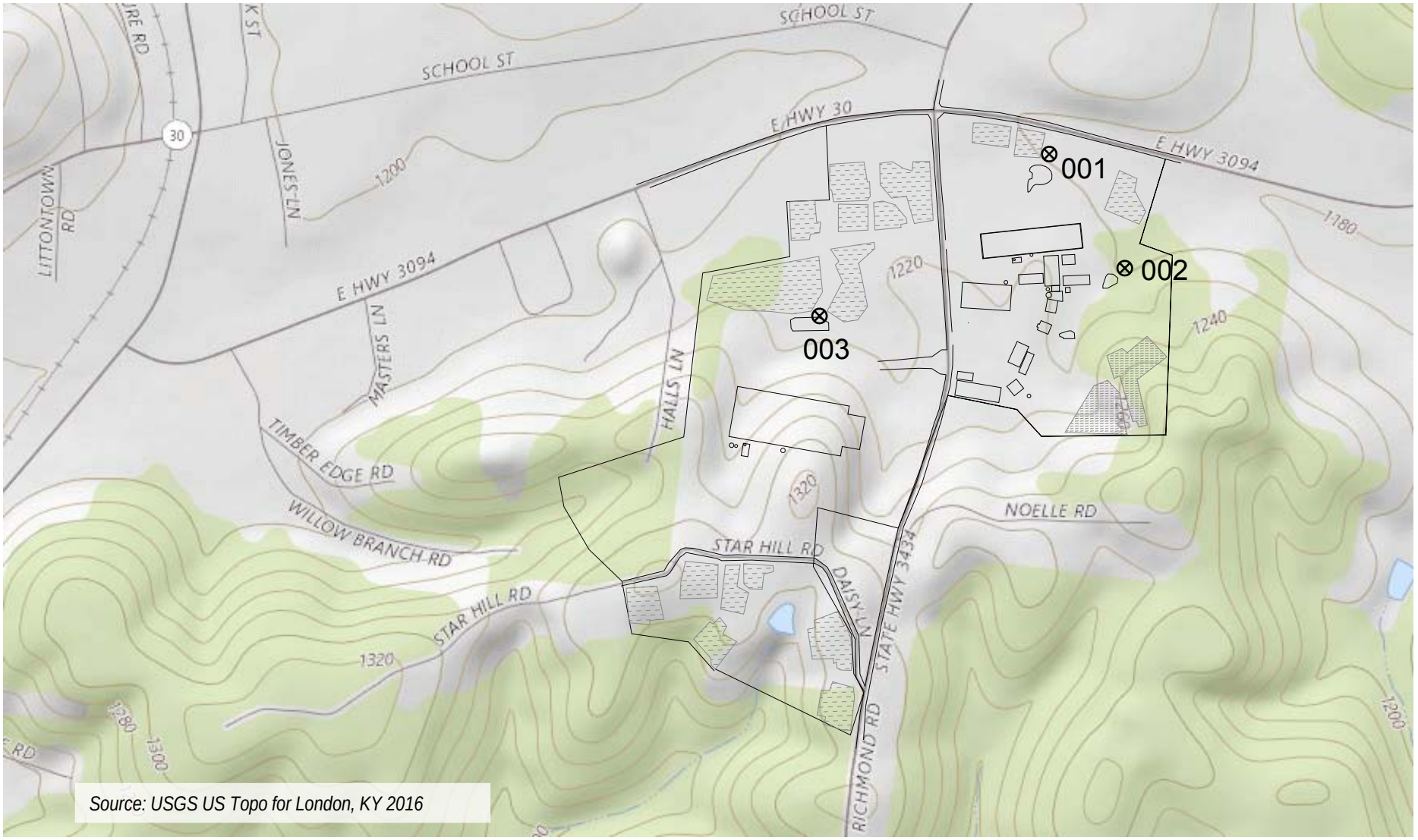
Robinson Stave Company
1812 HWY 3434
East Bernstadt, KY 40729
AI No. 2591

Location Map

Drawing Date: 17OCT17

Drawn by: PR

Figure 1



CEDAR CREEK ENGINEERING INC
Winchester, Kentucky

Robinson Stave Company
1812 HWY 3434
East Bernstadt, KY 40729
AI No. 2591

Site Plan
Outfall Locations

Drawing Date: 5OCT17

Drawn by: PR

Figure 2

NOTES:

1) This Certification was prepared for the entity(ies) named in the title block hereon and does not extend to any other entity(ies), unless recertified by the Surveyor.

2) This Tract is subject to all right-of-ways, easements, covenants and/or restrictions.

