



DANIEL A. SENN

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"STAK RAKU" BY DANIEL A. SENN

"Stak Raku" (pronounced stāk rakū) is a dance, theatre, vocal and percussion piece that is performed by four "tapping" dancers and two technicians within a prepared 4-channel sonic kiln. It is a continuous piece divided into two main sections; a PRE-CURTAIN section that is initiated 6 minutes prior to the beginning of the program or close of the intermission, and a POST-CURTAIN section which begins following the CURTAIN and continues for 10 minutes. These two sections are separated by a buffer called the CURTAIN which serves to accomodate any variables in the given transitional directives. The duration of the piece is approximately 15 minutes. Performances of "Stak Raku" will require the facilities, apparatus, personnel and rehearsal conditions alluded to during the PRE-CURTAIN dialogue.

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PRE-CURTAIN VISUAL SCORE	-135 - -0
POST-CURTAIN VISUAL SCORE	+0 - 600

Score Related and Rehearsal Paraphanalia:

PRE-CURTAIN Rehearsal Slides (4 sets)
 POST-CURTAIN Rehearsal Slides (4 sets)
 POST-CURTAIN Rehearsal Cassette Aural Scores (4 sets)
 PRE-CURTAIN Rehearsal Cassette Aural Scores (4 sets)
 Black-White Technician's Score
 Four-Channel Tape (15 ips)

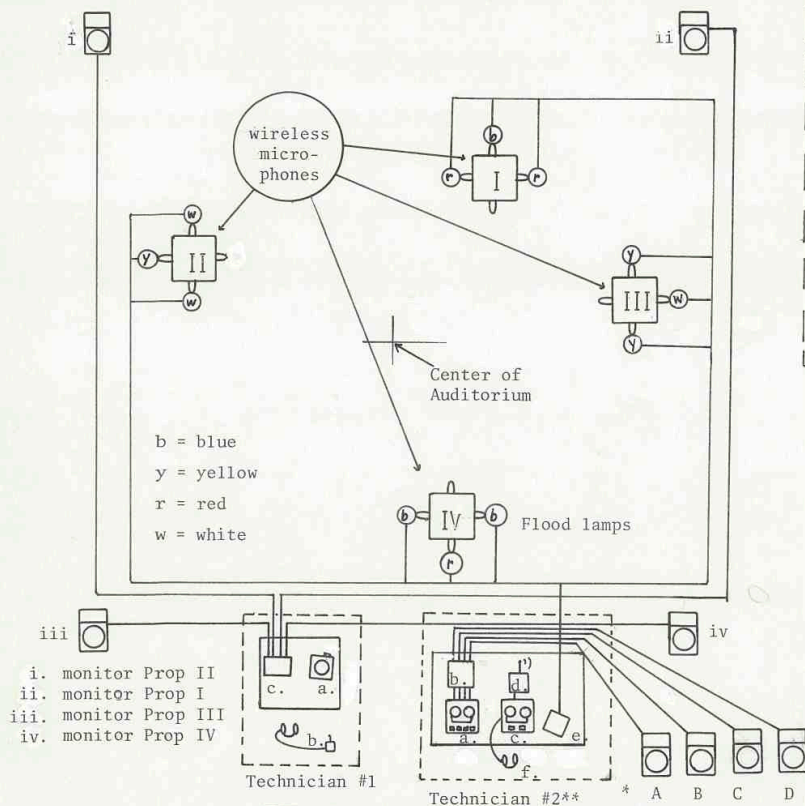
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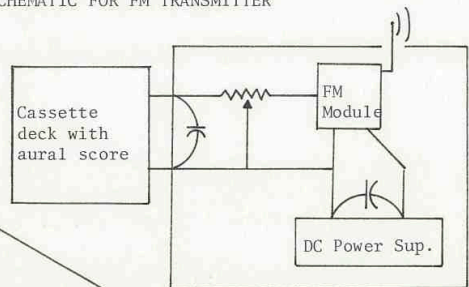
Projection Screen



* These speakers will be dispersed evenly throughout an unoccupied balcony or lobby area. (Doors separating the auditorium and lobby area should be kept open.)

** Technician #2 located outside performance area.

SCHEMATIC FOR FM TRANSMITTER

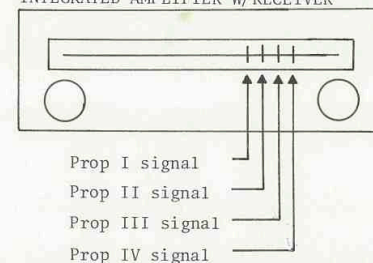


TECHNICAL NOTES

TECHNICIAN #1

- Slide projector containing visual slide scores.
- FM radio equipped with earphone used to monitor dance aural score. Info: from this score is needed to advance slides at the 60 pulse increments.
- Integrated amp with FM receiver amplifying 4 signals received from 4 wireless mikes placed beneath props (between instruments). The frequencies of the wireless mikes must be clustered so as to overlap each other. The sequence of these settings will correspond to the primary prop sounds being monitored.
- These speakers will monitor the mono signal received from the integrated amplifier.

INTEGRATED AMPLIFIER W/RECEIVER



TECHNICIAN #2

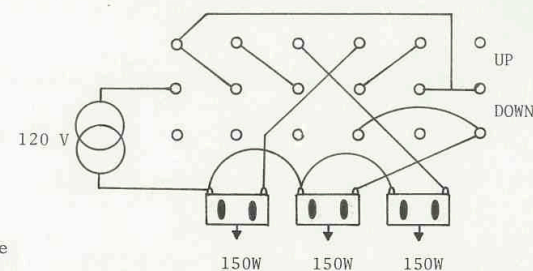
- Four channel tape monitored over speakers A, B, C, D.
- Pre-amplifier, amplifier.
- Dance aural scores (cassette deck).
- Single frequency transmitting station broadcasting aural score to dancers.
- Tailored light mixer operating 12 150W auditorium spots.
- Headphones used to monitor aural score. Info from these scores is needed to operate the light mixer during PRE-CURTAIN SECTION.

PRE-CURTAIN SPOTLIGHT DIRECTIVES: Technician #2 will be equipped with a monitoring device that is tapping the aural score being transmitted to the dancers, and a black and white copy of the PRE-CURTAIN and POST-CURTAIN visual score. The horizontal ellipses should be matched with the ellipses appearing on the diagram above at the given level. When a "Tourguide" character appears, all lights at that level should be off. All lights will be off during the CURTAIN section.

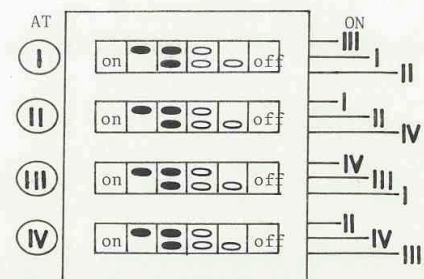
POST-CURTAIN SPOTLIGHT DIRECTIVES: Each vertical line that encloses a percussive event's time allotment will cause a random change in the order of lights coming from the corresponding prop. The all-lights-off position is reserved for periods when these rectangular barriers are absent.

LIGHT MIXER SCHEMATIC

(one of four 6-station interlock 4 amp switches)



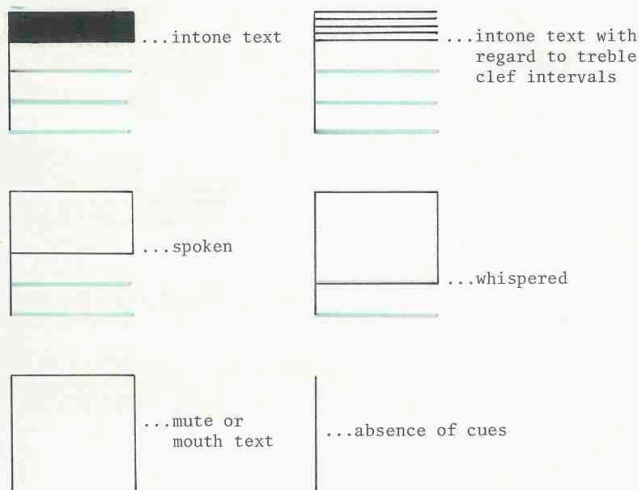
LIGHT MIXER



PRE-CURTAIN DIRECTIVES FOR DANCERS

GENERAL: Each of the four dancers should select a system (LEVELS I, II, III, or IV). During the PRE-CURTAIN section the dance directives, relative to a designated prop (the number given a system relates to the number on a platform) and the vocal dialogue, relative to the timbral cues (read TIMBRAL NOTATION), must be memorized as they are affected by the existing color code (read CHARACTER NOTATION).

TIMBRAL NOTATION



CONTENTS OF AURAL SCORE: Each performer has a specific timbral sound which will cue the changes given in the visual score. These cues relative to each dancer are given below.

DANCER	CUE
I	high frequency "pop"
II	high frequency sine tone
III	amplitude modulated square wave
IV	low frequency "boom" with reverb

CHARACTER NOTATION

COLOR CODE	AFFECTION	AFFECTED TEXT AND FACIAL GESTURE
BLACK	Hate	Spiteful, Haughty
RED*	Pain	Mournful, Sobbing
GREEN	Joy	Cheery, Sparkling
WHITE	Controlled	Militant, Humorless
ABSENCE OF CODE		Typical Tour-Guide

DANCE DIRECTIVES

WRITTEN CUE	MOTION
FORWARD	Directly towards designated prop
UPWARD	Upward Stretching
LATERAL	Circle designated prop laterally
DOWNWARD	Sit
STOP	Stop or freeze arm and leg activity

DANCE ACTIVITY: This section utilizes the "mingling" characteristics of a recessed audience and therefore begins five minutes prior to the end of a traditional concert intermission. Because of the four-coordinate notation cueing the dance directions, the dancers will often be moving over, standing on, and sitting upon the objects which fill the auditorium seating area. All these activities will be coordinated by single track aural score (read CONTENTS OF THE AURAL SCORE) being transmitted from a cassette machine via a FM transmitter on a single frequency to portable FM radios equipped with earphones covertly worn by each performer.

PRE-CURTAIN STARTING POSITIONS: These initial positions may be found by backing up from the point in the score where the prop is finally mounted to the first cue. Where you land is where you start.

**RED CONDITION FOR DANCE: While in the red mode, the image of being suddenly attacked by African honey bees should be used to guide the dance activity.*

POST-CURTAIN DIRECTIVES FOR DANCERS

GENERAL: Each dancer is to individually organize and memorize four envelopes of activity based on the conditions given in this section (black, red, green, white). Each envelope will contain percussive (tap danced), vocal (vocal loops), theatre (facial gestures) and dance elements that are present in varying degrees over the duration of the envelope which is divided evenly into two phases (see PHASE MODULATIONS). Though the particulars of each envelope will differ, the procedural manner will be the same for all four. Once this manner is understood, (that is, the logic that is used to coordinate the above elements), the affects of the color modes upon these elements may be applied. At first, four rudimentary envelopes should be assembled relative to the macro-conditions and the game conditions given in this section as well as those alluded to during the PRE-CURTAIN dialogue. These envelopes in their simplest forms can then be used to paint the score within the vertical time barriers.

