## APPROVED RESOLUTION 21-03

JANUARY 28, 2021

## CERTIFICATION OF DOMINION VOTING SYSTEMS' MODIFICATION TO DOMINION IMAGECAST EVOLUTION (ICE) v4.14.30 AND THE IMAGECAST PRECINCT (ICP) v4.9.13

WHEREAS, Title II of Article 7 of the Election Law inter alia provides for the examination of and process for approving voting systems and their components for use at elections in the State of New York; and

WHEREAS, Dominion Voting Systems (Dominion) submitted a modification to the ImageCast Evolution (ICE) and ImageCast Precinct (ICP) scanner software; and

WHEREAS, SLI Compliance (SLI) conducted a secondary review of the source code testing performed by Pro V\&V Labs Inc. to ascertain compliance with the provisions of the U.S. Election Assistance Commission's 2005 Voluntary Voting System Guidelines, the State Board's regulations, Part 6209 of 9 NYCRR, and the applicable sections of New York State Election Law; and

WHEREAS, the summary report of SLI Inc. was provided to the Board for consideration and has been duly considered; and

WHEREAS, the New York State Technology Enterprise Corporation (NYSTEC), in collaboration with SLI and the Election Operations Unit, developed a functional testing plan and executed such testing of the submitted modifications; and

WHEREAS the summary report of NYSTEC was provided to the Board, for their consideration and has been duly considered; and

WHEREAS, having considered the summary reports and the results of functional testing conducted, the Election Operations Unit recommends the certification of said system upgrade as herein defined;

- Dominion ImageCast Evolution (ICE) v4.14.30
- ImageCast Precinct (ICP) v4.9.13
; and
WHEREAS, the New York State Board of Elections on October 2, 2019 certified Dominion ICE firmware version 4.14.27 and in conjunction therewith the Operations Unit directed additional mandatory audit procedures pertaining to Dominion ICE Counter Review and such mandatory audit procedures, are included as step 23(e) of the Audit Procedure for 6210.18, version 12 (attached hereto), which remains in full effect; and

WHEREAS, the New York State Board of Elections issued a "Directive on Usage and Deployment of Dominion ImageCast Evolution (ICE) Hardware Upgrade" made on October 25, 2018, which remains in full effect, to wit:
(a) A Dominion ImageCast Evolution (ICE) machine shall not be assigned to serve more than 2,700 registered voters (excluding voters in inactive status); provided however, if more than one such ICE or other scanning device serves the same voters at a poll site, each additional device may be assigned to serve no more than 3,900 registered voters (excluding voters in inactive status), and
(b) Notwithstanding (a) herein, if a single ICE machine is assigned to a poll site and the number of voters served is 2,700 or less, there must be at least two scanners if more than two voters have used the BMD at a prior election at such poll site; and

NOW THEREFORE BE IT RESOLVED that the Commissioners of the New York State Board of Elections do hereby certify the modifications to the Dominion ImageCast Evolution and ImageCast Precinct scanner software as described above.

# Audit Procedure for 6210.18 



# New York State Board of Elections 

40 North Pearl St., Suite 5
Albany, NY 12207
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## 1. BACKGROUND

### 1.1. Purpose and contents of this document

The purpose of this document is to provide guidance on preparing for and performing the audit required by the New York State Election Law Section 9-211 and by regulations in Part 6210.18. Section 2 of this document includes recommendations provided as a result of an analysis of multiple "best practices" and policies and procedures from a number of other states, independent industry experts and Federal guidelines, as well as actual county board experiences over the past several years.

In addition to "best practices" recommendations, Section 3 contains State Board of Elections (SBOE) recommended methods for organizing your voting machine inventory prior to selecting systems for an audit. Section 4 contains three SBOE-approved methods for the random selection of voting systems for an audit.

Finally in Section 5, we provide a step-by-step guide from start to finish, for accomplishing an audit.

### 1.2. New York State Section 9-211 Audit of voter verifiable audit records

Section 9-211 of New York State Election Law contains audit requirements. The text of Section $9-211$ is included in Appendix 2 of this document.

### 1.3. New York State Election Regulations on Post - Election Audits

Section 6210.18 of the NYCRR establishes uniform statewide procedures by which manual hand count audits must be performed of a subset of ballots from each election. The county boards of elections retain the authority to order manual counts of a greater number of records in whole or in part under such other and additional circumstances as they deem warranted. The text of Section 6210.18 is included in Appendix 1 of this document.

### 1.4. Purpose of the Audit

It is important to understand the purpose of the New York State post-election audit. According to Best Practices and Principles for Post-Election Audits (http://www.electionaudits.org/principles), a post-election audit routinely checks voting system performance in contests, regardless of how close margins of victory appear to be. The postelection audit is designed to assess how the electronic voting system performed on Election Day using the actual votes cast by voters. This verifies the accuracy of the voting system and should not be confused with a recanvass which is meant to verify the election results. New York State has specific statutory provisions for the canvass and re-canvass of election results.

Post-election auditing helps verify that the complex voting systems, including central-count systems, in use today are accurately encoding and tallying ballots and that the winners of each election contest are called correctly. However, effective post-election auditing can also serve as a tool for:

- Detecting voting system problems that may require further investigation;
- Revealing when escalation of recounts are necessary to verify election outcomes;
- Finding common errors voters make in marking ballots that might be avoided in future elections with voter education;
- Identifying human errors in the tally process that can be remedied by new procedures in future elections;
- Deterring fraud;
- Providing statistical data to improve future elections or audits;
- Providing for continuous improvements in the conduct of elections; and
- Promoting public confidence in elections.


## 2. Best practices for Preparing for an audit

Detailed steps for preparing for the selection of which voting systems will be included in an audit are detailed in Section 3. Examples of methods for actually conducting a random selection of voting systems that will be included in an audit are explained in Section 4. This section provides recommendations for topics that will need to be discussed and planned, to prepare for and organize an audit.

### 2.1. Preliminary Organizational Work

## Audit Documents

- Prepare all possible audit tally sheets for each voting machine that may be subject to an audit and for each election district that was counted on that machine and, in the case of a primary election, for each political party with a contest to be decided at each election.


## Staffing

- Be sure staffing reflects tasks to be performed and sufficient manager/supervisor oversight.
- Managers
- Numbers of auditing personnel
- Number of auditing teams
- A poll worker participating in the manual tally should not be assigned to tally the results from a precinct in which that individual served as a poll worker on Election Day.
- It is recommended that an Oath of Office be required for all Audit Inspectors and any other audit team members. Here is a sample Audit Inspector oath which can be used for this purpose:


## OATH OF OFFICE

## Swear in Audit Inspector officials as election officials

"I, $\qquad$ (insert name) the undersigned do solemnly swear (or affirm) that I will support the Constitution of the United States of America and the State of New York; and that I will faithfully discharge the duties of the office of Audit Inspector for the County of $\qquad$ according to the best of my ability, that I am a registered voter and resident of such county, that I do not hold any public office, am not a candidate for any office to be voted for by the voters at this election or the spouse, parent or child of such candidate, that I have not been removed or otherwise disqualified as an election worker and am able to speak and read the English language and write it legibly."

