



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)

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Certification

OFFICIAL STATE USE ONLY Site #: Permit #:

Section 1. Applicant Information (individual responsible for site, signs certification below)

Applicant Name (company or individual): Domtar Paper Company, LLC SOS #: 535141 Status: N/A
Primary Contact/Signatory: W. Martin Barfield Signatory's Title or Position: Mill Manager
Mailing Address: 100 Clinchfield Street City: Kingsport State: TN Zip: 37660
Phone: 423-247-7111 Fax: 423-378-5762 E-mail: marty.barfield@domtar.com

Section 2. Alternate Contact/Consultant Information (a consultant is not required)

Alternate Contact Name:
Company: Title or Position:
Mailing Address: City: State: Zip:
Phone: Fax: E-mail:

Section 3. Fee (application will be incomplete until fee is received)

No Fee Fee Submitted with Application Amount Submitted: \$ 500
Current application fee schedules can be found at the Division of Water Resources webpage at:
https://www.tn.gov/environment/permit-permits/water-permits/1/aquatic-resource-alteration-permit-arap.html
or by calling (615) 532-0625. Please make checks payable to "Treasurer, State of Tennessee".
Billing Contact (if different from Applicant): Name: Email:
Address: Phone:

Section 4. Project Details (fill in information and check appropriate boxes)

Site or Project Name: Domtar Kingsport Mill Wastewater Treatment Plant Nearest City, Town or Major Landmark: Kingsport
Street Address or Location (include zip): 575 W. Industry Drive Kingsport, TN 37660
County(ies): Sullivan MS4 Jurisdiction: Latitude (dd.dddd): 36.5461
Longitude (dd.dddd): -82.5738
Resources Proposed for Alteration: [X] Stream / River [] Wetland [] Reservoir
Name of Water Resource (for more information, access http://tdeconline.tn.gov/dwr): South Fork Holston River
Brief Project Description (a more detailed description is required under Section 8):
Repairing waste water transfer pipe across the river.

Does the proposed activity require approval from the U.S. Army Corps of Engineers, the Tennessee Valley Authority, or any other federal, state, or local government agency? [X] Yes [] No
If Yes, provide the permit reference numbers:
Is the proposed activity associated with a larger common plan of development: [] Yes [X] No
If Yes, submit site plans and identify the location and overall scope of the common plan of development.
Plans attached? [] Yes [] No
If applicable, indicate any other federal, state, or local permits that are associated with the overall project site (common plan of development) that have been obtained in the past (e.g., construction general permit and/or other ARAP):
TVA No. 33074

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| | |
|--|-----------------------------|
| Section 5. Project Schedule (fill in information and check appropriate boxes) | |
| Proposed start date: 11/11/20 | Estimated end date: 1/20/21 |
| Is any portion of the activity complete now? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| If yes, describe the extent of the completed portion: | |

The required information in Sections 6-11 must be submitted on a separate sheet(s) and submitted in the same numbered format as presented below. If any question is not applicable, state the reason why it is not applicable.

| Section 6. Description | Attached Yes No |
|---|--|
| 6.1 A narrative description of the scope of the project | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 6.2 USGS topographic map indicating the exact location of the project (can be a photographic copy) | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 6.3 Photographs of the resource(s) proposed for alteration with location description (photo locations should be noted on map) | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 6.4 A narrative description of the existing stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 6.5 A narrative description of the proposed stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| 6.6 In the case of wetlands, include a wetland delineation with delineation forms and site map denoting location of data points | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| 6.7 A copy of all hydrologic or jurisdictional determination documents issued for water resources on the project site | <input type="checkbox"/> <input checked="" type="checkbox"/> |

| Section 7. Project Rationale | Attached Yes No |
|---|--|
| Describe the need for the proposed activity, including, but not limited to the purpose, alternatives considered and rationale for selection of least impactful alternative, and what will be done to avoid or minimize impacts to water resources | <input checked="" type="checkbox"/> <input type="checkbox"/> |

| Section 8. Technical Information | Attached Yes No |
|---|--|
| 8.1 Detailed plans, specifications, blueprints, or legible sketches of present site conditions and the proposed activity. Plans must be 8.5 x 11 inches. Additional larger plans may also be submitted to aid in application review. The detailed plans should be superimposed on existing and new conditions (e.g., stream cross sections where road crossings are proposed) | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 8.2 For the proposed activity and compensatory mitigation, provide a discussion regarding the sequencing of events and construction methods | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 8.3 Depiction and narrative on the location and type of erosion prevention and sediment control (EPSC) measures for the proposed alterations | <input checked="" type="checkbox"/> <input type="checkbox"/> |