ENVELOPE AND PHASE DURATIONS: The four macro-envelopes are determined by the longest duration of each color within each level. Each envelope is divided evenly into two phases. These durations are charted below:

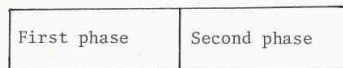
PERFORMER	MODE	1ST PHASE	2ND PHASE	TOTAL
I	BLACK	6u	6u	12u
	RED	5.5u	5.5u	11u
	GREEN	4u	4u	8u
	WHITE	12u	12u	24u
II	BLACK	5u	5u	10u
	RED	7.5u	7.5u	15u
	GREEN	18u	18u	36u
	WHITE	11.5u	11.5u	23u
III	BLACK	11.25u	11.25u	22.5u
	RED	5u	5u	10u
	GREEN	7u	7u	14u
	WHITE	7.5u	7.5u	15u
IV	BLACK	12.5u	12.5u	25u
	RED	14.5u	14.5u	29u
	GREEN	5.5u	5.5u	11u
	WHITE	8.5u	8.5u	17u

AN ARBITRARY PHASE MODULATION: The change from one phase to another may occur over the entire envelope,

Example:



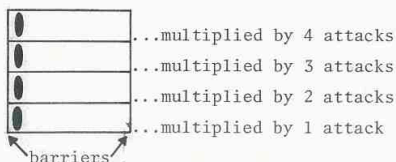
abruptly,



or somewhere in between these extremes.

ENVELOPE INITIATION: The appearance of a vertical barrier enclosing a percussive event, or a change in the affection color mode will always trigger the beginning of an envelope.

PERCUSSIVE (TAP) NOTATION



THE EMERGENCE OF A PERCUSSIVE EVENT: Though the exact position of an event is not given, it must appear in a single cluster somewhere between the vertical time barriers. This frequently offers the performer a choice of modes in which to perform. Once an event (percussive + vocal) is initiated any modal changes may be ignored until it is complete.

THE ABSENCE OF THE PERCUSSIVE NOTATION: When the rectangular lines encompassing the percussive symbols are not present (though the modal aspects are continuously present throughout) the performer should cease all dance activity immediately. Facial gestures are not considered to be a part of the dance elements here and should continue to operate relative to the existing mode. During these periods the loop sequence is delayed and therefore does not affect the facial gesture.

5.

A CONDITIONAL THIRD PHASE: This level is operative when the time needed to fulfill the notated parameters is insufficient. When this occurs, the percussive parameters will receive the highest priority. (As many attack units as is possible should be performed before the allotted time expires.)

VOCAL SOUND SOURCE: "Loops" constructed from the name of each performer will determine the vocal sounds and their order of appearance.

Example:

D - A - N - I - E - L - A - L - A - N - S - E - N

Except for the boxed in sounds which represent an absence of the vocal effects (hard consonants) these sounds would be looped continuously throughout the POST-CURTAIN section.

THE EMERGENCE OF A VOCAL EVENT: The vocal sound should be internalized immediately until a percussive event is initiated. A vocal event may appear at any point during a percussive event.

THE AFFECT OF THE VOCAL INFORMATION ON FACIAL GESTURES: An exaggerated version of the facial configuration needed to form the given vocal sound should immediately appear on the performer following the aural and visual cue. Because the given sound will often be internalized, only during the conglomerate event will the facial gesticulation be accompanied by the sound.

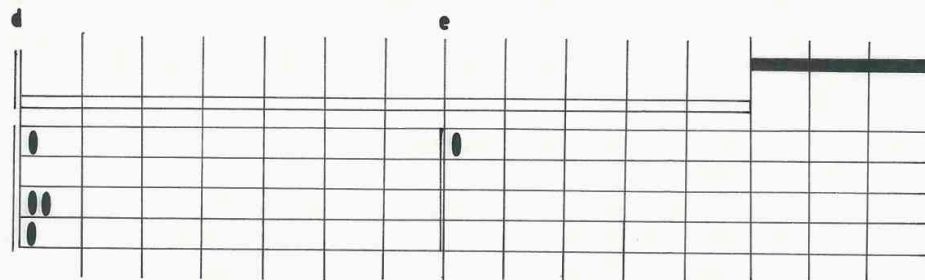
POST-CURTAIN DIRECTIVES FOR DANCERS (CONT.)

DANCE ACTIVITY: The feet of a dancer can move only when a percussive event is being executed. Except for the periods when the rigid state (see THE ABSENCE OF THE PERCUSSIVE NOTATION) is in effect, the portion of the body above the balls of the feet is to move as though the feet are free. Upon completion of a percussive event, the last foot position of that event or gesture is to be held until the next percussive event.

IMPORTANT: Whenever the percussive event barriers are absent, all dance activity will cease causing the body to become rigid. Only facial gestures are exempted from this condition.

UNCONTROLLED RATE AND POWER PARAMETERS: The rate and power in which a vocal, percussive, and dance event is generated is left to the performer except in situations described in "A CONDITION THIRD PHASE."

POST-CURTAIN AURAL SCORE CONTENT: This aural score contains forty fifteen pulse sequences with page-by-page verbal cues that correspond to the position (1, 2, 3, or 4) in the visual (slide) score.



- a. beginning of white envelope is triggered
- b. beginning of white envelope triggered
- c. beginning of black envelope triggered
- d. & e. percussive event barriers

DANCE	phase I, white dance activity		phase I, white dance activity		phase I, black	
	foot motion		activity		foot motion	
THEATRE	phase I, white facial gesture as affected by vocal sound		white mode, phase I facial gesture as affected by vocal sound		black mode, phase I, etc.	
VOCAL	internalized vocal sound		externalized vocal sound as affected by the white mode		next vocal sound internalized	
PERCUSSIVE	13 attack percussive event emerges as affected by white mode in phase I				4 attack perc. event emerges as affected by black	

POST-CURTAIN PARTICULARS:

COLOR CODE	AFFECTION MODE	GENERAL AFFECTS		EFFECT ON PERCUSSIVE EVENTS		EFFECT ON SPOKEN EVENTS		EFFECT ON THEATRE AND DANCE EVENTS	
		First Phase	Second Phase	First Phase	Second Phase	First Phase	Second Phase	First Phase	Second Phase
BLACK	Hate	Aggressive Hate	Aggressive self-hate	Erratic, heavy attacks, very loud		Short erratic bursts, very loud		Fighting gestures	Fighting gestures directed at self
RED	Pain	Extreme mental pain	Extreme sensuous pain	Somewhat erratic soft to medium loud attacks	Steady soft attacks	Mournful, medium loud	Loud, sensuous	By-product of other parameters	
GREEN	Joy	Child-like joy	Plastic joy	Rhythmic, full dynamic range used Vaudeville-like (lead-in or preparatory beats are note considered attacks)		Child-like laughter	Cheery, saccharine	By-product of other parameters	
WHITE	Controlled	Military-like	Rigid hysteria	Strict subdivision of attack units at moderate rate, mf)	Absence of subdivision, frenetic attacks, ff	"Snappy," as giving an order	Shrill, hysterical	Military gestures	Shaking rigidity

PLATFORM CONSTRUCTION

7.

The basic platform design consists of five leg supports, a chassis and the dance surface. The arrangement of the steel plates (given in INSTRUMENT CONSTRUCTION) differs for each platform.

SUPPORTS

There are two types of leg supports: four balance supports and one center support. The balance supports are constructed from two inch diameter fencing pipe (lower piece) and one and five eights inch diameter fencing pipe (upper piece). They are adjustable vertically at two inch increments and horizontally at four inch increments. A hydraulic bender can be used to turn the upper piece. Also, the end which enters the chassis should be hydraulically compressed to allow for a tight right angle fit.

CHASSIS

The chassis is constructed from two inch by four inch square tubing and consists of three lengths (one 48" pipe and two 23" pipes) bolted together at the center.

SURFACE

The dance surface is constructed from a 4' x 4' x 3/4" sheet of plywood (upper sheet) scabbed to a 4' x 4' x 1/4" sheet of plywood. The top sheet has four 9" diameter (beveled edges) circle removed in the proportions given in INSTRUMENT CONSTRUCTION. The lower sheet has a 3/4" hole placed directly in the center of the circle cut out of the upper piece.

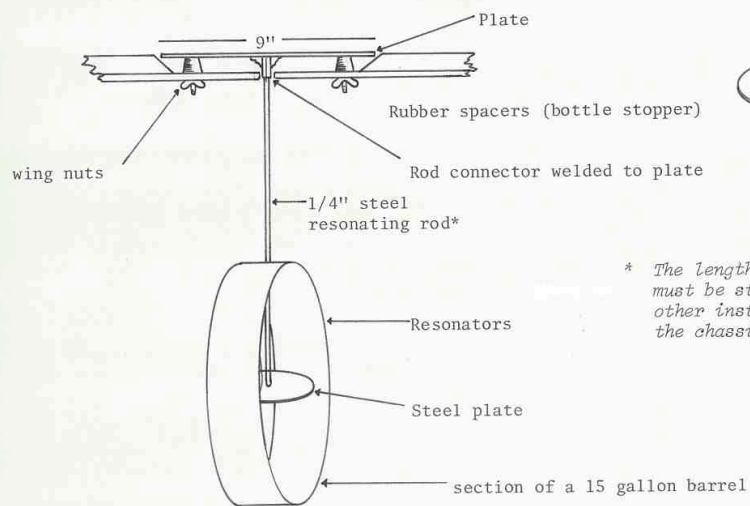
CHASSIS-SURFACE INTERFACE

The chassis is separated from the surface by eight 1" (1/2" diameter) spacers (pipe connectors). The chassis and surface are drawn together by 7" x 3/8" bolts.



INSTRUMENT CONSTRUCTION

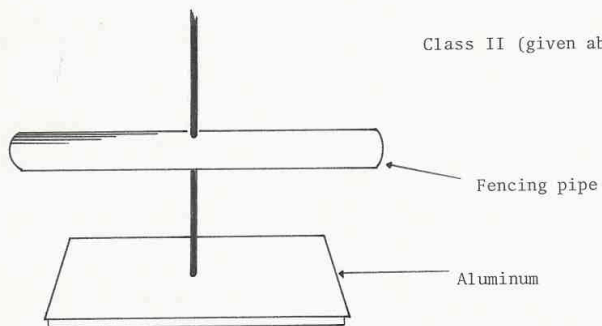
The basic instrument design consists of a steel plate, a resonating rod, and a resonator.



* The length of the resonating rods must be staggered to accommodate the other instruments or in some cases, the chassis.