3) This Plat of Survey is not valid unless the original signature and seal are attached. Any reproduction or variance by electronic or any other means is not considered issued by the Surveyor.

4) This Plat of Survey represents a boundary survey and complies with 201 KAR 18:150.

5) All field work pertaining to the Survey as shown hereon was complete as of December 13, 2017.

6) All trees shown hereon were marked with 2 sets of 3 hacks this survey.

7) Powder House Road (as referenced in Deed Book 645 at Page 372 and Deed Book 632 at Page 191) is no longer in use and only the remnants of an old road bed remain, as illustrated. The last record source of title for this road as shown hereon is Star Coal Company (Deed Book "V" at Page 105, dated October 31, 1901).

8) All the illustrated buildings, ponds, stave areas, wooded areas, and gravel drives were drawn from aerial photos.

Figure 3

Property Boundary Acreages Summary

Robinson Properties Rental, LLC
Tract 1: 26.35 Acres (by survey)
Tract 2: 4.59 Acres (by survey)
Tract 3: 20.33 Acres (by survey)
Tract 4: ± 20 Acres (by deeds plots, not surveyed)

TOTAL: 51.27 Acres (by survey)
+ 20 Acres (by deeds plots, not surveyed)
± 71.27 Acres

Robinson Stave, Inc.
Tract 7: 4.15 Acres (by survey)
Tract 8: 2.0 Acres (by deed, not surveyed)

TOTAL: ± 6.15 Acres

William Joe Robinson
Diane Robinson Reynolds
Ronnie Robinson
Deborah Robinson Nantz
Tract 5: 3.04 Acres (by survey)

William Joe Robinson
Tract 6: 3.36 Acres (by survey)

Grand Total: ± 83.82 Acres

Basis for meridian,
Magnetic North as observed
on the Property surveyed
herein along
Kentucky Highway 3434
on October 19, 2017

0' 100' 200'
GRAPHIC SCALE

Curve Table

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	196.48'	500.00'	N 56°37'45" E	195.21'
C2	119.64'	100.00'	N 43°33'07" E	112.63'
C3	37.15'	25.00'	N 60°35'53" E	33.83'
C4	80.47'	75.00'	S 58°36'26" E	76.66'
C5	65.37'	105.00'	N 71°30'32" W	64.31'
C6	20.71'	55.00'	N 88°28'07" W	20.58'
C7	29.10'	55.00'	S 39°07'35" W	28.76'
C8	85.40'	70.00'	S 42°52'31" W	80.20'
C9	444.78'	1870.53'	N 82°11'42" E	443.73'
C10	420.53'	1870.53'	S 83°19'29" E	419.64'

Stave Storage Areas

Area 1a	138,646 Sq. Ft.
Area 1b	209,843 Sq. Ft.
Area 2	25,602 Sq. Ft.
Area 3	83,400 Sq. Ft.
Area 3a	46,420 Sq. Ft.
Area 4	120,366 Sq. Ft.
Area 4a	13,890 Sq. Ft.
Area 4b	8,278 Sq. Ft.
Area 5	20,359 Sq. Ft.
Area 6	157,117 Sq. Ft.
Area 6a	17,825 Sq. Ft.
Area 7	75,210 Sq. Ft.
TOTAL	916,956 Sq. Ft.

Log Pile Storage Areas

Area 8	212,555 Sq. Ft.
Area 9	65,858 Sq. Ft.
TOTAL	278,413 Sq. Ft.

LEGEND

- 1/2" or 5/8" diameter X 18" long rebar with a blue plastic cap stamped "K WILSON, PLS 2834" or a 5/8" diameter X 18" long rebar with a yellow plastic cap stamped "KEN WILSON, PLS 2834" (set this or previous survey)
- 2" diameter steel pipe (found)
- 1/2" diameter rebar with no cap (found)
- 1/2" diameter rebar with a yellow plastic cap stamped "SS, 3121" (found)
- Tree (diameter and species as noted)
- Fence Post (found, type as noted)
- Road Meander Point (no monument set)
- Inaccessible Point (no monument set)
- Boundary Line
- Adjoining Boundary Line (not surveyed, plotted from records)
- Approximate Edge of Pavement / Gravel
- Approximate Edge of Dirt Road
- Wire Fence
- Overhead Power Lines
- Approximate Center of Branches / Drains
- Approximate Stave Storage Areas
- Approximate Future Stave Storage Areas
- Approximate Log Pile Storage Areas
- Approximate Location of the Remnants Powder House Road (see review 7)
- Approximate Concrete Area

CERTIFICATE OF ACCURACY

I hereby certify this Plat depicts a Survey completed by me and/or under my direct supervision by the method of random traverse with side shots. The unadjusted precision ratio of the traverse is 1:12,766 and was not adjusted. This is an "Urban" Survey which meets or exceeds all applicable requirements.

