STATE OF VERMONT DEPARTMENT OF TAXES

SCAN SPECIFICATIONS

for

IN114 & IN116

2018/2019 TAX YEAR

SUBSTITUTE FORMS

Substitute forms must be reproduced to match the official forms as closely as possible. All variable data fields must be in absolute positions. We will reject forms our scanning equipment cannot read.

When reconstructing forms, be aware of the following:
- Lines of text in paragraph must break at the exact location as the official forms.
- For all fixed text, use san serif fonts (i.e. Arial). Match the font sizes of the official forms as closely as you can. Use bold fonts as they appear on the official forms.

PAPER AND INK

Paper for substitute forms must be at least 20 lb. white stock and the same size as the Department's original (8 ½ x 11 unless otherwise specified).

VARIABLE DATA FIELDS

USE COURIER 12 POINT FONT FOR ALL DATA FIELDS.

Data placement is specified as exact positions using a 10/6 grid -- 10 spaces per horizontal inch and 6 lines per vertical inch. Follow the grid layout for the variable data fields shown in green.

DO NOT print internal codes, date/time stamps, distribution information, etc. above the barcode or title of the form.

Alpha characters must be **ALL CAPITAL LETTERS** in **variable data fields.**

DOLLAR AMOUNTS

- Do not use commas as separators.
- Amounts are right justified.

TEST CASES AND SAMPLE DATA

Test cases can be found on FTA SES website. The test cases are designed to look for specific issues that we have experienced with each form. It is imperative that you use all the information provided in each test case, not just the name and address. **If the sample(s) submitted do not use the test case information provided, the forms will be rejected.**

SUBMITTING FORMS FOR APPROVAL

When submitting forms for approval, please submit one blank form, one of each test cases using the samples posted on the FTA website and one full-field form. Please include your e-mail address in your cover letter. We will give approval/disapproval via e-mail.

Blank forms contain no variable data and should have a barcode where applicable.

Sample data forms must be created using the test cases found on our vendors-only website. If our test cases are not used, then submitted forms will not be tested or approved.

Full-field forms are like those shown in these specifications. Each field is filled with numbers and/or letters to show the maximum field lengths while conforming to specifications. Example: If a field is a numeric field, do not fill with letters.

The sample forms should be sent to:

(via UPS, FedEx, DHL, etc., use:)   **(via US Mail, use:)**

Ann Lane, Vendor Liaison   Ann Lane, Vendor Liaison
Vermont Department of Taxes   Vermont Department of Taxes
133 State Street   PO Box 429
Montpelier, VT 05633-1401   Montpelier, VT 05601-0429

RELEASE OF PROGRAM

Vendors should notify the Department by e-mail (*ann.lane@vermont.gov*) when their program is released.

SCAN SPECIFICATIONS

LAYOUT

- The form was designed on a 10x6 grid.

TARGETS/ANCHORS

- Targets are required on the forms. Exact placement of targets is required. Follow grid layout for size and positioning.

- There are three targets on each page as shown below.

BARCODE

- This is specific to the form.
- The last two digits of the barcode represent your VT vendor number. If you need a 2-digit ID number, please contact Ann Lane at (802) 828-6536 or by e-mail at *ann.lane@vermont.gov*
- Follow grid layout for positioning.

NEW! OCR SCAN LINE SPECIFICATION FOR INCOME PAYMENT VOUCHER (IN-114 & IN-116)

Scan line:
- Must be printed in OCR-A font at 10 characters per inch.

Scanline structure – IN-114, IN-116 (length 45)

Field Name	Number of Characters	Description
Voucher Type	3	IN-114 = EST IN-116 = RTN
ID	11	9 length, (SSN) leading 0's
Tax Year	4	YYYY
Payment Amount	14	Numeric, (no decimal, leading 0's)
Last Name	10	First 10 characters of last name, leading 0's
Vendor Number	2	Is the last 2 digits in the barcode
N/A - Check Digit	1	Scanline Check Digit (1 digit, see table at the end of this section)

Sample IN-114 ScanLine: EST00009123456201800000000000075000TYLERMOOREWW4

Check Digit Logic
Luhn Modulus 10 Check Digit with Alpha

The Check Digit is computed using Luhn Modulus 10 as follows:

1. Convert all alpha characters to numeric values. No punctuation.
- Each Alpha character is converted to its EBCDIC numeric value (see following table):

A	B	C	D	E	F	G	H	I
J	K	L	M	N	O	P	Q	R
	S	T	U	V	W	X	Y	Z
1	2	3	4	5	6	7	8	9

Use For Loop with If/ElseIf to walk through scanline and change all alphas to numbers.