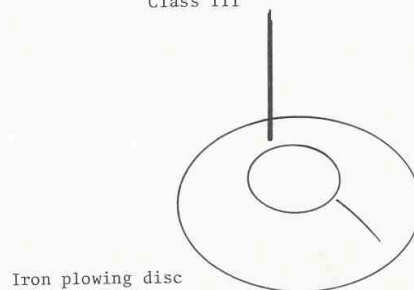
RESONATORS: The resonators should be designed to fit four timbral classes. Within each class, a development of the intrinsic materials relative to four clearly differentiated frequency levels, should be sought after. The highest pitched overall group of each set of four instruments will be considered class I and its parts then arranged beneath platform I. The second highest pitched under platform II, etc.

Class I



Class II (given above)

Class III



Class IV

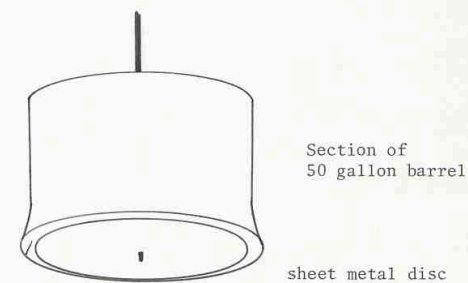
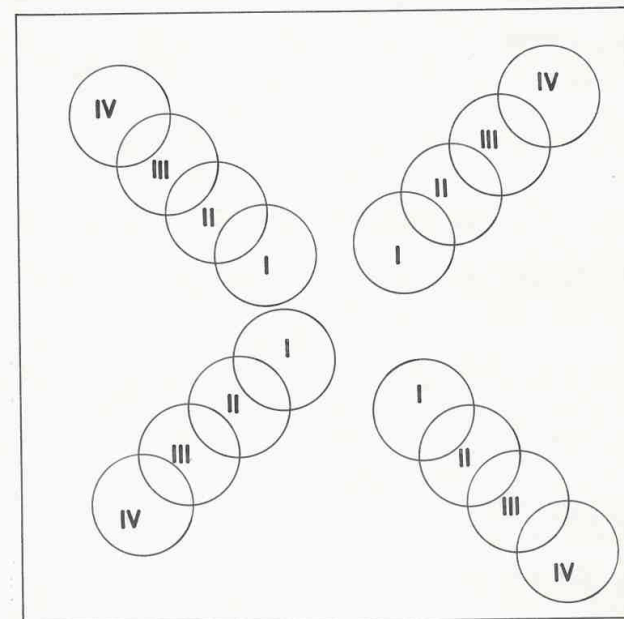


PLATE ARRANGEMENT



Forward

Text
Spots

"Performance of 'Stak Raku' will occur in areas enclosed by darkness or by vertical barriers surfaced with a sound absorbent material. The outer vertical perimeters will be separated by at least 90 feet and not more than 180 feet. The upper horizontal perimeter is unlimited and though the lower limit may be graded or ungraded, the distance between must be at least 24 feet.

Lateral

Forward

Upward

"If mobile chairs are present, they will be faced toward the center of the seating area."

"Suppose the chairs are fixed, then what?"

Downward

Lateral

"If mobile chairs are present, they will be faced toward the center of the seating area. Non-mobile chairs are an acceptable condition."

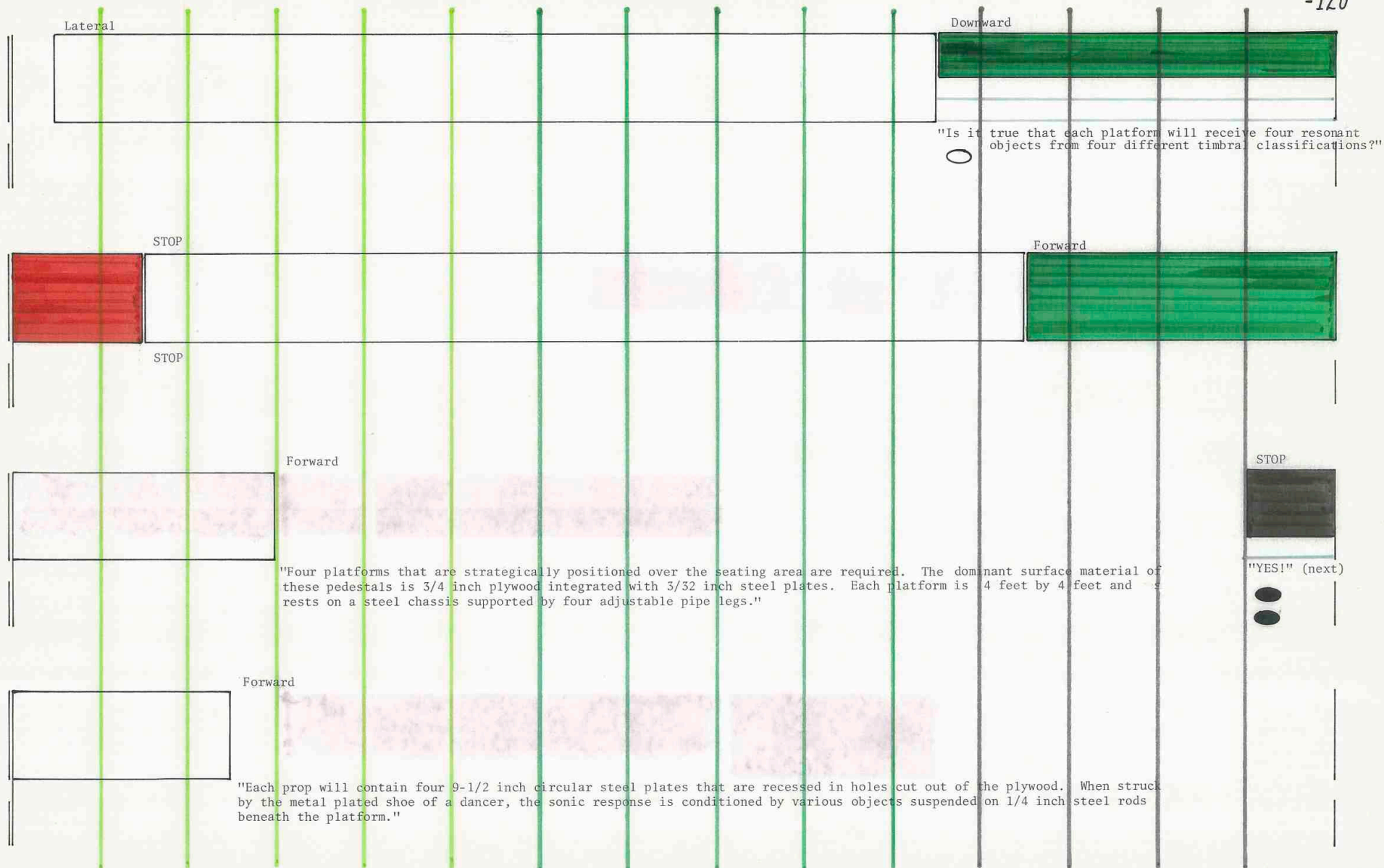
Upward

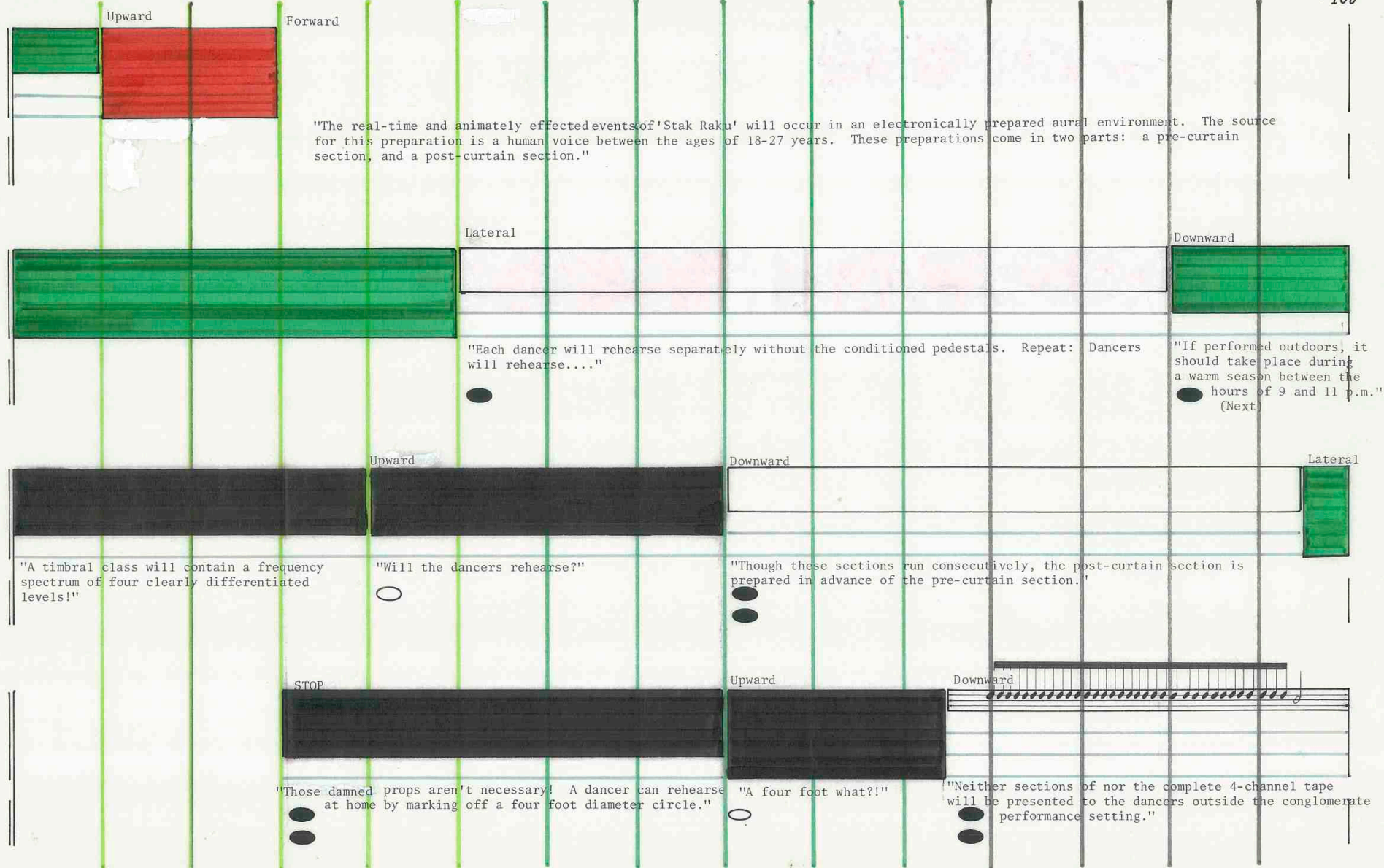
Downward

Lateral

Ra

"Where, if I might ask, will performances occur?"





Lateral

Downward

Upward

"If performed indoors, it should be performed during the evening in a building meeting the enclosure requirements. The lighting requirements will be accomplished by the existing houselights equipped with a main-circuit dimmer switch, and 12 spotlights located at the perimeters...."