| Section 9. Water Resources Degradation (degree of proposed impact) |
|--|
| <p>Note that in most cases, activities that exceed the scope of the General Permit limitations are considered greater than <i>de minimis</i> degradation to water quality.</p> <p>Please provide your basis for concluding the proposed activity will cause one of the following levels of water quality degradation:</p> <p><input checked="" type="checkbox"/> a. <i>De minimis</i> degradation, no appreciable permanent loss of resource values</p> <p><input type="checkbox"/> b. Greater than <i>de minimis</i> degradation (if greater than <i>de minimis</i> complete Sections 10-11)</p> <p>For information and guidance on the definition of <i>de minimis</i> and degradation, refer to the Antidegradation Statement in Chapter 0400-40-03-.06 of the Tennessee Water Quality Criteria Rule: https://publications.tnsosfiles.com/rules/0400/0400-40/0400-40.htm</p> <p>For more information on specifics on what General Permits can cover, refer to the Natural Resources Unit webpage at: https://www.tn.gov/environment/permit-permits/water-permits/1/aquatic-resource-alteration-permit--arap-.html</p> |

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| Section 10. Detailed Alternatives Analysis | | Attached | |
|--|---|--------------------------|--------------------------|
| | | Yes | No |
| 10.1 | Analyze all reasonable alternatives and describe the level of degradation and permanent loss of resource value caused by each alternative. Assessment must consider options other than the "Preferred" and "No Action" alternatives. Provide associated rationale for selecting or rejecting all alternatives considered and demonstration that the least impactful practicable alternative was selected. | <input type="checkbox"/> | <input type="checkbox"/> |
| 10.2 | Discuss the social and economic consequences of each alternative | <input type="checkbox"/> | <input type="checkbox"/> |
| 10.3 | Demonstrate that the degradation associated with the preferred alternative will not violate water quality criteria for uses designated in the receiving waters, and is necessary to accommodate important economic and social development in the area | <input type="checkbox"/> | <input type="checkbox"/> |

| Section 11. Compensatory Mitigation | | Attached | |
|-------------------------------------|--|--------------------------|--------------------------|
| | | Yes | No |
| 11.1 | A detailed discussion of the proposed compensatory mitigation. Provide evidence of credit reservation if proposing to utilize a third-party provider. | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.2 | Analysis of any proposed appreciable loss of resource value using the TN Stream Mitigation Guidelines. Provide Stream Quantification Tool (SQT) results if applicable. Include Existing Condition Score (ECS) and debit/credit calculations. | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.3 | Describe how the compensatory mitigation would result in no net loss of resource value | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.4 | Provide a detailed monitoring plan for the compensatory mitigation site if permittee-responsible project is proposed | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.5 | Describe the long-term protection measures for the compensatory mitigation site if permittee-responsible project is proposed (e.g., deed restrictions, conservation easement) | <input type="checkbox"/> | <input type="checkbox"/> |

| Certification and Signature | | | |
|---|---|---|----------------------------------|
| <p>An application submitted by a corporation must be signed by a principal executive officer; from a partnership or proprietorship, by the partner or proprietor respectively; from a municipal, state, federal or other public agency or facility, the application must be signed by either a principal executive officer, ranking elected official, or other duly authorized employee.</p> <p><i>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.</i></p> | | | |
| <p><u>Ronald J. Nussman</u> Printed Name</p> | <p><u>Kingsport Controller</u> Official Title</p> | <p><u>Ronald J. Nussman</u> Signature</p> | <p><u>11/6/2020</u> Date</p> |

Note that this form must be signed by the principal executive officer, partner or proprietor, or a ranking elected official in the case of a municipality; for details see **Certification and Signature** statement above. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed ARAP Application form (keep a copy for your records) to the appropriate EFO for the county(ies) where the proposed activity is located, addressed to **Attention: ARAP Processing**. You may also electronically submit the complete application and all associated attachments to water.permits@tn.gov.