Signature: $\qquad$ Date: $\qquad$

## How to prepare ballots for auditing

In reviewing how other states organize their ballots for the audit process we have identified the 'read and mark' method as the best method to use when conducting the NYS post-election audit. This method is explained below:

## READ AND MARK METHOD

In the read and mark method, the bipartisan team of Audit Inspectors sort the ballots secured from the voting system ballot box or other secure container into that machine's election districts, and ballot style piles. An Audit Inspector reads aloud the selections made on each ballot from that machine's election district for each contest and/or ballot proposal. Observers must listen to different names as they are read aloud. An audit team member of the opposite political party than the reader will observe the votes as read aloud to ensure that they have accurately been announced.

As the votes are read aloud, an individual of the opposite political party than the reader will mark the vote on a tally sheet. An individual of the opposite political party than the marker will observe the marks posted to the tally sheet to ensure that they have accurately been marked.

Tallying ballot marks during the audit count shall be completed nearly as practical to the provisions contained in NYS Election Law Section 9-116.

## § 9-116. Tallying ballots; generally.

1. As each vote for any office or position, or upon any ballot proposal, is announced, a clerk, or, if there be no clerks, an inspector, under the scrutiny of a clerk or inspector of opposite political party immediately shall tally it in ink, with a downward stroke from right to left upon the official tally sheet. Each such clerk or inspector, as he or she tallies a vote, shall announce clearly the name of the person for whom he or she tallies it, or that he or she tallies the vote blank or void as the case may be, or, in the case of a ballot proposal, that he or she tallies the vote "yes" or "no". When the name of a person voted for is not printed on the tally sheet, such clerks or inspectors shall write it in full thereon in ink in the place provided therefor.
2. When all the votes upon the same office, position or ballot proposal shall have been canvassed the tally thereof shall be verified by adding together all the votes tallied thereupon. Whenever the total number of votes tallied (including blank and void votes) for any office or party position, divided by the number of persons to be nominated or elected thereto, or tallied for any ballot proposal, does not exactly equal the number of ballots cast (including blank and void ballots), a recanvass must be made immediately in order to correct the error.

In applying this section to a primary election the term "ballots" means the ballots of the party whose tallied votes for an office or party position are counted as above provided. Upon a recanvass the clerks or inspectors must keep the tally in ink from left to right across the previous tally marks.
3. When the errors if any have been corrected such clerks or inspectors shall indicate the last tally opposite each name by forthwith drawing in ink a long horizontal line immediately after the last tally mark opposite such name. Such tally sheets having thus been prepared, verified and closed, such clerks or inspectors shall sign their initials on each sheet, in any blank space thereof.

## CHOOSING NUMBER OF AUDIT INSPECTOR TEAMS

- The more observers and sets of eyes on a single ballot, the greater the certainty of the results.
- Evaluate the audit work to be completed and assign a number of audit teams and audit team supervisors to the task, taking into consideration:
- Total number of voting systems that may be subject to audit;
- Total number of different ballot styles;
- Total number of contests for offices, party positions or ballot proposals at the election; and
- Potential total number of ballots to be audited.


## RULE OF THUMB FOR AUDIT TEAMS

- Aim for at least 2-3 sets of eyes on each ballot to be audited, as well as the recording of each vote.
- Use a 4-person bipartisan team or teams.
- At least two bipartisan team members check the ballot marks and at least two other bipartisan team members mark the vote on the tally sheet and verify the accuracy of those entries.
- All 4 members of the audit team verify and record and check the sums on the audit tally sheets.


## ORGANIZING FOR THE COUNT

Organize the Audit Site
It is critical that the decorum of the audit site is conducive to the important work to be conducted in it. An organized and orderly work space, and as quiet an atmosphere as possible will help ensure the audit teams have an appropriate environment in which they can concentrate and accurately log their findings. Observers will be better able to hear the incremental decisions of the audit teams, and the outcome of the audit. Consider the following as you organize your audit site:

- Tables should be placed at distances from each other sufficient to allow for an adequate path of travel for audit team members and supervisors.
- Sufficient and comfortable seating should be provided.
- Audit team members and supervisors should wear name tags.
- Observers should sign in, and identify whom they represent. Consider identifying observers with a 'Guest Pass' sticker, so that security can be maintained in a crowded and/or active audit site.
- Observers should be able to hear and see the activity of the audit team, but shall not be so close to the team as to hover over them or distract them.
- Be sure adequate rest breaks are taken, to keep the audit team fresh. When breaks are taken, assign a bi-partisan team to guard the ballots and audit team documents until the audit team returns.

Custom audit supplies:

- Audit tally sheets: documents that have been prepared with specific audit-related information such as machine serial number, audit number drawn, poll site in which the unit was used, election districts (and in primary elections, political parties) served by the voting system, etc. A sample of an audit tally sheet can be found in the Appendix.
- Additional seals for securing containers into which audited ballots will be placed.
- A copy of the audit procedures and any additional guidance materials provided by the county board of elections.
- A copy of the audit notice sent to candidates.

General supplies needed for use in the audit:

- Binder clips, rubber bands or other reliable binding items, for securing manageable packets of ballots to be audited.
- Office supplies such as red pens, red pencils, highlighters, post-it note pads.
- Two containers (boxes, bins, etc) of an appropriate size, into which packets of audited and unaudited ballots can be placed, to keep them secure and separate.

Arrange the audit counting site for counting


Room layout for counting

### 2.2. Ballot Handling Recommendations

- Throughout the audit, ballots may only be handled by CBOE commissioners of elections or their sworn designated representatives. No observer or member of the public may handle a ballot, nor any official audit or election-related document.
- The ballot chain of custody forms for the ballots cast from all of the randomlyselected voting systems must be inspected to ensure proper completion. If the audit team determines that any of the ballot accounting and reconciliation chain of custody forms were not properly completed, or that election officials failed to complete the ballot accounting and reconciliation chain of custody forms, the voting
system may not be audited, and a replacement machine must be selected. The first extra voting system identified during the random selection process should be used.
- When such voting system is deferred, it shall be assigned to the recanvass team or other designated bipartisan team for resolution.
- Ballot Marks
- Valid votes that have been marked by the voter outside the vote targets or using a marking device that cannot be read by the vote tally system shall not be included in making the determination whether the voting system has met the standard of acceptable performance.
- See 9-211.4 and Part 6210.18 (j)
- Election Officials in Charge of the Audit
- Duties of responsible Election Official. The election commissioners or their designated representatives in charge of elections where an audit is to be completed pursuant to statute or regulation must:

1. Be present or personally represented throughout the audit proceedings;
2. Be responsible for acquiring sufficient facilities and personnel to ensure timely and lawful auditing of voting systems and their corresponding ballots;
3. Be responsible for the proper training of all personnel participating in audit proceedings and administer oaths to all audit team members who are not already duly-appointed election inspectors;
4. Maintain actual control over all proceedings and be responsible for the lawful execution of all proceedings in the audit counting site;
5. Be responsible for assuring the lawful retention and storage of ballots audit records and other pertinent documents; and
6. Arrange for observation of the audit by providing written notice (Pursuant to NYS Election Law Section 9-211.1 and regulation Part 6210.18(b)), including a copy of audit procedures with the notice to each candidate, political party or independent body entitled to appoint watchers. Such notice shall also include:
a. the date, time and location that the audit shall commence;
b. information on the number of audit teams which will conduct such audit; and
c. such other information that the County Board deems necessary.