"...(?) that are connected to a tailored light mixer that is operated by a technician?"

"This will allow cliché elements developed during the post-curtain section to appear during the pre-curtain section*."

Upward

Forward

STOP

"A loose network of 75w bulbs will be strung over the seating area...."

"(?) with a light density that emphasizes the darkness beyond the perimeters but not the individual features of the audience?"

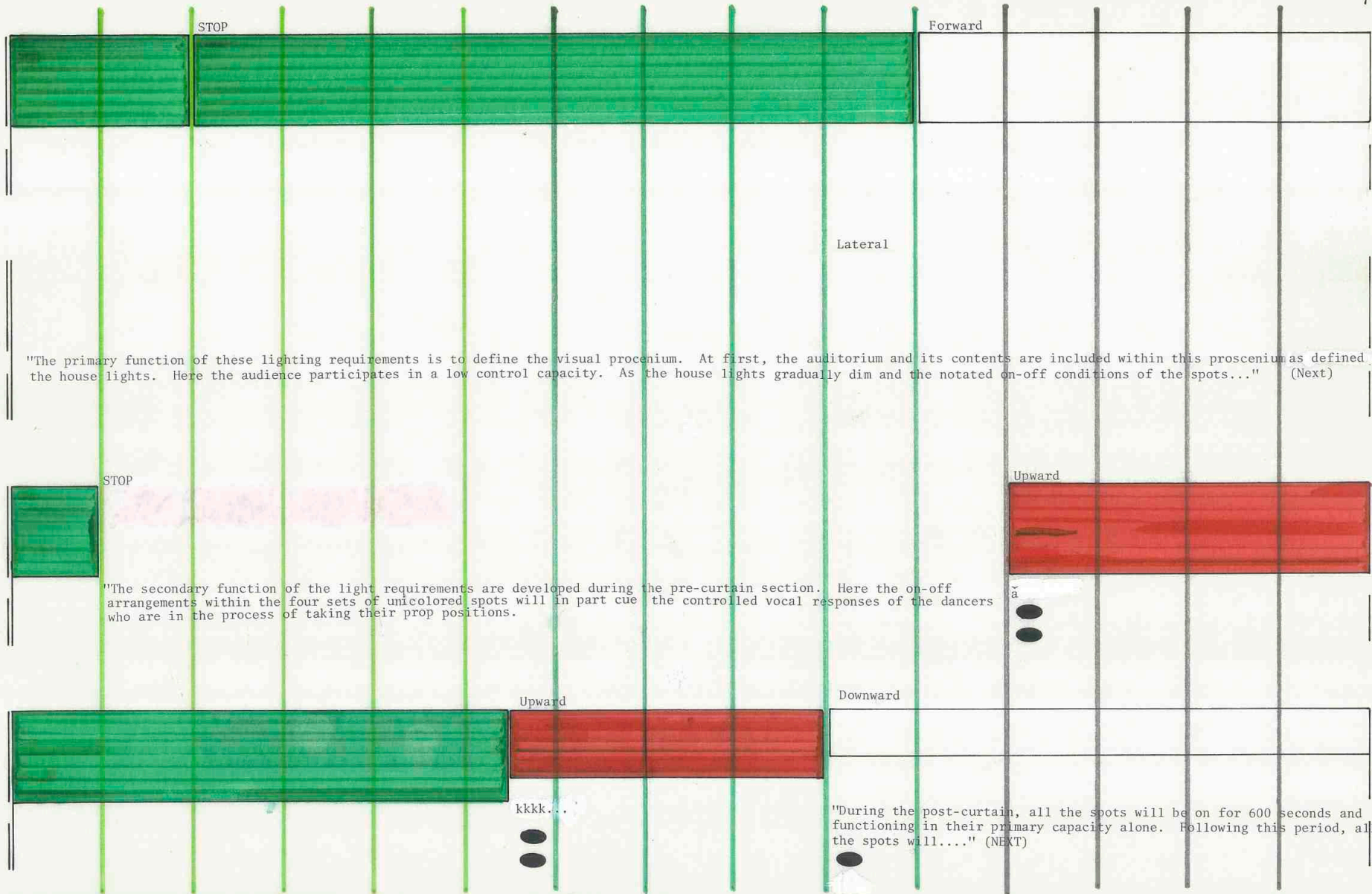
"The spots focused on the prop performers, will be stationed at the perimeters just above the eye-level of the seated audience." (Pause briefly)

Forward

Lateral

STOP

* See pre-curtain and post-curtain four channel tape construction.



Lateral

Downward

"Outside of the conglomerate performance situation, the dancers will rehearse (Pause briefly) (next) separately. This will reduce the inter-cliche effects that will develop in sectional preparations."

STOP

"...gain predominance, the visual proscenium is reduced to the fragmented proscenium or pedestals. By curtain time, the audience has passed into a visually de-emphasized and vacuous ambience surrounding 4 inanimate, high density light concentrations within which an animate subset of 4 people are being controlled."

Upward

Downward

Lateral

Forward

"When can these idiot dancers return to their seats?"

"During the darkest portion of this latter post-curtain period, the dancers will return to their initial auditorium seats."

Lateral

Forward

"...simultaneously..."

"...shut off and the intensity of the houselights will be increased for 60 seconds to their initial pre-curtain state."

(Pause briefly)

"During the post-curtain section, a source of light that is a by-product of the visual projected score will enter the performance area from one screen illuminated by one slide projector."

"This traditional concert state is not unlike the universal concept of a god-like spectator positioned within the diffused atmospheres separating the planets."

Upward



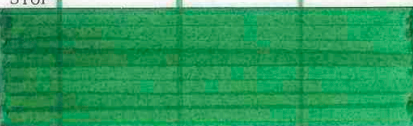
STOP

"Control of such parameters is not limited to the visual light and space elements alone!"

(Silent)



STOP



"This traditional concert state is not unlike the universal concept of a god-like spectator positioned within the diffused atmospheres separating the planets."

(Silent)

"The dancers will receive their post-curtain performance cues from the projected visual scores, the changing spots and the transmitted aural score. (Next)"

STOP

"At first, the auditorium and its contents are included within the visual proscenium as defined by the houselights. Here the audience participates in a low-control capacity. As the auditorium lights gradually dim and the notated on-off conditions of the spots gain predominance, the visual proscenium is reduced to the fragmented proscenium or pedestals. By certain time the audience... (Next)"

STOP



"These projectors are operated and advanced every 60 pulses by a technician with a remote switch."

"And how, pray tell, will the performers receive this visual information?"



Forward

STOP

"At first, the auditorium and its contents are included within the visual proscenium as defined by the houselights. Here the audience participates in a low-control capacity." (Next)

Lateral

"This latter information is received by way of earphones connected to transistor radio's covertly worn by each performer."

Upward

Downward

Lateral

"...has passed into a visually de-emphasized and vacuous ambience surrounding 4 inanimate, high density light concentrations within which an animate subset of 4 people are being controlled."

"Why? Why? Why?"

"Why are the lighting requirements so specific?"

Upward

Forward

"I suppose that each will have their own little technician."

"Projectors equipped with the remote switches will be used by each performer during their individual preparation."

(Pause briefly)

"The primary function of the lighting requirements is to define the visual proscenium." (Next)

"As the auditorium lights gradually dim and the notated on-off conditions of the spots gain predominance, the visual proscenium is reduced to the fragmented proscenium or pedestals."

Downward

Upward

"By curtain time the audience has passed into a visually de-emphasized and vacuous ambience surrounding 4 inanimate, high density light concentrations within which an animate subset of 4 people are being controlled."

Downward

Upward

STOP

"Would you please address yourself to the purpose of the slides we are about to see."

ū

"Why, of course." (Next)

Forward

"By curtain time the audience has passed into a visually de-emphasized and vacuous ambience surrounding 4 inanimate, high density light concentrations within which an animate subset of 4 people are being controlled."

"At first the auditorium and its contents are included within this proscenium as defined by the houselights. Here the audience participates in a low control capacity. As the houselights gradually dim and the notated on-off conditions of the spots gain predominance, the visual proscenium is reduced to the fragmented proscenium or pedestals."

STOP

Downward

Upward

"This traditional concert state is not unlike the universal concept of a god-like spectator positioned within the diffused atmospheres separating the planets."

"All responses and their emotive condition occur along a linear time continuum that is designed to economically draw upon the mental capacity of each performer."

Forward

"The primary functions of the projected visual scores are to direct the emotive and the affected percussive responses of the dancers. All dance, theatre, vocal, and percussive elements are subject to the existing affection mode."

STOP

Upward

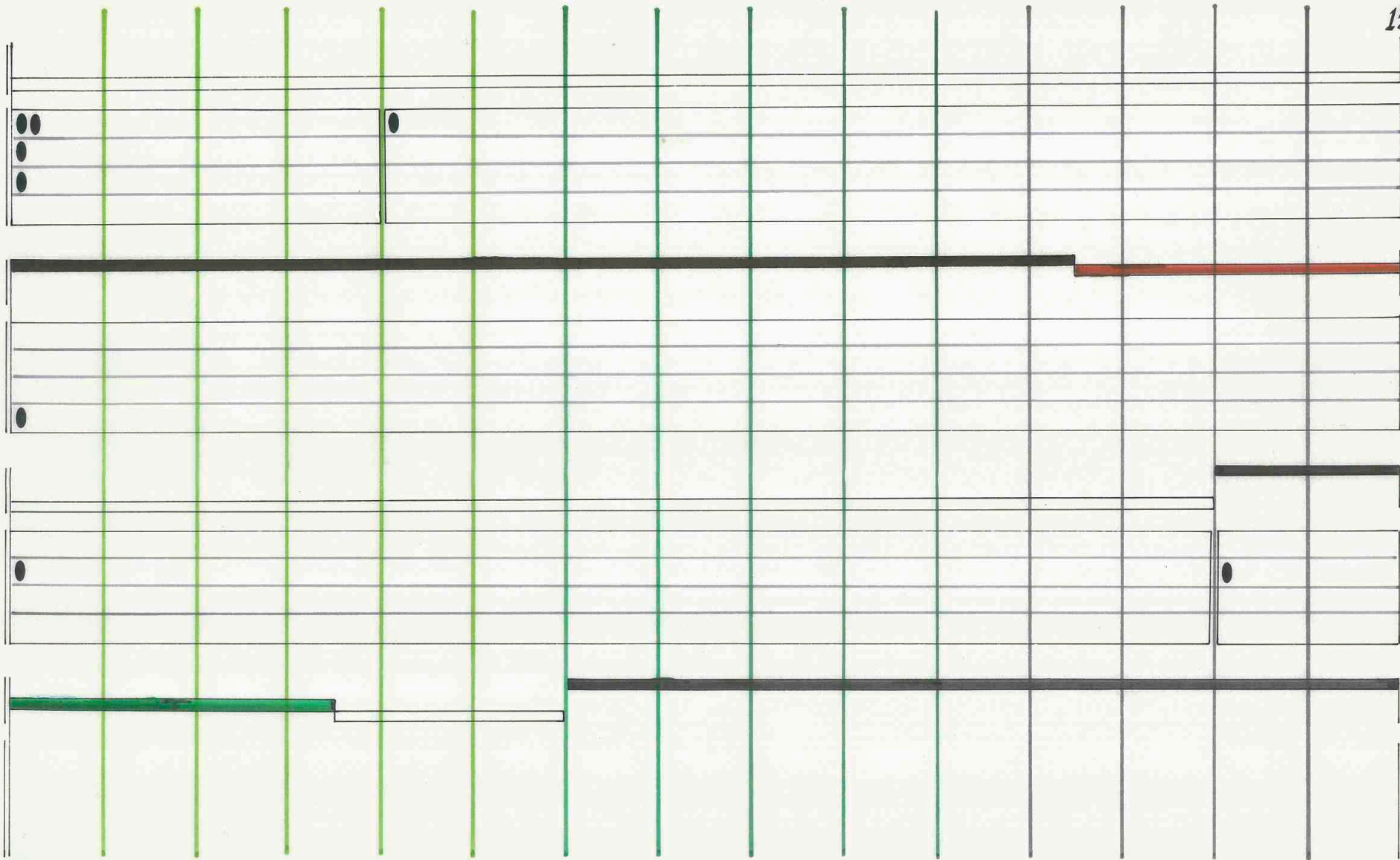
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STOP