- o Example:
  For i = 1 to Len(ScanLine)
  If(ScanLine(i) = "A" or ScanLine(i) = "J" or ScanLine(i) = 1) then 1
  ElseIf (ScanLine(i) = "B" or ScanLine(i) = "K" or ScanLine(i) = "S" or ScanLine(i) = 2) then 2
  …
  ElseIf(ScanLine(i) = "I" or ScanLine(i) = "R" or ScanLine(i) = "Z" or ScanLine(i) = 9) then 9
  Else 0
  Next

2. Multiply each digit in the converted scanline by a weighting factor. The weighting factors are based on digit's position in the scanline.   Starting from the right most digit (including the check digit) double every second digit until you have reached the left most digit.

Sample Number String = 10134567890000012004
Apply weights from **right to left**

1	0	1	3	4	5	6	7	8	9	0	0	0	0	0	1	2	0	0	4
1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2

Multiply Digits by Weights

	1	0	1	3	4	5	6	7	8	9	0	0	0	0	0	1	2	0	0	4
X	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
	1	0	1	6	4	10	6	14	8	18	0	0	0	0	0	2	2	0	0	8

- ■ Use For loop to perform weighting from Right to Left
  - o For i = Len(ScanLine) to 1
  If ScanLine(i) Mod 2 = 0 Then Weight(i) = 2
  Else Weight(i) = 1

3. Sum the digits that resulted from the multiplication with the weighting factors.

If product of a weighting factor multiplication is 10 or higher, then Sum the Digits of the Products (10 would be 1+0, 14 would be 1+4, 18 would be 1+8)

From above example: 1+0+1+6+4+1+0+6+1+4+8+1+8+0+0+0+0+0+2+2+0+0+8 = 53

- ■ Inside Same For Loop use If/Else to determine Sum
  - o If ScanLine(i) x Weight(i) > 9
  then Sum = Sum + ((ScanLine(i) x Weight(i)) – 9)
  Else Sum = Sum + (ScanLine(i) x Weight(i))
  Next

4. Subtract the sum from the next highest multiple of 10. The result is the Check Digit.

For a Sum of 53:   60
                          -53
                          7 = Check Digit

- ■ Determine Check Digit from Sum
    - ○ CheckDigit = 10 - Right(Sum, 1)
    - If CheckDigit = 10 Then CheckDigit = 0

Mail voucher and payment to:

Vermont Department of Taxes
PO Box 1779
Montpelier, VT 05601-1779

Payment Due Dates	
1st Quarter	APR 15, 2019
2nd Quarter	JUN 15, 2019
3rd Quarter	SEP 15, 2019
4th Quarter	JAN 15, 2020

Pay your income taxes online

Did you know? You can make your estimated income tax payment online using ACH debit or your credit card. Visit us on the web at **www.myVTax.vermont.gov** and select "✓Make payments" to get started.

Calculate your payment using the "Taxpayer's Worksheet."

Record your payments.

Taxpayer's Worksheet - Keep for your records

100% of 2018 Tax Liability divided by 4 $_____

OR

90% of 2019 Tax Liability (calculated below)

Line 1	Estimated 2019 Vermont Taxable Income	1.	$_____
Line 2	Estimated 2019 Vermont Tax: Use 2019 preliminary tax schedules	2.	$_____
Line 3	Estimated 2019 Vermont Tax with Adjustments. See instructions for Form IN-111, Line 10	3.	$_____
Line 4	Estimated Income Adjustment. See instructions for Form IN-111, Line 15	4.	$_____%
Line 5	Adjusted Vermont Tax (Multiply Line 3 by Line 4)	5.	$_____
Line 5a	Expected 2019 Vermont Tax Withholding	5a.	$_____
Line 6	Subtract Line 5a from Line 5	6.	$_____
Line 7	2019 ESTIMATED TAX LIABILITY	7.	$

You can check the status of your estimated payments online at **www.myVTax.vermont.gov** under "Individual."

Vermont Individual Income Estimated Tax Payment 2019 Voucher IN-114

DEPT USE ONLY

191141 1WW

Please PRINT in BLUE or BLACK INK

Taxpayer's Last Name	First Name	MI	Social Security Number

Spouse's or CU Partner's Last Name	First Name	MI	Spouse's or CU Partner's Social Security Number

Mailing Address   Tax Year

City   State   ZIP Code   For Department Use Only

Foreign Country (if not United States)

scanline

Amount of this Payment $ .00   Form IN-114
                                                              Rev. 10/18

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EST0012345678920190099999999900BROOMFIELDWW5

Vermont Income Tax
Payment Voucher
2018 Voucher IN-116

DEPT USE ONLY

Please PRINT in BLUE or BLACK INK

* 1 8 1 1 6 1 1 W W *

Taxpayer's Last Name	First Name	MI	Taxpayer's Social Security Number
Spouse's or CU Partner Last Name	First Name	MI	Spouse's or CU Partner's Social Security Number
Mailing Address			Tax Year
City	State	ZIP Code	2018
			For Department Use Only
Foreign Country (if not United States)			

scanline

Amount of this Payment $

.00

Form IN-116
Rev. 10/18

RTN009876543212018000123456789 0000FLETCHERWW8