### 2.3. Security in Audit Counting Sites

Proceedings at the audit counting site may be open to the public. They are under the direction of the election commissioners or their designated personnel in county boards of elections where an audit is to be completed. Only persons employed and authorized by the CBOE commissioners for the purpose of conducting an audit may touch any ballot card, ballot container, statement of canvass or other official document.

### 2.4. Standards of acceptable performance by voting system

A comparison of the aggregated results compiled by the voting system with the post-election review must show that the results of the voting system are consistent with the provisions of Part 6210.18 (e) (1) and, if not, whether further auditing is required. Only votes that have been marked by the voter inside the vote targets or using a ballot marking device that can be read by the voting system shall be included in making the determination whether the voting system has met the standard of acceptable performance for any voting system.

### 2.5. Questionable Votes and Marginal Marks

Voting systems (scanners) are specifically calibrated to recognize marks made by voters in sensitive marking areas of the ballot. Scanners will easily recognize votes that are marked with a density that is within the calibrated thresholds. In an audit, the human eye may perceive these marks differently that the scanner, however the audit team members and observers alike should understand that the scanners, in accordance with Section 7-202.1e provide each voter with a notification of any mark the system perceives as questionable and provides each voter with the opportunity to remark their ballot or cast it 'as-is'.

## 3. How to Organize your Voting Systems inventory prior to selecting MACHINES FOR THE AUDIT

## Organize inventory

To conduct a drawing by lot, to determine which units shall be audited, several documents must be prepared in advance of the drawing. For illustrative purposes, we will assume an inventory of 50 voting systems or when auditing a central count system, 100 election districts. Samples of the two documents described below are provided in the Appendix. The first document to be prepared is a Drawing by Lot Spreadsheet, used to track the results of your random drawing:

- On a document or spreadsheet with two columns on it, number the first column sequentially, from 1 through 50, which will represent each chip drawn, in order.
- In the second column, post the number drawn from the chip container. For example, on the first draw, chip number 33 is pulled. Enter the number 33 in the second column, next to number 1 . On the second draw, number 15 is drawn; proceed to enter the number 15 in the second column next to number 2 , and so on, until each chip is drawn for every machine in the inventory.
- For central-count systems, number the total Election Districts in the county in sequential, numeric order: i.e. 100 Election Districts
- In order to do a 3\% audit on all of the county's election districts, one must multiply the total number of election districts by $3 \%$
- $100 \times 3 \%=3$ election districts to be audited throughout the county
- To determine which election districts to audit, one must follow steps 1 and 2 and apply those steps to election districts instead of machines.
- Upon completion of the random drawing selection, the CBOE Commissioners or their designees shall sign and date the Drawing by Lot spreadsheet.

The second document to be prepared for use in the drawing by lot is an Inventory Assignment Spreadsheet. Once completed, this document will identify which specific voting systems will be audited, based upon the random drawing.

- On a document or spreadsheet with five (5) columns on it, number the first column sequentially, from 1 through 50.
- In the second column, next to each sequential number, post each voting system's serial number.
- In the third column, list the poll site in which the unit shall be used.
- In the fourth column, list the election districts which will be served by the voting system, and in a primary election, the political party(ies) that constitute those ballots styles. This is especially important if the unit is to be used in a poll site serving more than a single election district.
- Using the Drawing by Lot spreadsheet, post the number drawn first in the fifth column, next to the corresponding inventory number. For example, from the Drawing by Lot spreadsheet described above, the first number drawn was 33. Locate number 33 on your Inventory Assignment Spreadsheet, and post the number 1 in the fifth column. The second number drawn was 15 . Locate number 15 on the Inventory Assignment Spreadsheet, and post the number 2 in the fifth column, and so on, until each number drawn in order is posted next to a corresponding voting system serial number.
- Upon completion of the transfer of the drawing selection order from the Drawing by Lot Spreadsheet to the Inventory Assignment Spreadsheet, the CBOE Commissioners or their designees shall sign and date the Inventory Assignment Spreadsheet.

Both documents shall be time stamped, copied, as necessary, and the original of each document is to be secured with other audit documents for archival storage.

## 4. Preparing for the Audit Drawing by Lot

Decide on the method you will use to conduct your Audit Drawing by Lot. Practice using that method or tool, to be sure you can conduct the drawing with confidence. Familiarize yourself with the official documents to be completed, so that the drawing will be efficient and accurate.

After notices of the Audit Drawing by Lot have been sent to candidates, and before the audit is conducted, review your process and the tools you intend to use to conduct the audit, to be sure you have the supplies you need and the mechanism you intend to use for the drawing is in proper working order. For example:

- If you intend to use an on-line, random number generator, access the site you intend to select and practice generating numbers that will become the basis of your audit selection process.
- If you intend to use chips of some sort, sequentially number them with an indelible marker, equal to the number of voting systems in your inventory.
- If you intend to use your bingo machine (as used for your ballot drawing purposes), be sure all of the numbered spheres are accounted for, and that the spinning device works properly.


## Demonstrating the Drawing Method

Immediately before the Audit Drawing by Lot, arrange for observers to see that the pieces, parts or other components of the method you intend to use, are intact:

- If you intend to use numbered chips of some sort, display the chips in order, so that observers can see that every sequentially-numbered chip is accounted for.
- If you intend to use the bingo machine, display all of the numbered spheres in order, so that observers can see that every sequentially-numbered sphere is accounted for.
- If you intend to use an on-line, random number generator, be sure you access the site on a computer that the observers can see, to ensure transparency in the on-line process.


## 5. Methods for Random Selection for an audit

### 5.1. Option One: Individually Numbered Chips

Obtain a sufficient quantity of individually number chips (i.e. bingo balls, Popsicle sticks, poker chips, etc.). Make sure that they have every number in sequence and that no number is duplicated.

Step \# 1. At the start of the random selection process, the number of chips shall equal the total number of voting systems to be utilized in the election which may be subject to audit.

Number all the machines that will be part of the audit with a number from 1 to XX , where XX is the last machine that will be part of the audit. Or, when auditing a central count voting system, number the election districts from lowest to highest number. Identify chips with numbers from 1 to XX (with XX representing the highest number of voting systems). Secure a box or other
appropriate container with which to conduct the drawing. The container should be smooth and free from flaps that may trap a chip or chips, and thus impede the random selection.

At the beginning of the random drawing selection, allow an opportunity for all of the audit observers to see that the box or container is empty and that you have the requisite number of chips equal in number to the total number of voting systems utilized in the election.

Place the required number of numbered chips into the drawing container and obtain the Drawings by Lot Spreadsheet to track the results of your random drawing. Select chips one at a time from the drawing container and read aloud the number. A clerk of a different political faith than the drawing clerk shall then record the number on the Drawing by Lot Spreadsheet, also reading aloud the number as it is being recorded. Continue in this manner until all of the chips have been selected.