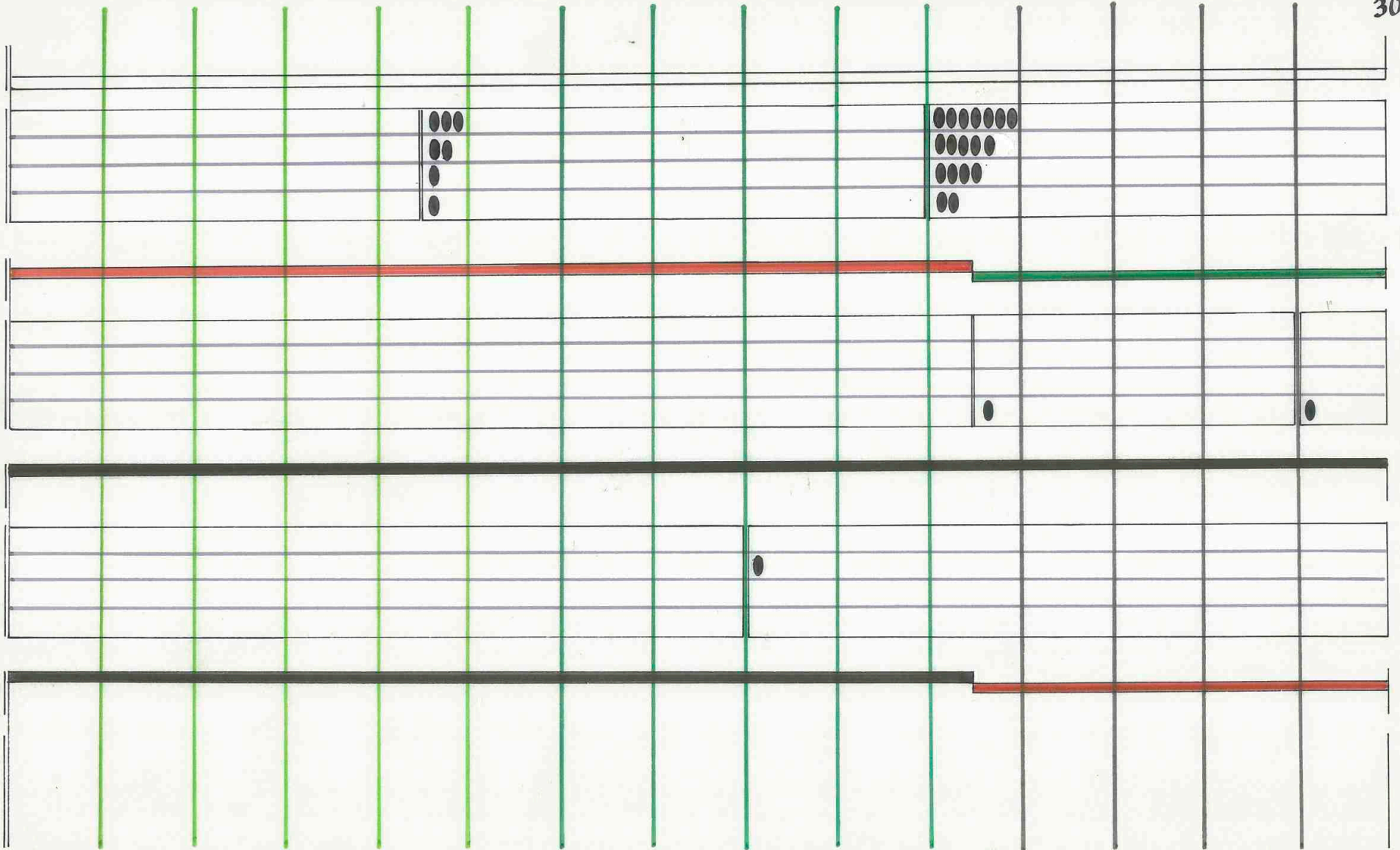
"By curtain time, the audience has passed into a visually de-emphasized and vacuous ambience surrounding 4 inanimate, high density light concentrations within which an animate subset of 4 people are being controlled."

CURTAIN
SECTION

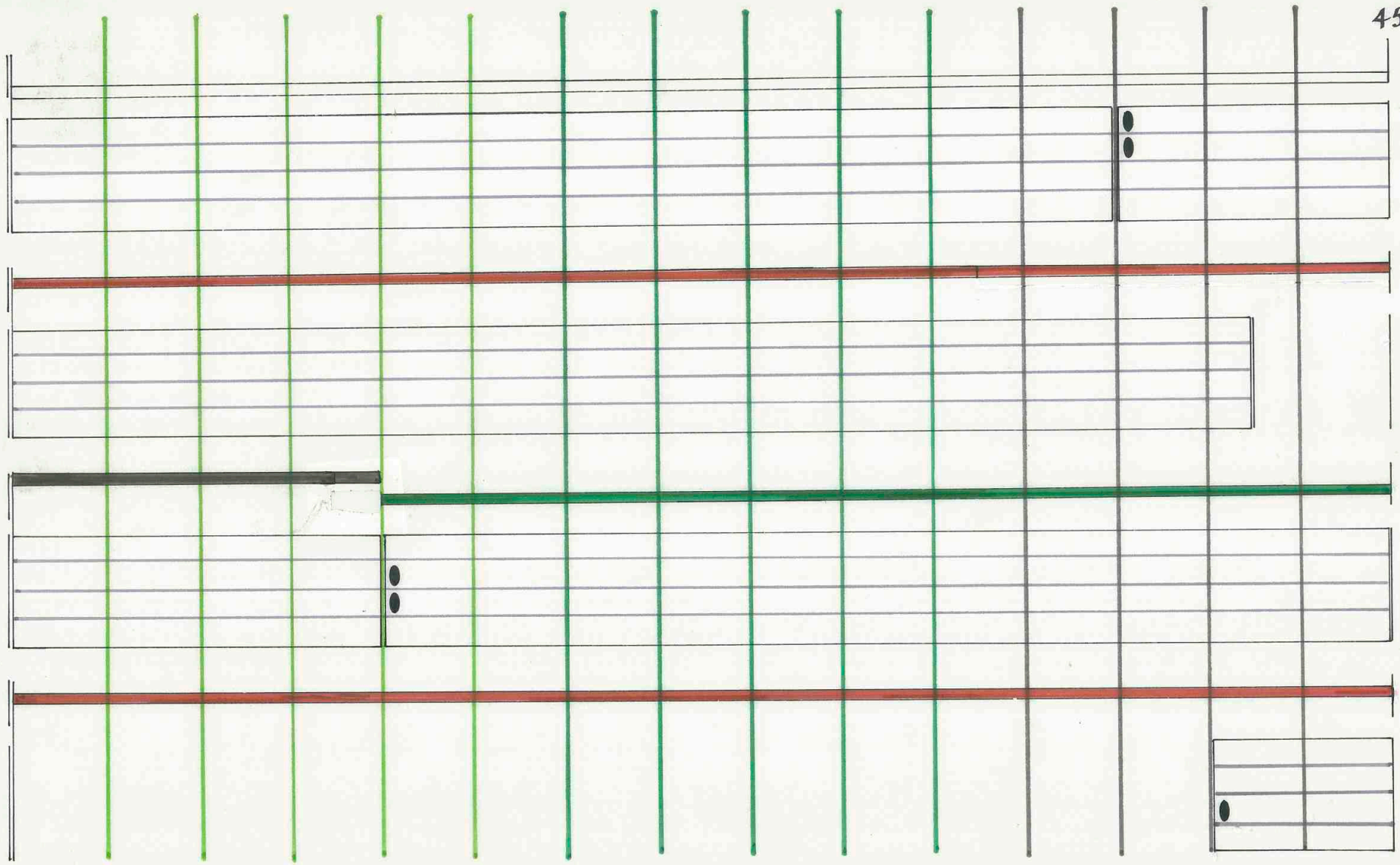
15"