| EFO | Street Address | Zip Code | EFO | Street Address | Zip Code |
|-----------|--------------------------------|------------|--------------|---------------------------------|----------|
| Memphis | 8383 Wolf Lake Drive, Bartlett | 38133-4119 | Cookeville | 1221 South Willow Ave. | 38506 |
| Jackson | 1625 Hollywood Drive | 38305-4316 | Chattanooga | 1301 Riverfront Pkwy., Ste. 206 | 37402 |
| Nashville | 711 R S Gass Boulevard | 37243 | Knoxville | 3711 Middlebrook Pike | 37921 |
| Columbia | 1421 Hampshire Pike | 38401 | Johnson City | 2305 Silverdale Road | 37601 |



Attachment 1: Waste Water Transfer Line Repair

6.1 Description of Project

The pipe that transfers water from the Domtar Kingsport Mill's primary clarifier to the Aerated Stabilization Basin (lagoon) failed on the south side of the river (South Fork of the Holston River). To repair the piping, a section of the line that crosses the river will have to be replaced.

In order to gain access to perform the line repairs on the south side of the river, the bank will have to be temporarily cut back to make a shallow angle slope to be able to safely get an excavator near the edge of the river. This bank will be approximately 30 feet wide, sloped on the sides and approximately 40 feet long. We estimate we will have to remove 450 yards of material to make this slope, and uncover the failed end of the pipe. The material that is removed will be re-used on the bank once the pipe repairs have been finished. See Photos 1 and 2 for reference.

A similar approach will be done on the north side of the river. However, the bank will have to be temporarily cut back at a different approach as we have to work around the utility tower that is present on this bank. The same approach will be made, but due to the different angle, the sloped area will be slightly larger. We estimate the slope to be 35 feet wide (sloped on the edges) and around 55 feet long. We estimate we will have to remove 650 yards of material to make this slope and uncover the pipe. See Photos 3 and 4 for reference.

Once the slope is complete on the North bank, we will use an excavator or dozer to remove the failed section of pipe from the river. The pipe will be inspected to better understand the cause of failure. This section of pipe will not be reused.

A new section of pipe will be fabricated on the south side of the river. The new pipe that crosses the river bed will be of similar construction as the original pipe. It will have a corrosion inhibiting protective coating to extend the life of the pipe. After the pipe section has been constructed, it will be pulled across the river using a cable and winch system. The pipe will be laid in the same location as the original section. See Photo 5 for reference.

Once the pipe has been installed, temporary coffer dams will be built on each bank of the river. The coffer dams will be built using large stone (rip-rap) to provide the basic width and height, then lined with heavy plastic, and covered with small stone. We anticipate the coffer dam on the South side of the river to take 230 tons of materials to construct. The dam on the north side will take approximately 570 tons of materials to construct.

After the coffer dams have been built, the water on the bank side of the dams will be pumped back to the river to gain access to the ends of the pipes. Once the water has been pumped out, which will likely require continuous pumping, the new section of piping will be connected to the existing pipe on each bank. This may require removing more soil to expose the existing pipe. When the line has been fully repaired, it will be hydrostatically tested.

Following a successful hydrostatic test, the coffer dams will be removed. The sloped banks will be re-established by returning the material that had been removed. Fabric and rip-rap will be installed on the

banks as required to ensure no erosion. When weather permits, the banks will be seeded with grass seed. This will be done on both sides of the river.