### 5.2. Option Two: Electronic Random Number Generator

There are a number of random number generators available on the internet. One that is popular is Random.org which can be found at this URL address: http://www.random.org/

Number all the machines that will be part of the audit with a number from 1 to XX , where XX is the last machine that will be part of the audit. Use the True Random Number Generator to select numbers. For example, if you have 100 systems in your audit you would proceed as follows:

First pick: $\quad \operatorname{Min}=1, \operatorname{Max}=100$ Select the Generate button. Note the result.
Second pick: $\quad \operatorname{Min}=1, \operatorname{Max}=100$ Select the Generate button. Note the result. If the number that is randomly selected is a duplicate repeat the process until you get a number that has not yet been selected.

Third pick: $\quad \operatorname{Min}=1, \operatorname{Max}=100$ Select the Generate button. Note the result. If the number that is randomly selected is a duplicate repeat the process until you get a number that has not yet been selected.

Continue selecting random numbers until all 100 machines have a corresponding number.

### 5.3. Proposed Option Four: Hybrid Selection Method

The objective of this proposed method is to define a process that randomly selects voting machines for auditing after an election, while adhering to the requirement that the randomly selected machines must encompass all the races within an election.

Some machines designated for specific polling places may be set up to process a single collection of races and ballot proposals constituting a single "ballot-style", while others assigned to "election centers" may be setup to process multiple ballot-styles. Process 2 presented below handles any combination of setups within an election. Process 1, while
restricted to elections in which all machines are dedicated to a single ballot-style, permits a more intuitive introduction to the components of both processes.

The requirement that the randomly-selected machines must encompass all the contests within a country is equivalent to the requirement that collectively the randomly-selected machines must encompass all the ballot-styles within the county. This follows since the collection of all the ballot-styles in an election will contain all the races within that election. Working with ballot-styles rather than the individual contests makes the selection process less voluminous and more easily executed.

Certainly, if the objective of the process was just randomly selecting voting machines, with no concern for the inclusion of all ballot styles or contests, the process would be simple. Specifically: (1) Assign each machine a number from 1 to the number of machines. (2) Then use any number of methods to randomly select the prescribed number of machines. The easiest and most time-efficient would be to use an unrelated random number generator service outside the sphere of political influence - such as those found in the public domain. These services (including internet-based services) are autonomous with no way of sensing the application to which their selection process is being applied.

By adding the requirement that we need to not only randomly select $P$ percent of the machines to be used in an election, but that the selected machines must contain all the races in the county, the process becomes more complex. The number of ballot-styles operational within a county for a particular election can have a substantial effect on the number of machines selected.

For instance, it you considered a county with 100 machines and you wanted to select $3 \%$ of the machines to be audited that could mean that 3 machines would be selected. But, if there were 8 ballot-styles involved in the election, then if all the randomly-selected machines happened to be single ballot-style machines, it would take a selection of 8 , not 3 machines to satisfy both the audit and ballot style requirements.

If, on the other hand, if the first 3 machines selected happened to be multi-ballot-style (voting center machines), it is conceivable that they could collectively satisfy the ballot-style requirement.

The two processes described below systematically incorporate these influences into their selection. They each randomly select the minimal number of machines to be audited in mutual consideration of the machine selection percentage and ballot-style requirements.

## PROCESS 1 - Each Machine in the Election Operates One Ballot-Style

This process assumes the following:

1. Each voting machine has been labeled with a number from 0001 to the number of machines used in the current election designated as NVM.
2. Each ballot-style has been labeled with a number from 001 to the number of ballotstyles required throughout the county utilized in the election.
3. Each machine has been designated with the ballot-style that it provided on Election Day. (In conjunction with this, 0010-026 will represent that Machine 10 presented BallotStyle 26 to the voters on Election Day.)
4. P specifies the (minimum) percentage of voting machines to be randomly audited. Minimum because the number of machines finally selected could be larger because of the ballot-style requirement.
5. The hyphenated number MMMM-SSS will represent the machine/ballot-style combinations (or Combos for brevity) of machine number MMMM setup with ballotstyle SSS

## Step 1 - List the machine/ballots combos in machine order

Sequentially list the voting machine/ballot-type combinations starting with machine 0001 and ending with NVM.

With 200 machines and 15 ballot-styles the list would look similar to

0001-005
0002-011
0003-004

0200-013 representing the last machine (200) operating ballot-style 13.

## Step 2 - Select All Combos Containing Ballot-Style 001

Starting with the lowest number machine, select all Combos ending in 001 and create an indexed list of these Combos. This list will be referred to as the "001-List "

The 01-List could appear as follows:

Index Combo
01 0018-001
02 0036-001
03 0071-001

| 04 | $0123-001$ |
| :--- | :--- |
| 05 | $0142-001$ |
| 06 | $0187-001$ |

Step 3 - Determine the Number of machines to be randomly-selected
Calculate P divided by 100 times the largest index number and round-up this number to the next largest integer. This result will be designated as NSELECT indicating the number of Combos to be selected.

With the list shown in Step 2 and $P$ defined as $3 \%$. This calculation would be $3 / 100 x$ $06=18 / 100=.18$ and rounding up to the next integer would produce 1 .

$$
\text { NSELECT = } 1
$$

Step 4 - Randomly select the specified number of 001 Combos from the 001-List

Use a random number generator to select NSELECT Combos from the 001-List and place these Combos in a list referred to as the COMBO AUDIT LIST.

In the above example with NSELECT = 1, any one of the combos could have been randomly selected and placed in COMBO AUDIT LIST, e.g. if 0123-001 was selected, then it would produce the following:

## COMBO AUDIT LIST <br> 0123-001

Step 5 - Repeat Steps 2, 3 \& 4 for the remaining Ballot Styles
Repeat Steps 2, 3 \& 4 for each subsequent ballot style adding the selected Combos to the COMBO AUDIT LIST.

Repeating steps 2, 3 \& 4 for the 15 ballot style of this example could result in the following:

## COMBO AUDIT LIST

0123-001
0037-002
0043-003
0016-004
0162-005
0086-006
0013-007

0005-008
0057-009
0191-010
0159-011
0007-012
0026-013
0093-014
0122-015

Note: In other examples dependent upon the number of machines, number of ballot styles and their assignments, any one the ballot styles could have resulted in multiple entries in the COMBO AUDIT LIST, such as

0005-008
0111-008
0069-008

## Step 6 (Final) - Produce the List of Machines to be Audited

Remove the ballot style Designation from Each Combo in the COMBO AUDIT LIST and organize/sort the resultant machine numbers from the smallest to the highest to get a convenient representation of the MACHINE AUDIT LIST.

For the above COMBO AUDIT LIST the following machine audit list would result

## MACHINE AUDIT LIST

0005
0007
0013
0016
0026
0037
0043
0057
0086
0093
0122
0123
0159
0162
0191

Sufficiency Test - Test to make sure the number of machines selected matches or exceeds the mandated percentage of machines to be audited (P).

In this example, P was set at 3\%. 3\% X 200 equals 6 machines required to be audited. This process produced 15 machines and clearly was driven by the requirement that each ballot-style was to be included.

Note: In the case of one ballot style per machine, it can be proven that this process will always, at least, produce the number of machines mandated by the specified percentage ( P ).

## PROCESS 2 - One or More Ballot Styles Per Machine

This is for the case where machines are used in "voting centers" and some or all of these voting machines were set up to process multiple ballot styles. PROCESS 2 for randomly selecting the machines for auditing in this circumstance proceeds along an identical track with PROCESS 1 except for the following three minor adaptations:

Step 1 - List the machine/ballots combos in machine order

Sequentially list the voting machine/ballot type starting with machine 0001 and ending with NVM.