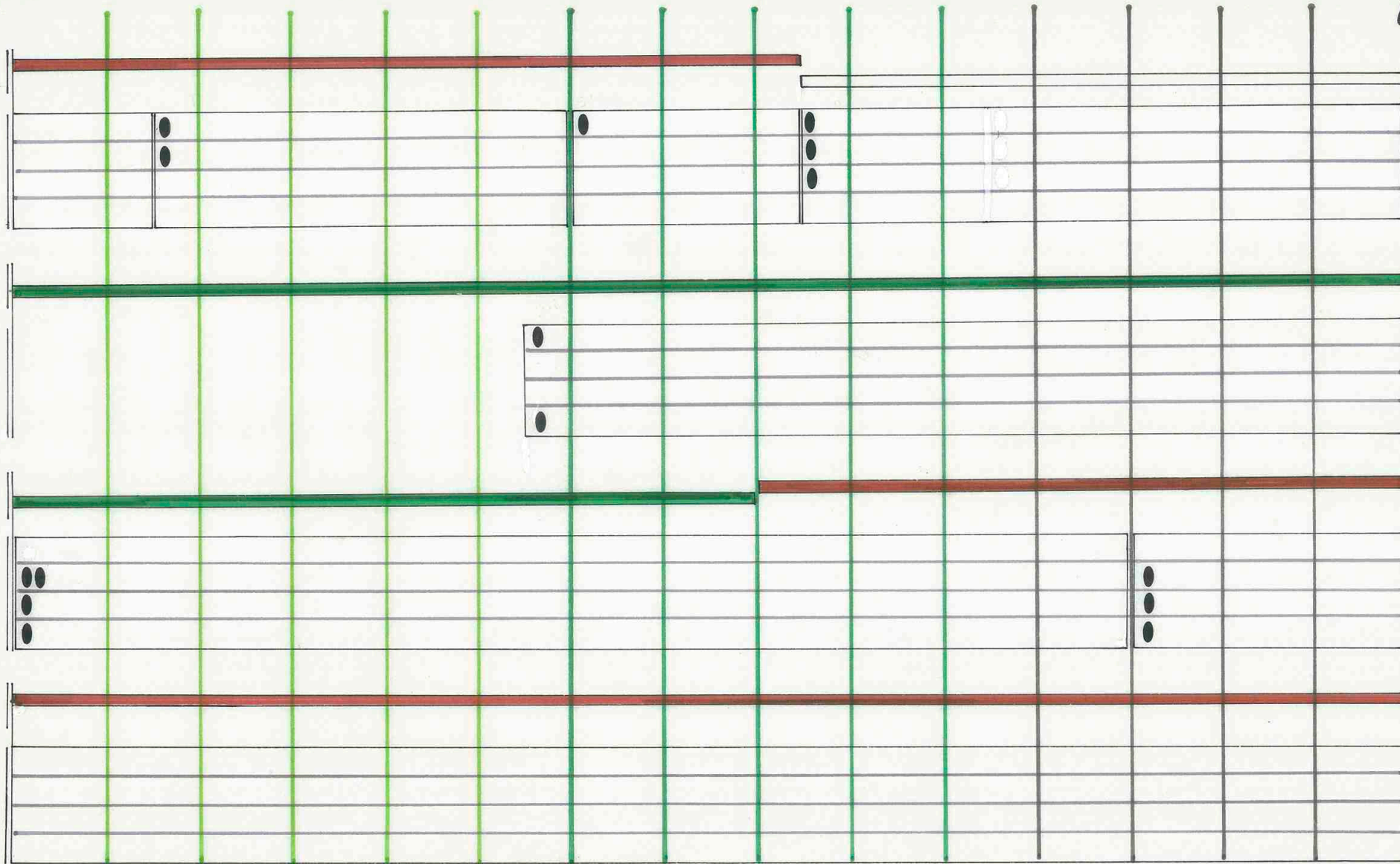
30"



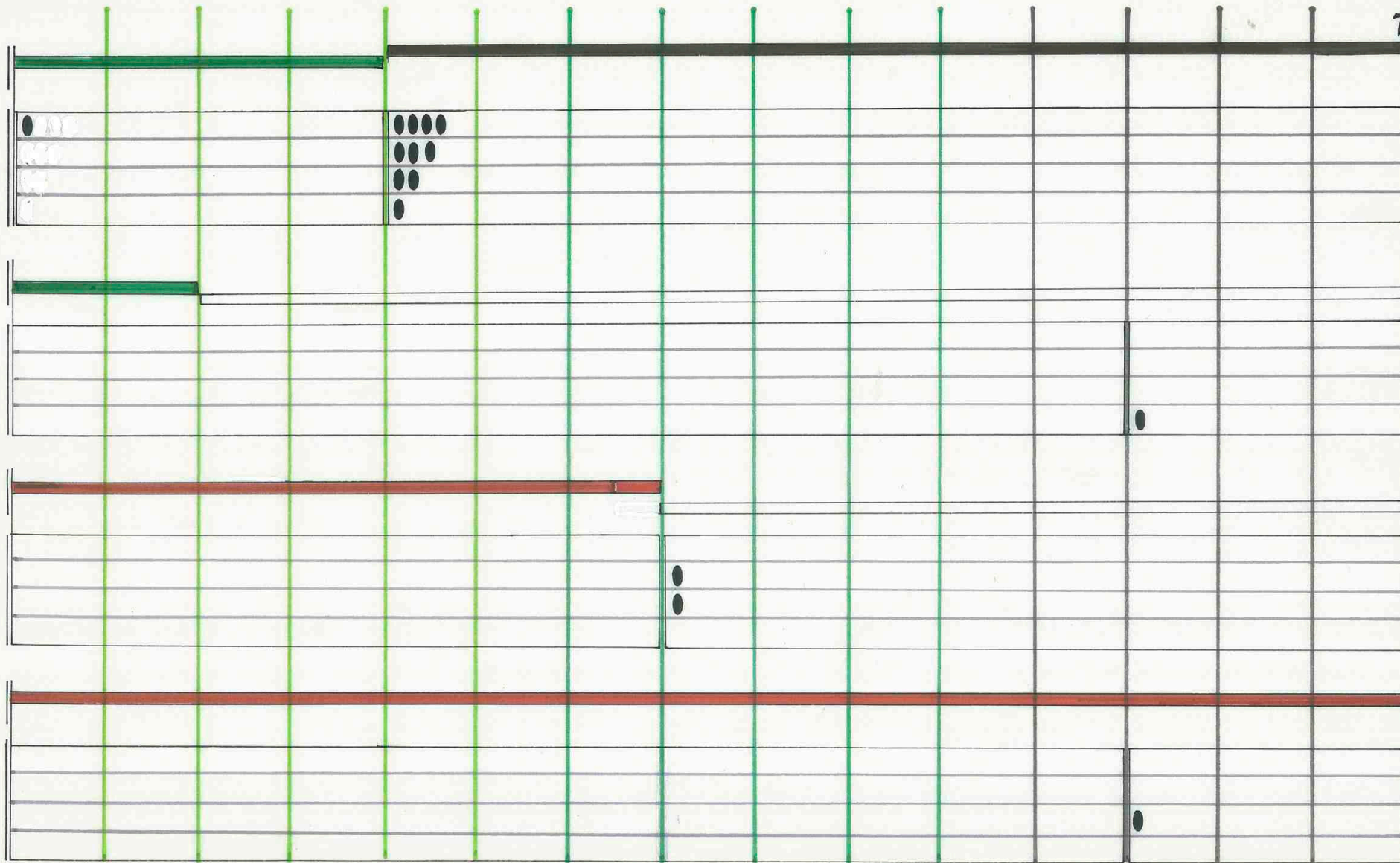
45"



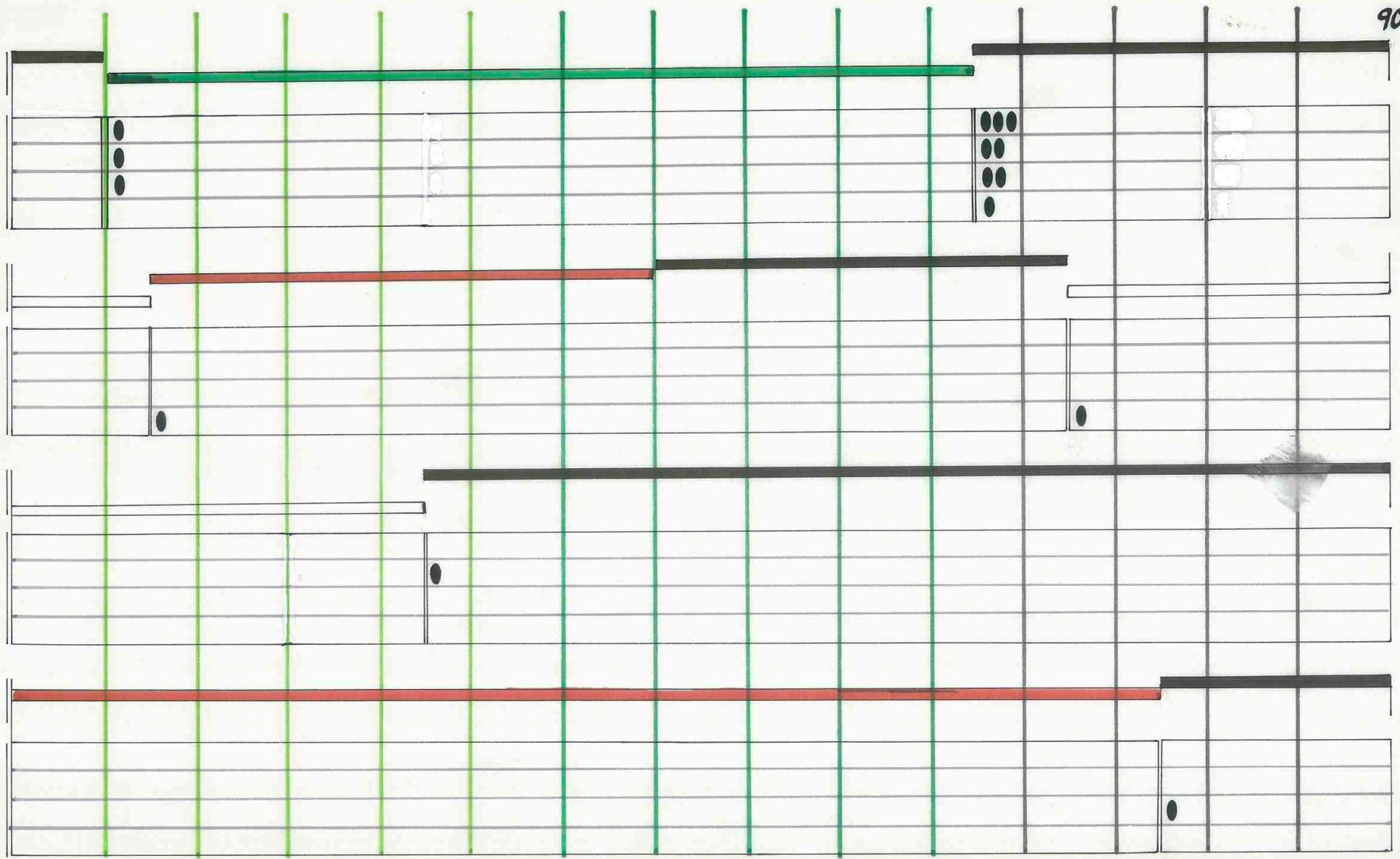
60"



75"