Wm Kenneth Wilson, PE, PLS #2834 — Date

Revised 09/19/18: To Show Proposed Project

A Survey of a Part of the Property and Surveyed for:

Robinson Properties Rental, LLC
1750 Highway 3434, East Bernstadt, Kentucky 40729

Robinson Stave, Inc.
1812 Highway 3434, East Bernstadt, Kentucky 40729

William Joe Robinson
1851 Highway 3434, East Bernstadt, Kentucky 40729

William Joe Robinson
Diane Robinson Reynolds
Ronnie Robinson
Deborah Robinson Nantz
P.O. Box 676, East Bernstadt, Kentucky 40729

Wm Kenneth Wilson
Engineer • Surveyor • Project Manager
1005 West 5th Street, P.O. Box 1169, London, Kentucky 40743-1169
email: kenwilsonpe@windstream.net Telephone: (606) 862-7612

DATE: 12/11/17
DRAWN BY: C.R.F. / J.L.P.
CHECKED BY: W.K.W.
SCALE 1" = 100'
REVISED: 09/19/18
SHEET NUMBER 1 of 1

STORMWATER INSPECTION CHECKLIST

Robinson Stave Company

1812 HWY 3434

East Bernstadt, Kentucky

Inspection Item	Yes/No	Note
Are stormwater discharges observed?		
If there is a stormwater discharge, is there any sheen or other obvious contamination present?		
Are there any areas where erosion is a problem?		
Is there any fuel, oil or other spills/stains on the parking lot or other outdoor areas that need to be cleaned up?		
Are all stormwater drains, ditches or other controls free from debris and in good working order?		
Are any vegetated areas eroded to the extent that soil and sediment can impact stormwater?		
Are spill kits present with proper supplies?		
Is there any waste, chemicals or other materials stored outdoors that could contact and contaminate stormwater?		
Are any wastes, batteries or drip-prone products stored indoors but not in/on spill containment?		
Are any un-labeled product containers on site?		
Are there any non-stormwater discharges or new sources of stormwater impact that were not identified in SWPPP?		
Are there any other suggested preventive or corrective actions as a result of the inspection?		

Name: _____

Signature: _____ Date: _____

Clean Water Commitment

Robinson Stave Company operates the East Bernstadt facility under an industrial storm water permit from the Kentucky Department for Environmental Protection, and maintains a Storm Water Pollution Prevention Plan to meet the requirements of that permit.

Those requirements are designed to keep sediment, oil and grease, and other pollutants out of natural waterways.

Robinson Stave is committed to a clean environment, and needs your help to identify potential sources of pollution, strive to eliminate them, and report conditions that represent a threat to the environment.

STORMWATER POLLUTION PREVENTION

1812 HWY 3434

East Bernstadt, KY 40729

Information for Employees

Prepared by:

CEDAR CREEK ENGINEERING

CedarCreekEngineering.com

Do's and Don'ts

Do:

- recognize environmental hazards
- clean up leaks and spills promptly
- know where to find the spill kit
- report problems

Don't:

- wash chemicals into storm drains
- stockpile bark chips in the rain
- let dust and debris accumulate

Sources of Pollution

Wood Bark – When stormwater comes in contact with bark from the white oak tree, the water can become discolored and carry sediment from the bark into streams. Make sure these materials are transferred carefully, and stored properly avoid contact with stormwater. Sweep up before sediment becomes a problem.

Erosion – Erosion not only results in unwanted sediment in streams, but can lead to costly repairs. Don't let erosion go unchecked. Any project involving excavation, grading, or other land disturbance requires measures to reduce impacts to stormwater, such as the use of straw bales, silt fence or detention ponds.

Other Sources – Oils, cleaners, battery acid and other fluids can pollute rivers and streams. Report leaking equipment, and clean up or report spills immediately. Spill kits are located at the Stave Mill and at the Cooperage.

Who to Call

Emergency:

Call 911

REPORT :

- LEAKS AND SPILLS
- EROSION
- EQUIPMENT MALFUNCTIONS

➢ William Larkey 606-682-7712

EMPLOYEE TRAINING RECORD

I have read and understand Robinson Stave Company's "Stormwater Pollution Prevention -- Information for Employees."

Name (Print)	Signature	Date