The adaptation here is that if a machine operates multiple ballots each ballot becomes a separate Combo in the list.
E.g. If voting machine 16 were to be used to process ballots $6,7 \& 31$, then the list would contain the following 3 entries:

```
0016-006
```

0016-007
0016-031

Step 6 - Produce the List of Machines to be Audited

Remove the ballot style designation from each combo in the COMBO AUDIT LIST and organize/sort the resultant machine numbers from the smallest to the highest to get a convenient representation of the MACHINE AUDIT LIST.

The only adaptation here is if one machine is included multiple times in the MACHINE AUDIT LIST then the redundant entries can be eliminated since any voting center machine, if selected, must be audited for all the ballot-types it provided on Election Day.

| E.g. | - |  |
| :---: | :---: | :---: |
|  | - | - |
| 0026 |  | - |
| 0043 |  | 0026 |
| 0043 | would be reduced to | 0043 |
| 0043 |  | 0087 |
| 0087 |  | - |
| 0113 |  | - |
| - | - |  |
| - |  |  |

## Sufficiency Test - Test to make sure the number of machines selected matches or exceeds the mandated percentage of machines to be audited (P).

It may be possible to prove the list of machines selected for auditing by PROCESS 2 will never fail the Sufficiency Test. But, if we allow for the possibility of PROCESS 2 working with multiballot style machines not to pass the sufficiency test by being N machines short (no matter how unlikely), then all that would be necessary to complete the process would be to randomly select N machine from the population of machines that did not make it into the MACHINE AUDIT LIST. Note that the requirement to include each ballot style would have already been achieved by the process through Step 6.

## CONCLUDING COMMENTS

(1) Using Machine Serial Numbers: The above processes start out by labeling the population of voting machines from 0001 to the number representing the count of machines (NVM). If a county kept their file of machines by their serial numbers and wanted the final Machine Audit List to be in terms of these serial numbers, this could be achieved by the country first making a numbered list of their machines as a cross-listing (Step 0) and then translating the machine numbers in the Machine Audit List back to the serial numbers utilizing the cross listing as Step 7.
(2) Easier Random Number Selection: The way the above processes work by considering only those machines (i.e. combos) associated with one ballot style at a time, the resultant quantity of numbers to be randomly selected from is smaller. With random number generators this doesn't make a difference, but if manual methods are required, it makes the random selection process much less burdensome to conduct.

## 6. Audit Process Checklist

This checklist is modeled on a sample prepared by the New Hampshire Department of State Election Procedure Manual and has been altered to reflect NY requirements.

Step \#1 - Arrange the audit site for counting. If possible, the counting area should be segregated from the observer gallery. All counting, however, must occur where it is visible to all legally present observers.
Step \#2 - Identify all those who will be serving as audit team inspectors, audit team supervisors or any other audit team members, and distribute name badges. Identify observers and distribute "Visitor" badges accordingly.
Step \#3 - Administer oaths and obtain signatures on the oath documents for all audit team members. Retain completed and signed oath documents with other audit materials for archive storage.

Step\#4- Review audit instructions with all audit team members and any observers present.

Step \#5 - At the beginning of the audit, the bipartisan team of audit inspectors shall compare and verify the ballot box seal number noted on the chain of custody report with the seal on the ballot box they are to audit. Record this seal number on the Audit Tally Worksheet.

5 a) If the seal numbers match, break the seal and continue to Step 6.
5 b) If the seal numbers do not match, note the problem under "AUDIT TEAM REMARKS' and summon a supervisor, who will then take custody of all audit materials. The audit team Inspectors will move on to the next available machine to be audited, and resume the process at Step 5.

Step \#6 - Open the ballot box(es) in view of the observers, remove all ballots from the container and place the ballots onto the audit table.

Step \#7- Reveal the empty ballot box.
Step \#8 - $\quad$ Sort the ballots by election district and, in a primary election, by political party.
Step\#9- Have the audit inspector teams count the ballots, and if necessary for manageability, further sort the ballots into piles of a known size (10, 25, 50 or 100 ballots).

Step \#10 - Wrap each pile with a rubber band, clip it with a large binder clip, or other similar fastener.

Step \#11- Locate each audit inspector team's prepared audit tally sheets. The sheet(s) should be organized in the same order as the ballot, with sections for each office and question and the name of each candidate listed in the same order as they are listed on the ballot. There should be a space following each name/question
for one of the counters to put a hash mark for each vote for that candidate/question.

Step \#12 - Overview of the counting process:
12 a) Each audit team will count all contests and questions in one bound pile of ballots at a time. Note: for the following overview we will assume that 50 ballots are contained in each bound pile of ballots.

12 b) A mark must be made on the tally sheet for each vote cast on each ballot. Make a vertical line (hash mark) for the first four votes for any given candidate and then cross a horizontal line through the vertical lines for the fifth vote for that candidate. If the voter wrote in a candidate, that vote shall be represented by a hash mark in the field designated on the audit tally sheet for write-in votes for that contest.
$12 \mathrm{c})$ If the voter skipped a contest or question, that is they did not vote for any candidate or did not make the total number of selections for the contest, or did not mark either yes or no on a ballot proposal, put a hash mark in the "BLANK" line for that office or proposal on the audit tally sheet.
$12 \mathrm{~d})$ If the voter overvoted, that is they voted for more candidates than are permitted for that contest, put a hash mark in the "Overvote" line for that office or ballot proposal on the audit tally sheet, EXCEPT THAT;

12 e) In the case of a candidate whose name appears on the ballot more than once for the same office, and the voter marked the ballot more than once for the same candidate for the same office, the audit team shall enter a single hash mark on the audit tally sheet where the first vote appears for the candidate in that contest.
$12 \mathrm{f})$ The audit team will then total the votes for all candidates for each office, write-in, or all the "yes," "no," votes on any ballot proposal(s), blanks and overvotes for each question. The total number of hash marks (votes) for a 'vote for one' office must equal the number of ballots in the bound pile (i.e. 50) votes for that office (including the votes for each candidate, write-ins, blanks and overvotes).
$12 \mathrm{~g})$ For offices where the voter may vote to fill two positions, the total votes counted should total 100. For offices where the voter may vote to fill three positions the total votes counted should total 150, and so on.

12 h ) If the total does not equal 50 the team should check their hash marks for that office/question and correct any errors. The team is done auditing a 50 ballot pile at the point when the office/question totals equal 50.

12 i) As the teams audit, if there is any question regarding how a vote should be recorded, call the audit team supervisors to your table and seek their instructions on how the ballot should be audited.

12 j ) If after receiving supervisor instructions, the audit team is still unable to determine whether or not to record the vote in question, the audit team members will then follow the Resolution Procedure found in Step 13.

12 k ) If there are many questioned ballots that need to be decided, it is recommended that the audit team hold these ballots aside, complete the remaining ballots in that bound pile and then resolve all questioned ballots within the bundle being audited, at one time. If this is done, however, it is further recommended that all questionable ballots be resolved before the audit team totals are tallied for each bundle. This ensures that the election officials do not know whether the vote on a particular ballot will affect the outcome of the audit. This process reinforces the neutrality and enhances the legitimacy of the audit process.