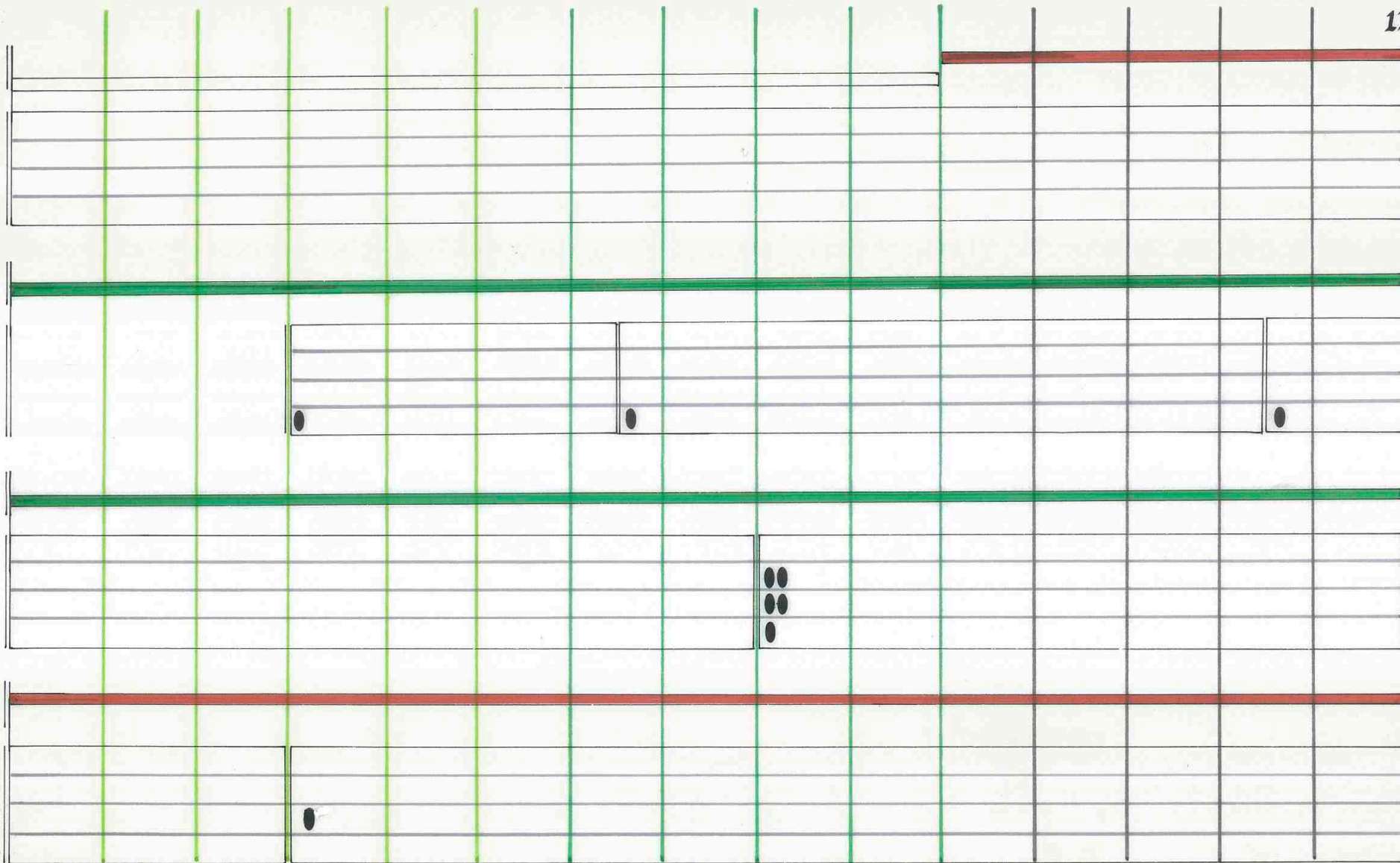


90"

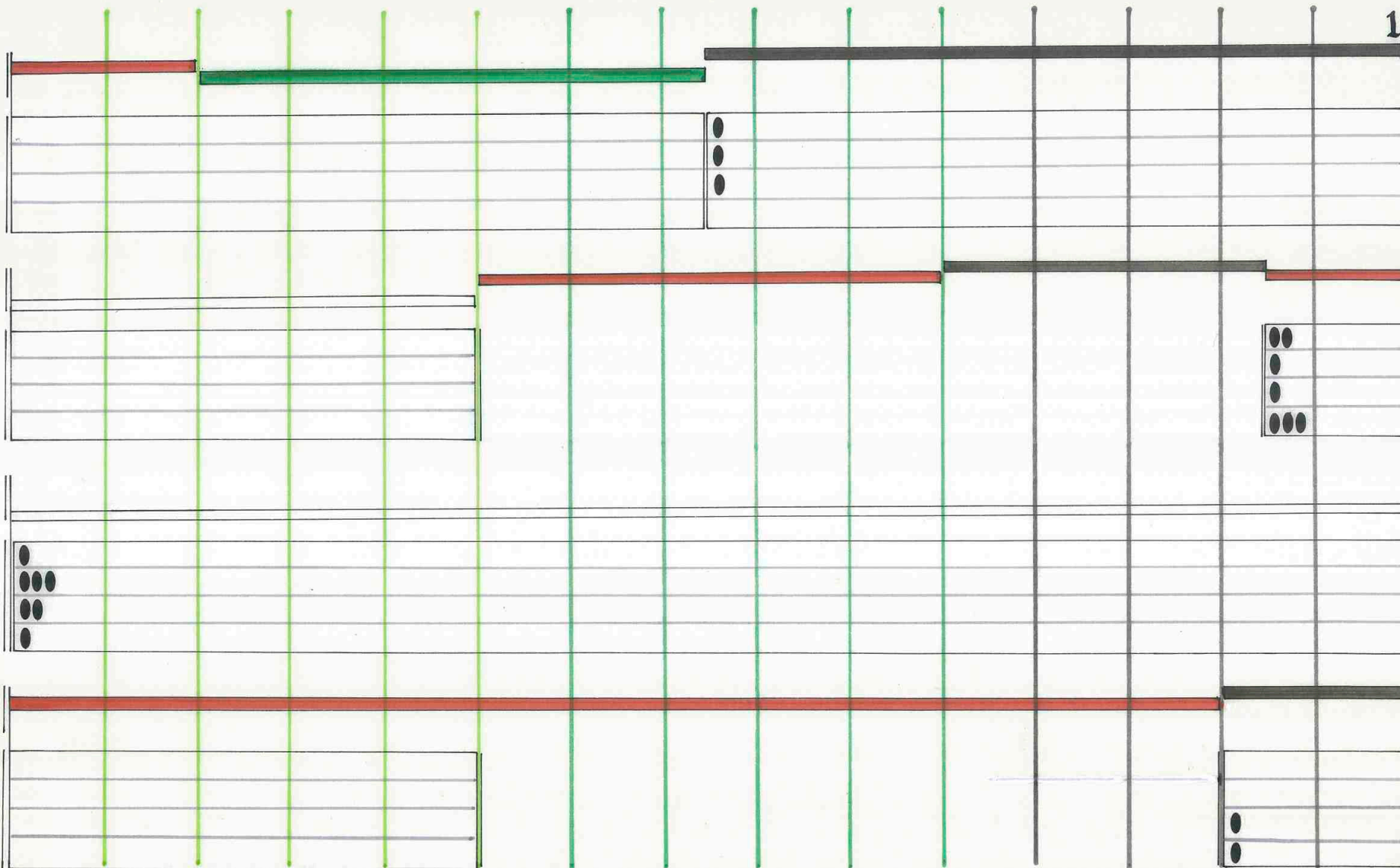




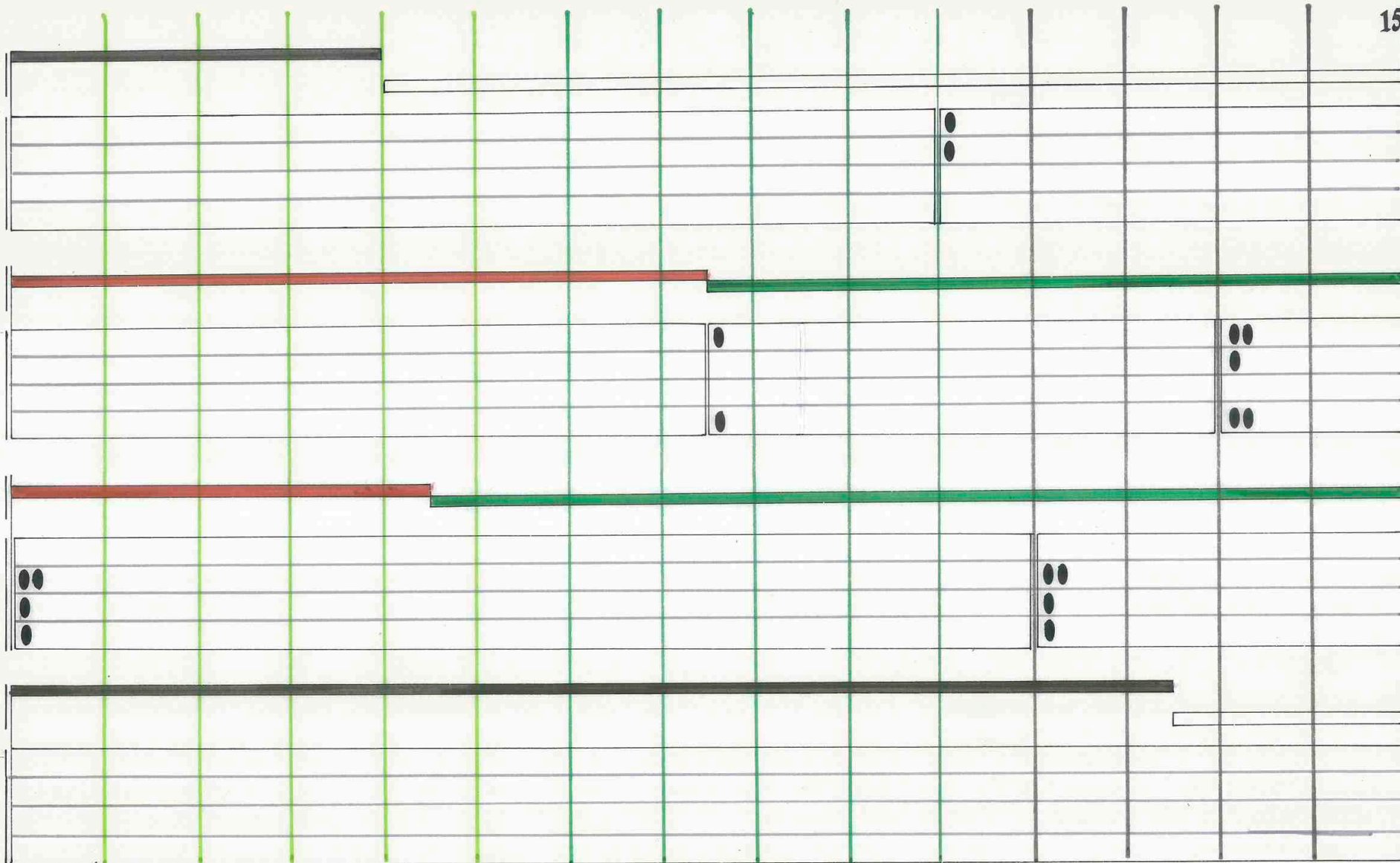
120"