Photo 1: South Bank of the River



Photo 2: South Bank



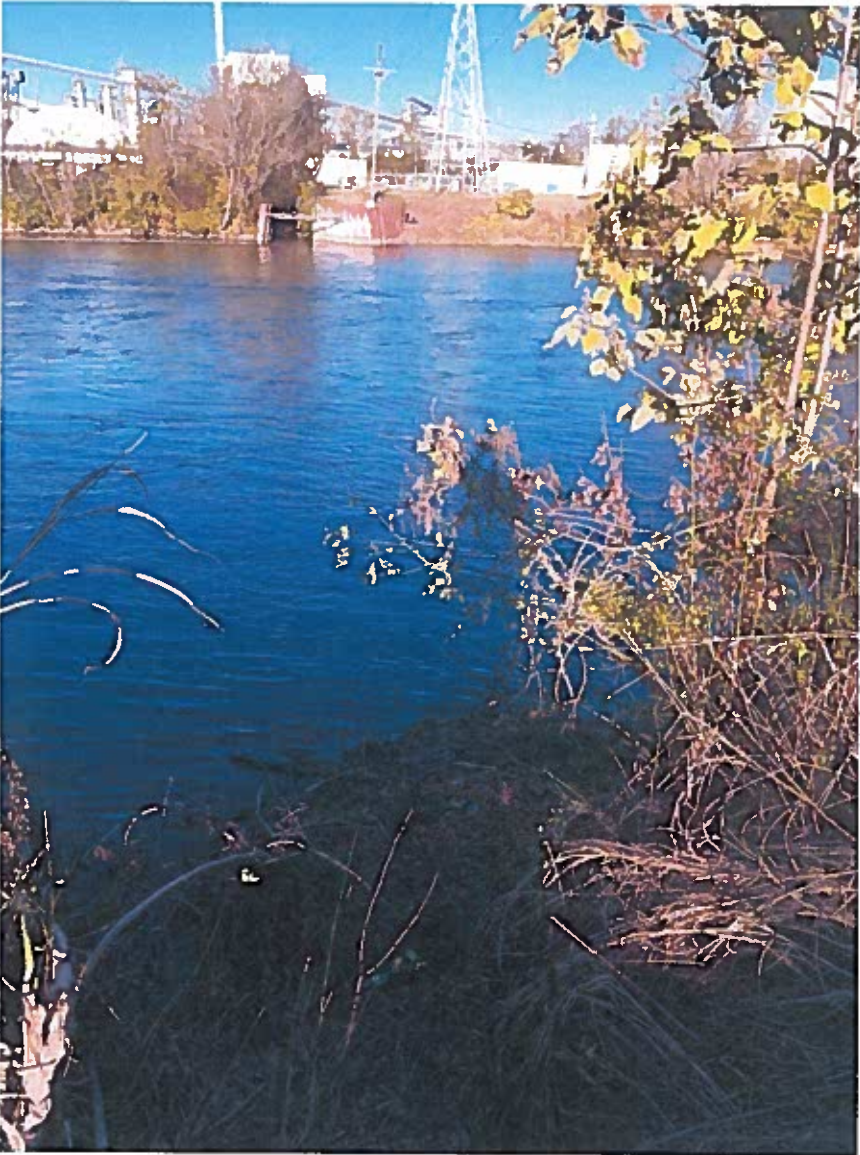
Photo 3: North Bank of River



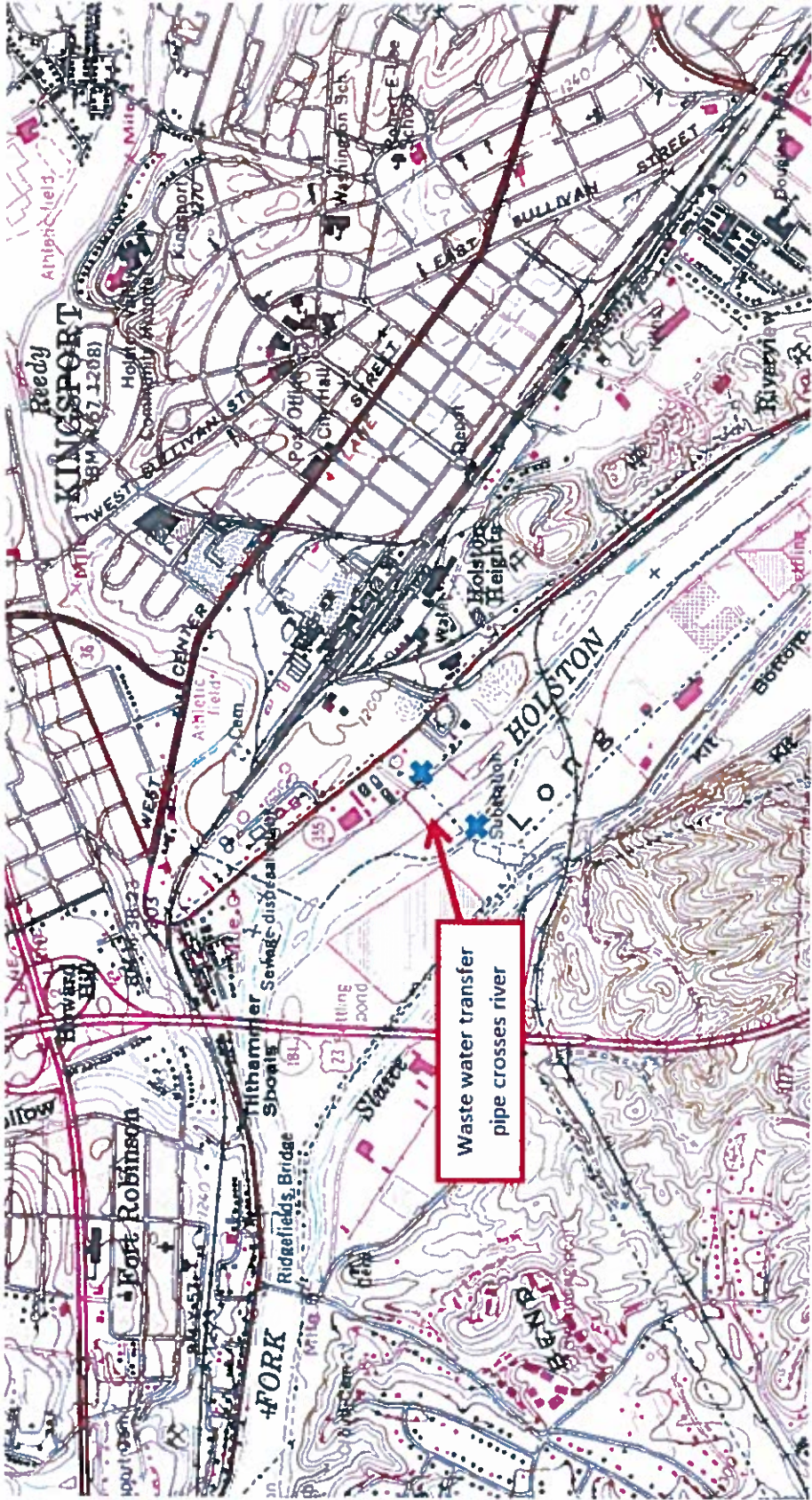
Photo 4: North bank



Photo 5: From the South side to the North side where line crosses



6.2 Topographical Map



✕ Photos taken at each side of the river

6.3 Photographs

See Photos 1 – 5 in Section 6.1

6.4 Narrative description of existing stream

This section of South Fork of the Holston River is fairly shallow and is possible to wade across during low flows (low TVA dam generation). It is approximately 300 feet across the river in this area. The banks are lined with grass, brush and trees.

6.5 Narrative description of proposed stream

The stream will not be altered from existing conditions.