Step \#13 - Audit Resolution Process: Escalate any unresolved questioned ballots to the election commissioners, who can then consult with State Board legal or other appropriate resources.
Step \#14- Starting with the first contest on the ballot:

14 a) One audit team member (the reader) should read aloud the name of the candidate or the word yes or no for questions which received the vote on the ballot being audited.

14 b) Another audit team member of the opposite political faith than the reader shall observe the ballot to ensure that the vote has accurately been announced.

14 c) As the votes are read aloud, another audit team member (the marker) of the opposite political faith than the reader shall make a hash mark beside that name on the audit tally sheet, and as he or she tallies a vote, shall announce clearly the name of the person for whom he or she tallies it (or in the case of a write-in, blank, overvote or yes or no vote for a ballot proposal, as the case may be).
$14 \mathrm{~d})$ Another audit team member of the opposite political faith than the marker shall observe the marks being posted to the audit tally sheet to ensure that they have been accurately marked.

Step \#15 - $\quad$ Continue this process until the votes cast on the entire ballot have been marked on the tally sheet. Then proceed to the next ballot. If a voter has not voted for any candidate for a particular office the reader should state "blank" and the marker should mark the "blank" row for that office on the tally sheet.

Step \#16- If the voter voted for two or more candidates for an office where the ballot instructs to vote for one, the reader should announce "overvote" and the marker should mark the "overvote" row on the tally sheet. If the instructions are that a voter should vote for two and the voter voted for three or more follow these same instructions.

Step \#17- When all ballots from the bound pile of ballots (i.e. 50) have been marked on the tally sheet, the hash marks should first be totaled for each candidate including the "blank" and "overvote" rows and the write-in row and then for each office. The total votes for each office/question should equal 50. If they do not, go back through the pile and correct any counting/marking errors.
Step\#18- Upon completion of the audit count for each respective bound pile, each member of the bipartisan audit team of inspectors shall sign and date the audit tally sheet, and bind the pile of ballots with the audit tally sheet on top with a rubber band or clip. They then set that pile aside on the audit table until it can be aggregated into the final reconciliation audit tally report from all of the respective bound piles from the same voting machine.

Step \#19 - Continue the audit process with the next pile of ballots.
Step \#20 - Upon completion of the audit counting when all of the bound piles contained within the voting machine ballot box for a particular election district, and in the case of a primary election further sorted by party, have been counted, the bipartisan audit team shall tally the piles and aggregate their numbers on a multi-part reconciliation audit tally report. Each member of the bipartisan audit team of inspectors shall sign and date the reconciliation audit tally report and secure all of the bound pile of ballots with one copy of the reconciliation report on top.

Step\#21- The audit team inspectors shall then place all ballots from a single voting machine into a secure container (i.e. banker storage box) labeled with identification information showing the election date and type and the voting machine serial number.

Step \#22 - $\quad$ The audit team supervisors should ensure that the audit counting site maintains an orderly and appropriate atmosphere in which audit teams can complete the tallies. The tallying must occur in a manner that provides an opportunity for all legally-present observers to view the audit process. Be mindful however, that when all the audit team inspectors and any other audit team members gather at the audit tallying table and watch the final calculations, everyone conducts themselves in a way that puts no pressure on those making the final calculations, so that the opportunity for disruption and error is diminished. The tallying team should tally the results for all elections. The use of a printing calculator allows the team to check the printed calculator tape as a means of ensuring the accuracy of the tally. The final tallies should be written down on the
reconciliation audit tally report, signed and dated by each member of the audit team.

Step \#23 - The audit supervisors shall then retrieve the vote tabulation printout produced by the voting system being audited as completed and attested to at the close of polls by the voting system's primary election inspectors and compare the respective tabulation of votes from such tape to the respective election district/contest reconciliation audit tally report

23 a) The audit supervisors shall then record in the space provided in the reconciliation audit tally report for the supervisors' official use, the respective machine totals (tape) numbers.
23 b) They shall then compare the audit vote totals with the machine totals and note any discrepancies between the totals. If any discrepancies are found, the audit supervisors and the audit inspector team(s) shall attempt to resolve the discrepancies. See Part 6210.18 (c) (2).
$23 \mathrm{c})$ If any unresolved discrepancy is detected between the manual count and the machine totals (tape), even an unresolved discrepancy of a single vote, the manual count shall be conducted a second time on such machine or system to confirm the discrepancy.
$23 \mathrm{~d})$ If such voting system is required to be re-audited, to the extent possible, the re-audit should be conducted by a different audit inspector team.
23 e) Dominion ICE Only Counter Review
If a Dominion ICE machine is selected as part of the random selection an additional audit step must be performed. If no ICE machine is selected in the random selection process one ICE machine must be selected at random and the following audit step must be performed.

1. From the zero tape:

Record the "Printer Protective Counter" total and verify that the "Number of Print Request" total is 0 (zero) and record that total.
2. From the result tape:

Record the "Printer Protective Counter" total and the "Number of Print Request" total.
3. Calculate the difference between the Results Tape and Zero Tape "Printer Protective Counter" and compare that number to the ending total from the results tape of the "Number of Print Request" total. Both totals should be the same.

If a discrepancy is found (difference between the two totals), please perform the Counter Review process on an additional machine to ensure that the discrepancy is isolated to one machine. Provide a
report to the State Board of Elections indicating the two totals along with the machine serial number. If a second machine is found to have a difference in the totals all ICE machines must have the audit performed and the State Board of Elections must be notified immediately.

Table 1. Example of recording and comparing the totals:

| Results <br> Tape | Zero <br> Tape |  | Difference |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Printer Protective Counter | 16 | - | 15 | $=$ | 1 |
| Number of Print Request | 1 | - | 0 | $=$ | $1^{*}$ |

*The Printer Protective Counter and Number of Print Request should match.

Step \#24- The audit team members shall then cause the ballot box or other secure ballot container to be sealed and shall record such seal(s) on the chain of custody report.

Step \#25- Upon completion of the initial phase of the audit, the reconciliation audit report shall be submitted to the election commissioners or their designees for determination on whether or not an expansion of the audit is required. The election commissioners or their designees shall date and affix their signatures to the reconciliation audit report on which their determination has been indicated.

Step \#26- Announce the results of the initial phase of the audit.

Step \#27- If an escalation of the audit is required, the audit teams shall next audit the ballots from the next group of voting machines or systems identified in the original random drawing of machines to be audited.