6.6 N/A

6.7 N/A

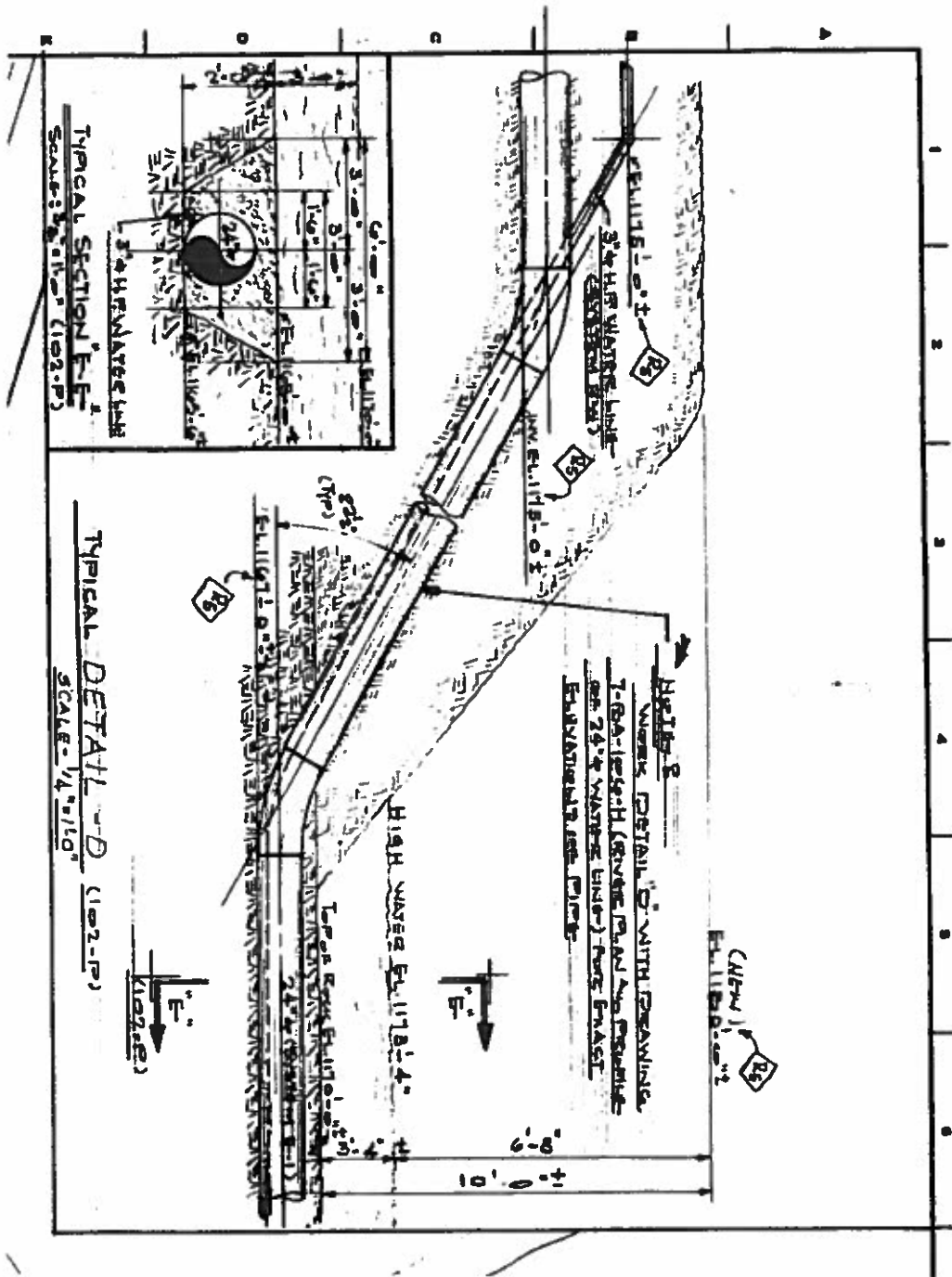
7 Project Rationale

The waste water transfer line repairs are necessary for the Domtar Kingsport Mill to pump waste water from the primary clarifier and complete the biological treatment in the ASB before discharge to the river.