# Appendix 1 - Section 6210.18 Three-Percent (3\%) Audit Regulations 

## Section 6210.18 Three-Percent (3\%) Audit

(a) As required by NYS Election Law, section 9-211, the Board of Elections or a bipartisan team appointed by such board shall manually count all votes of the voter verifiable paper audit trail (VVPAT) from no less than three percent of each type of voting machine or system used within the county, provided, however, that there shall be a manual count of at least one of each type of voting machine or system used therein for each public office and any questions or proposals appearing on the ballot. The conduct of such random audit shall be in a manner consistent with procedures prescribed by the State Board of Elections.
(b) The voting machines or systems to be audited to meet the county-wide minimum requirement set forth in subdivision (a) of this section shall be selected by lot through a transparent, random, manual process where all selections of machines or systems used in the county are equally probable. The voting machines or systems to be audited to meet the requirements for a specific contest set forth in subdivision (a) of this section shall be selected by lot through a transparent, random, manual process where all selections of machines or systems used in the contest within each county are equally probable. The county boards shall adopt one of the random, manual selection methods prescribed by the State Board of Elections or such county board may submit for approval by the State Board a proposed alternative random, manual selection method. County board adoption of the prescribed random, manual selection method shall take place not later than 45 days after the purchase of a voting system and notice by the county board of the adoption of such random, manual selection method shall be filed with the State Board.
(1) As required by NYS Election Law, section 9-211, not less than five days prior to the time fixed for the random selection process, the Board of Elections shall send notice by first class mail to each candidate, political party and independent body entitled to have had watchers present at the polls in any election district in such board's jurisdiction and to the State Board. Such notice shall state the time and place fixed for such random selection process. Such random selection process shall not occur until after election day. Each candidate, political party or independent body entitled to appoint watchers to attend at a polling place shall be entitled to appoint such number of watchers to observe the random selection process and the subsequent audit.
(2) Such notice shall also announce the date, time, and location that the audit shall commence, information on the number of audit teams which will conduct such audit, and such other information that the county board deems necessary.
(3) The county board shall at a single session randomly select from all machines and systems used within the county in the election so that no further drawings are required
if anomalies are encountered during the manual audit. The audit shall commence on the same day as the random, manual selection process.
(4) Prior to auditing the audit records, the county board shall distribute to those in attendance at the audit session, copies of the list showing the number of machines and systems needed to meet the audit requirement and the unofficial vote results per voting machine or system selected for audit.
(c) For each voting machine or system subject to be audited, the manual audit shall consist of a manual tabulation of the voter verifiable paper audit trail records and a comparison of such count, with respect to all candidates and any questions or proposals appearing on the ballot, with the electronic vote tabulation reported for such election district.
(1) A reconciliation report, on a form prescribed by the State Board of Elections, that reports and compares the manual and electronic vote tabulations for each audited candidate for each contest and any question or proposal from each machine or system subject to the audit by election district, including tallies of overvotes, undervotes, blank ballots, spoiled ballots and rejections recorded on the VVPAT, along with any discrepancies, shall be prepared by the board of elections or a bipartisan team appointed by such board and signed by such members of the audit team.
(2) Any discrepancies between the corresponding audit results and initial electronic vote counts shall be duly noted, along with a description of the actions taken by the county board of elections for resolution of discrepancies. The number and type of any damaged or missing paper records shall be duly noted.
(3) If any unresolved discrepancy is detected between the manual count described in this subdivision and the machine or system electronic count, even an unresolved discrepancy of a single vote, the manual county shall be conducted a second time on such machine or system to confirm the discrepancy.
(d) The reconciliation report required in subdivision (c) of this section shall be transmitted to the county board commissioners or their designees upon completion of the initial phase of the audit for determination on the expansion of the audit conducted pursuant to subdivisions (e) through (g) of this section.
(e) The county board shall aggregate the audit results reported pursuant to paragraph (c)(2) of this section that are applicable to any contests, questions or proposals. The aggregated results for each contest, question or proposal shall be used to determine whether further auditing is required as follows:
(1) For any contest, question or proposal, an expanded audit will be required if either or both of the following criteria apply to the aggregated audit results:
(i) any one or more discrepancies between the confirming manual counts described in paragraph (c)(3) of this section and the original machine or system electronic counts, which taken together, would alter the vote share of any candidate, question or proposal by 0.1 percent or more of the hand counted votes for respective contests, questions or proposals in the entire sample; or
(ii) if discrepancies of any amount are detected between the confirming manual count described in paragraph (c)(3) of this section and the original machine or system electronic count from at least 10 percent of the machines or systems initially audited then the board or bipartisan team appointed by such board shall manually count the votes recorded on all the voter verifiable paper audit trail records from no less than an additional five percent of each type of the same type of voting machine or system which contains any such discrepancy or discrepancies;
(iii) when determining whether discrepancies warrant expanding the audit, the percentage-based thresholds in this section shall be rounded down by truncating the decimal portion (with a minimum of one).
(f) A further expansion of the audit will be required if either or both of the following criteria apply to the audit results:
(1) For each contest, question or proposal, the county board shall aggregate the results from the initial audit as required in subdivision (a) of this section and the expanded five percent audit. If, such aggregated results of unresolved discrepancies satisfy the criteria in subparagraph $(e)(1)(i)$ of this section, a further expansion of the audit will be required.
(2) For each contest, question or proposal, the county board shall take the results of the five percent expanded audit under subdivision (e) of this section, and, if such results of unresolved discrepancies satisfy the criteria in subparagraph (e)(1)(ii) of this section, a further expansion of the audit will be required.
(3) When an expanded audit is required for a contest pursuant to this section, each county board or bipartisan team appointed by such board shall manually count all voter verifiable paper audit trail records from no less than an additional 12 percent of each type of the same type of voting machine or system which contains any such discrepancy or discrepancies.
(4) When determining whether discrepancies warrant expanding the audit, all percentage-based thresholds in this section shall be rounded down by truncating the decimal portion (with a minimum of one).
(g) A further expansion of the audit will be required if either or both of the following criteria apply to the audit results:
(1) For each contest, question or proposal, the county board shall aggregate the results from the initial audit as required in subdivision (a) of this section and the expanded audit as required in subdivisions (e) and (f) of this section. If, such aggregated results of unresolved discrepancies satisfy the criteria in subparagraph (e)(1)(i) of this section, a further expansion of the audit will be required.
(2) For each contest, question or proposal, the county board shall take the results of the 12 percent expanded audit under subdivision ( f ) of this section, and, if such results of unresolved discrepancies satisfy the criteria in subparagraph (e)(1)(ii) of this section, a further expansion of the audit will be required.
(3) When an expanded audit is required for a contest pursuant to this section, each county board shall manually count all voter verifiable paper audit trail records from all the remaining unaudited machines and systems where the contest appeared on the ballot.
(4) When determining whether discrepancies warrant expanding the audit, all percentage-based thresholds in this section shall be rounded down by truncating the decimal portion (with a minimum of one).
(h) The standards set forth in subdivisions (a)-(g) of this section are not intended to describe the only circumstances for a partial or full manual count of the voter verifiable paper audit record, but instead are designed to set a uniform statewide standard under which such hand counts must be performed. The county boards of elections, as well as the courts, retain the authority to order manual counts of those records in whole or in part under such other and additional circumstances as they deem warranted. In doing so, they should take into consideration:
(1) whether the discrepancies were exclusively or predominantly found on one type of voting machine or system;
(2) the size of the discrepancies;
(3) the number of discrepancies;
(4) the percentage of machines or systems with discrepancies;
(5) the number and distribution of unusable voter-verified paper audit trial records as described in subdivision (j) of this section;
(6) the number of cancellations recorded on the voter-verified paper audit trail records reported pursuant to paragraph (c)(1) of this section; and
(7) whether, when projected to a full audit, the discrepancies detected (no matter how small) might alter the outcome of the contest, question or proposal result.
(i) If the audit officials are unable to reconcile the manual count with the electronic vote tabulation on a voting machine or system, then the Board of Elections shall conduct such further investigation of the discrepancies as may be necessary for the purpose of determining whether or not to certify the election results, expand the audit, or prohibit that voting machine or system's use in such jurisdiction.
(j) If a complete audit is conducted, the results of such audit shall be used by the canvassing board in making the statement of canvass and determinations of persons elected and propositions approved or rejected. The results of a partial audit shall not be used in lieu of voting machine or system tabulations, unless a voting machine or system is found to have failed to record votes in a manner indicating an operational failure. When such operational failure is found, the board of county canvassers shall use the voter verifiable audit records to determine the votes cast on such machine or system, provided such records were not also impaired by the operational failure of the voting machine or system. If the voter verified paper audit tail records in any machine or system selected for an audit are found to be unusable for an audit for any reason whatsoever, another machine or system used in the same contest shall be selected at random by the county board to replace the original machine or system in the audit sample. All such selections shall be made randomly in the presence of those observing the audit. The county board shall inquire in an effort to determine the reason the voter verified paper audit trial records were compromised and unusable and such inquiry shall begin as soon as practicable. The results of the inquiry shall be made public upon completion.
(k) Any anomaly in the manual audit shall be reported to and be on a form prescribed by the State Board and shall accompany the certified election results.