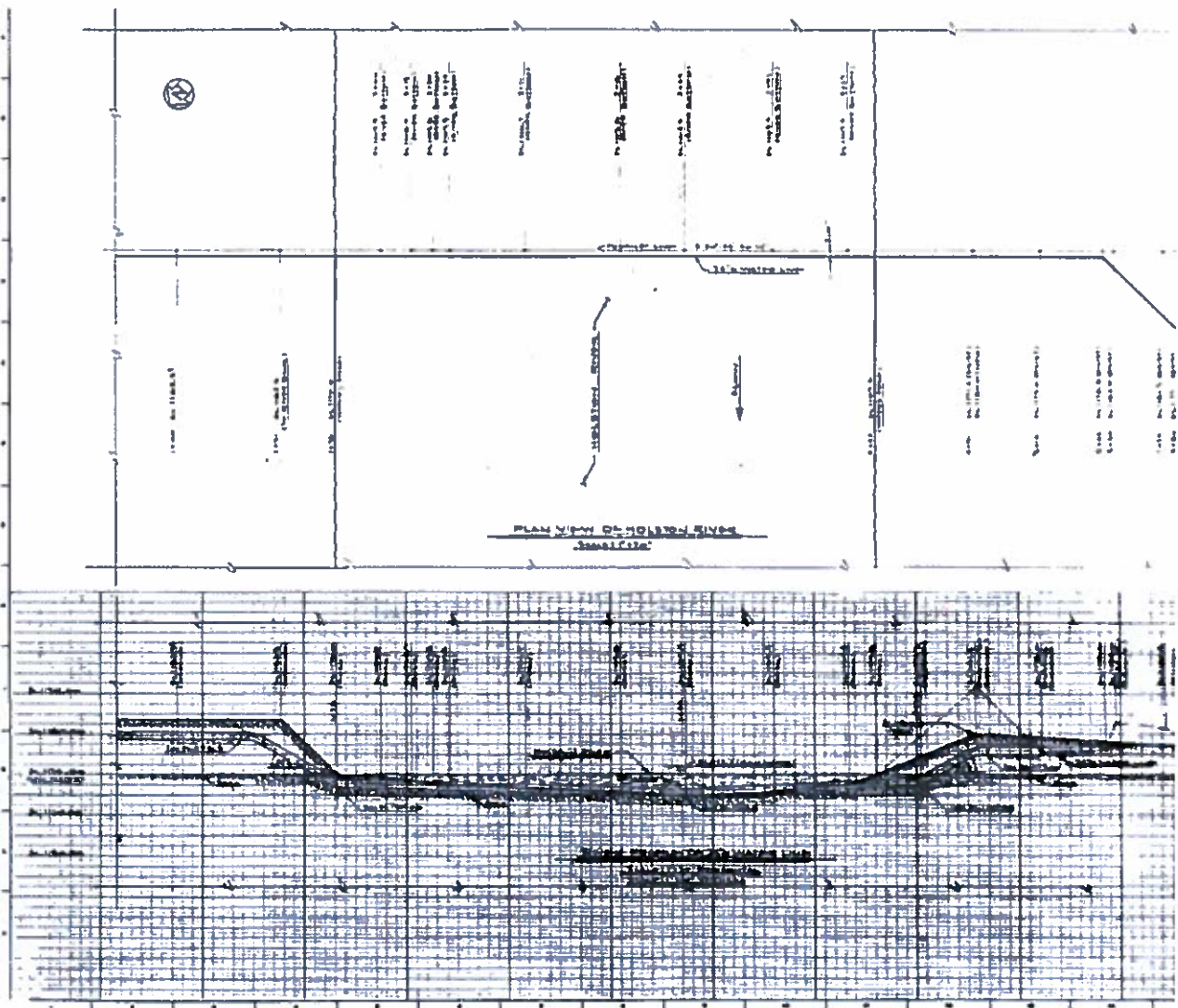
8.1 Detailed plans

See Section 6.1 for the narrative and the drawings are below

Drawing 1: Original pipe layout at river bank – new pipe section will be connected to this existing pipe



Drawing 2: Layout of waste water pipe across river - new pipe section will be installed in same location



10 Alternatives Analysis

No alternatives were considered as this is a replacement of the existing pipe.

11 N/A



Domtar Paper Company, LLC
 100 Kingsley Park Drive
 Fort Mill, SC 29715-6475

JP MORGAN CHASE BANK, N.A.
 SYRACUSE NY

50-937
 213

PAY EXACTLY FIVE HUNDRED AND NO/100 DOLLARS

| | |
|--|--------------|
| CHECK DATE | CHECK NUMBER |
| 11/05/2020 | 51577659 |
| NOT NEGOTIABLE AFTER 6 MONTHS FROM DATE OF CHECK | |

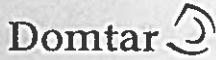
TO THE ORDER OF

STATE OF TENNESSEE TREASURER
 DIV OF FISCAL SERVICES - FEE SECTION
 312 ROSA L PARKS AVE - 10th FL
 NASHVILLE TN 37243

\$*****F**500.00

BY DOMTAR PAPER COMPANY, LLC
 UNIQUE CHARACTER FACSIMILE SIGNATURE

⑈51577659⑈ ⑆021309379⑆ 6301546259509⑈



Domtar Paper Company, LLC
 100 Kingsley Park Drive
 Fort Mill, SC 29715-6475

PLEASE DETACH BEFORE DEPOSITING

ATTACHED IS OUR CHECK IN PAYMENT OF ITEMS LISTED. IF NOT CORRECT, PLEASE CONTACT APPROPRIATE LOCATION.

| | |
|---|--------------------------|
| SUPPLIER NO./PAYMENT DOCUMENT NO. 3155919-1500075854 | CHECK NO. 04-51577659 |
|---|--------------------------|

| LOCATION | INVOICE NO. | REFERENCE NO. | AMOUNT | DEDUCTIONS | NET AMOUNT |
|--|--|---------------|--------|------------|------------|
| | ARAP APPLICATION | | 500.00 | 0.00 | 500.00 |
| | OVERNIGHT TO LOCATION: TN395 Ron Nussman | | | | |
| SEE REVERSE SIDE FOR LOCATION CODE EXPLANATION | | | | | |
| TOTALS ==> | | | 500.00 | 0.00 | 500.00 |