## Appendix 2 - New York State Election Law, Section § 9-211

## § 9-211. Audit of voter verifiable audit records.

1. Within fifteen days after each general or special election, and within seven days after every primary or village election conducted by the board of elections, the board of elections or a bipartisan committee appointed by such board shall manually audit the voter verifiable audit records from three percent of voting machines or systems within the jurisdiction of such board. Voting machines or systems shall be selected for audit through a random, manual process. At least five days prior to the time fixed for such selection process, the board of elections shall send notice by first class mail to each candidate, political party and independent body entitled to have had watchers present at the polls in any election district in such board's jurisdiction. Such notice shall state the time and place fixed for such random selection process. The audit shall be conducted in the same manner, to the extent applicable, as a canvass of paper ballots. Each candidate, political party or independent body entitled to appoint watchers to attend at a polling place shall be entitled to appoint such number of watchers to observe the audit.
2. The manual audit tallies for each voting machine or system shall be compared to the tallies recorded by such voting machine or system, and a report shall be made of such comparison which shall be filed in the office of the state board of elections.
3. The state board of elections shall, in accordance with subdivision four of section 3-100 of this chapter, promulgate regulations establishing a uniform statewide standard to be used by boards of elections to determine when a discrepancy between the manual audit tallies and the voting machine or system tallies shall require a further voter verifiable record audit of additional voting machines or systems or a complete manual audit of all machines or systems within the jurisdiction of a board of elections. Any board of elections shall be empowered to order that any such audit shall be conducted whenever any such discrepancy exists.
4. If a complete audit shall be conducted, the results of such audit shall be used by the canvassing board in making the statement of canvass and determinations of persons elected and propositions rejected or approved. The results of a partial voter verifiable record audit shall not be used in lieu of voting machine or system tallies.
5. Notwithstanding subdivision four of this section, if a voting machine or system is found to have failed to record votes in a manner indicating an operational failure, the board of canvassers shall use the voter verifiable audit records to determine the votes cast on such machine or system, provided such records were not also impaired by the operational failure of the voting machine or system.

## Appendix 3 - Inventory Assignment Spreadsheet

Inventory Assignment Spreadsheet is available for download at the SBOE FTP site.

INVENTORY ASSIGNMENT SPREADSHEET

| SEQUENTIAL NUMBERING | VOTING SYSTEM SERIAL \# | POLL SITE BEING SERVED | ED SERVED (IN A PRIMARY, PARTIES SERVED) | NUMBER DRAWN |
| :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |
| 7 |  |  |  |  |
| 8 |  |  |  |  |
| 9 |  |  |  |  |
| 10 |  |  |  |  |
| 11 |  |  |  |  |
| 12 |  |  |  |  |
| 13 |  |  |  |  |
| 14 |  |  |  |  |

USE ADDITIONAL PAGES AS NECESSARY TO ACCOMMODATE YOUR INVENTORY
SIGNATURE AND DATE OF COMMISSIONERS OR RESPECTIVE DESIGNEES:

Date

## Appendix 4 - Drawing by Lot Spreadsheet

Drawing by Lot Spreadsheet is available for download at the SBOE FTP site.
DRAWING BY LOT SPREADSHEET

| SEQUENTIAL NUMBERING | POST NUMBER DRAWN |
| :--- | :--- |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 |  |
| 21 |  |
| 22 |  |
| 23 |  |
| 24 |  |
| 25 |  |
| 26 |  |
| 27 |  |
| 28 |  |
| 29 |  |
| 30 |  |
| 31 |  |
| 33 |  |
| 35 |  |
| 35 |  |
| 38 |  |

USE ADDITONAL PAGES, AS NECESSARY, TO ACCOMMODATE YOUR INVENTORY
SIGNATURE AND DATE OF COMMISSIONERS OR RESPECTIVE DESIGNEES:


## Appendix 5 - Audit Team Oath

Audit team oath is available for download at the SBOE FTP site.

## OATH OF OFFICE

## Swear in Audit Inspector officials as election officials:

"I, $\qquad$ (insert name) the undersigned do solemnly swear (or affirm) that I will support the Constitution of the United States of America and the State of New York; and that I will faithfully discharge the duties of the office of Audit Inspector for the County of $\qquad$ according to the best of my ability, that I am a registered voter and resident of such county, that I do not hold any public office, am not a candidate for any office to be voted for by the voters at this election or the spouse, parent or child of such candidate, that I have not been removed or otherwise disqualified as an election worker and am able to speak and read the English language and write it legibly."

Signature: $\qquad$ Date: $\qquad$

Keep original oath on file, and provide a copy to the audit team member.

## Appendix 6 - Individual Audit Tally Worksheet

Inventory Assignment Spreadsheet is available for download at the SBOE FTP site.


## Appendix 7 - Reconciliation Audit Tally Report Worksheet

Inventory Assignment Spreadsheet is available for download at the SBOE FTP site.
Reconciliation Audit Tally Report Worksheet


## Appendix 8 - Commissioners' Audit Reconciliation Certification

## COMMISSIONERS' AUDIT RECONCILIATION CERTIFICATION

To be completed for each scanner audited, and on County Board of Elections letterhead, shall appear the following, to be completed, signed and dated by the Commissioners of Elections, and filed with the State Board of Elections:

COUNTY $\qquad$ DATE $\qquad$
Scanner Serial \# $\qquad$

We the undersigned Commissioners, having reviewed the Audit Reconciliation Summary Report, do hereby direct the following:
$\qquad$ The audit results confirm the electronically-tabulated results. No further action is required.
$\qquad$ Thk audit results reveal unexplained discrepancies from the tabulated results, thus requiring the escalation of the audit, to level:


Subsequent to the escalation described above, all discrepancies have been resolved.

DATE: $\qquad$

SIGNATURE: $\qquad$ SIGNATURE: $\qquad$

## ApPENDIX 9 - Ballot counting table layout example from NH