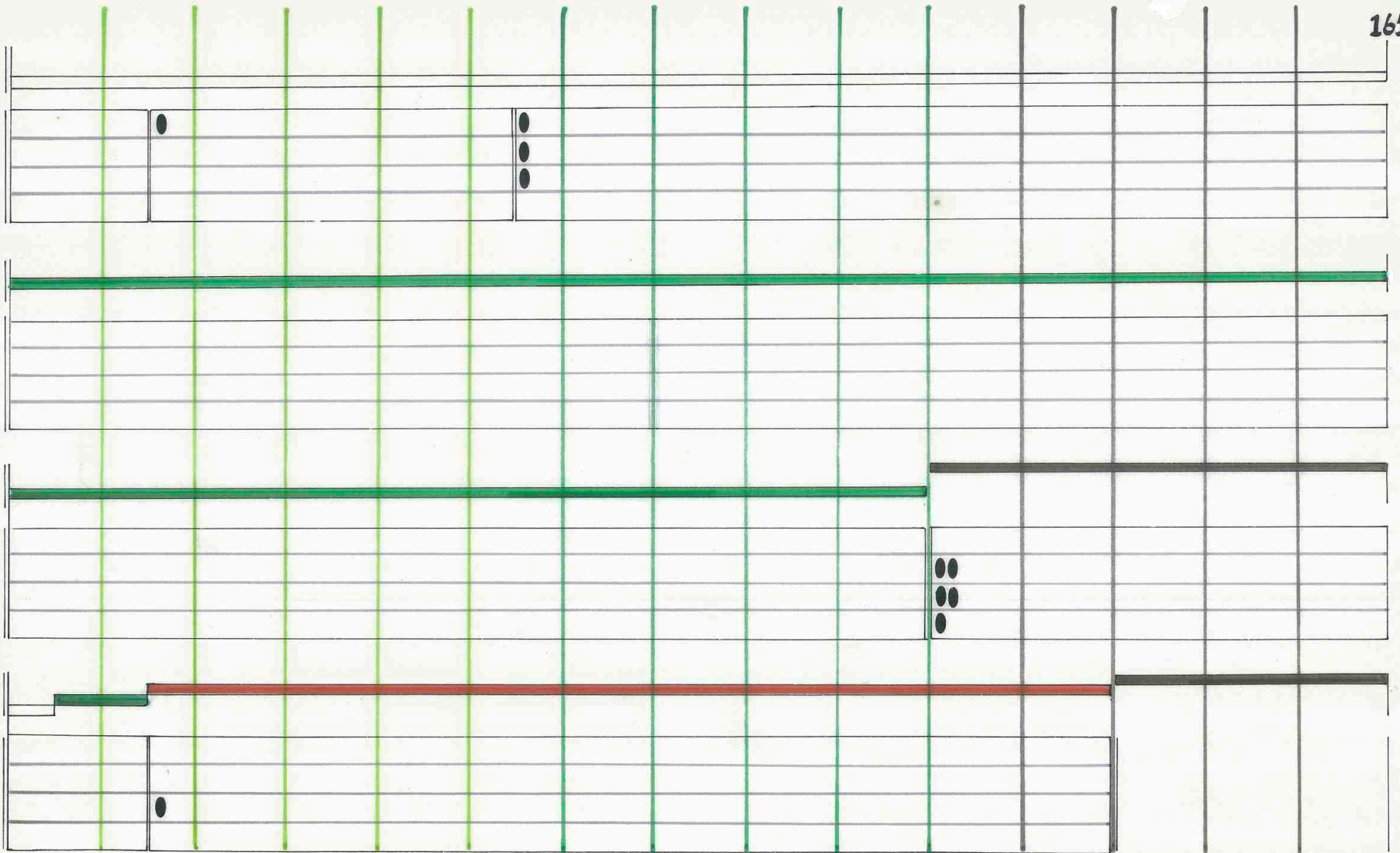


135"

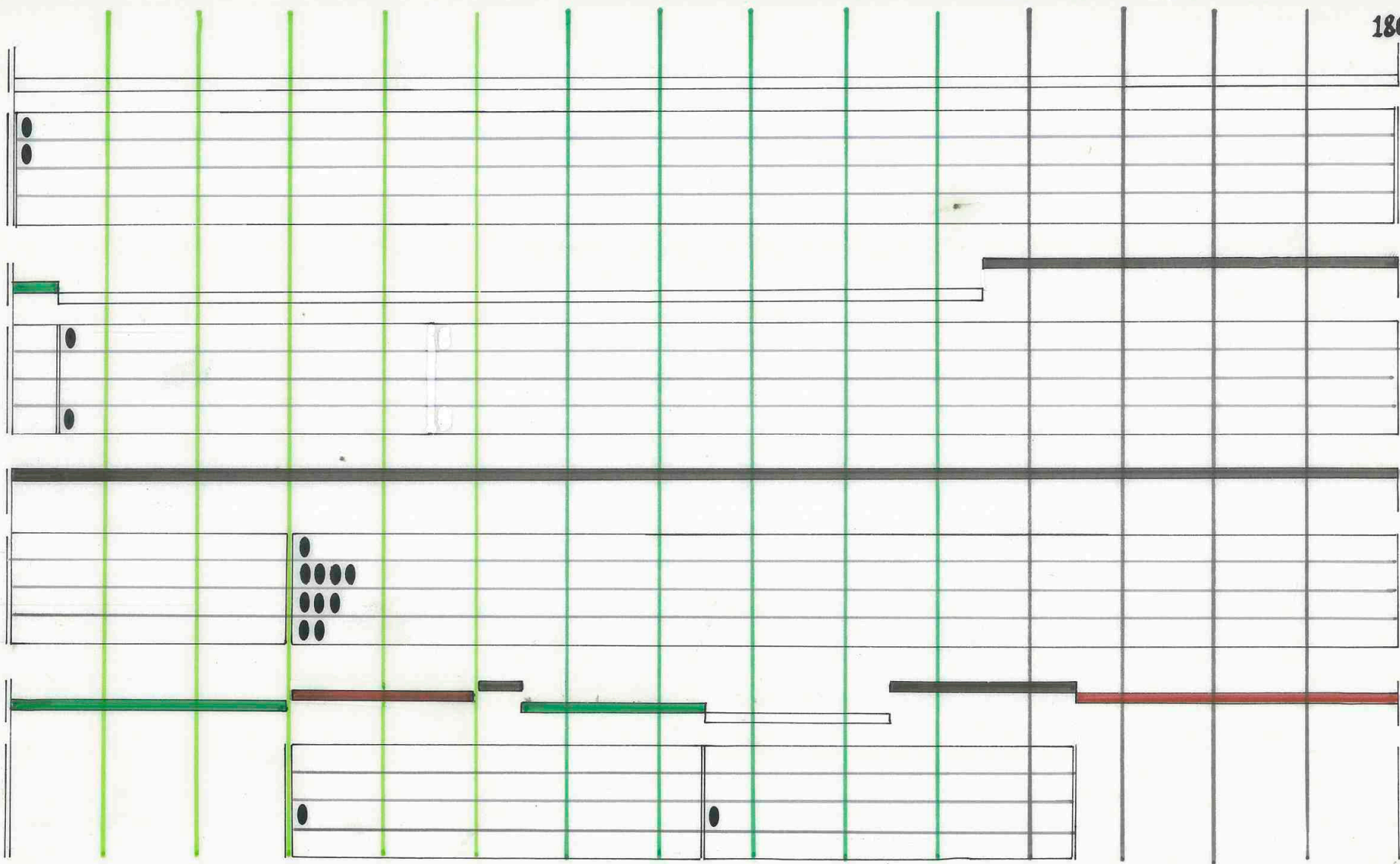


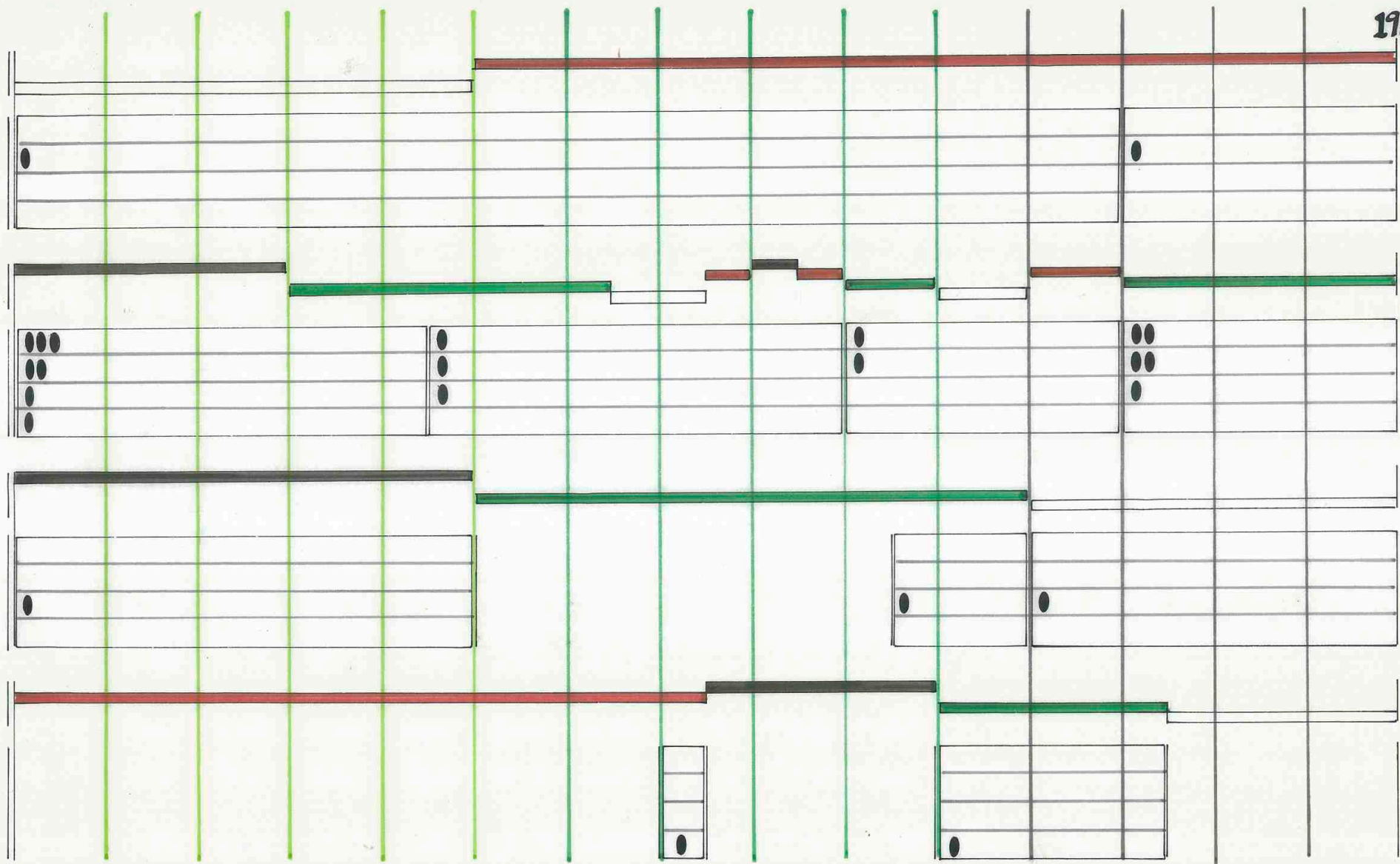
150"



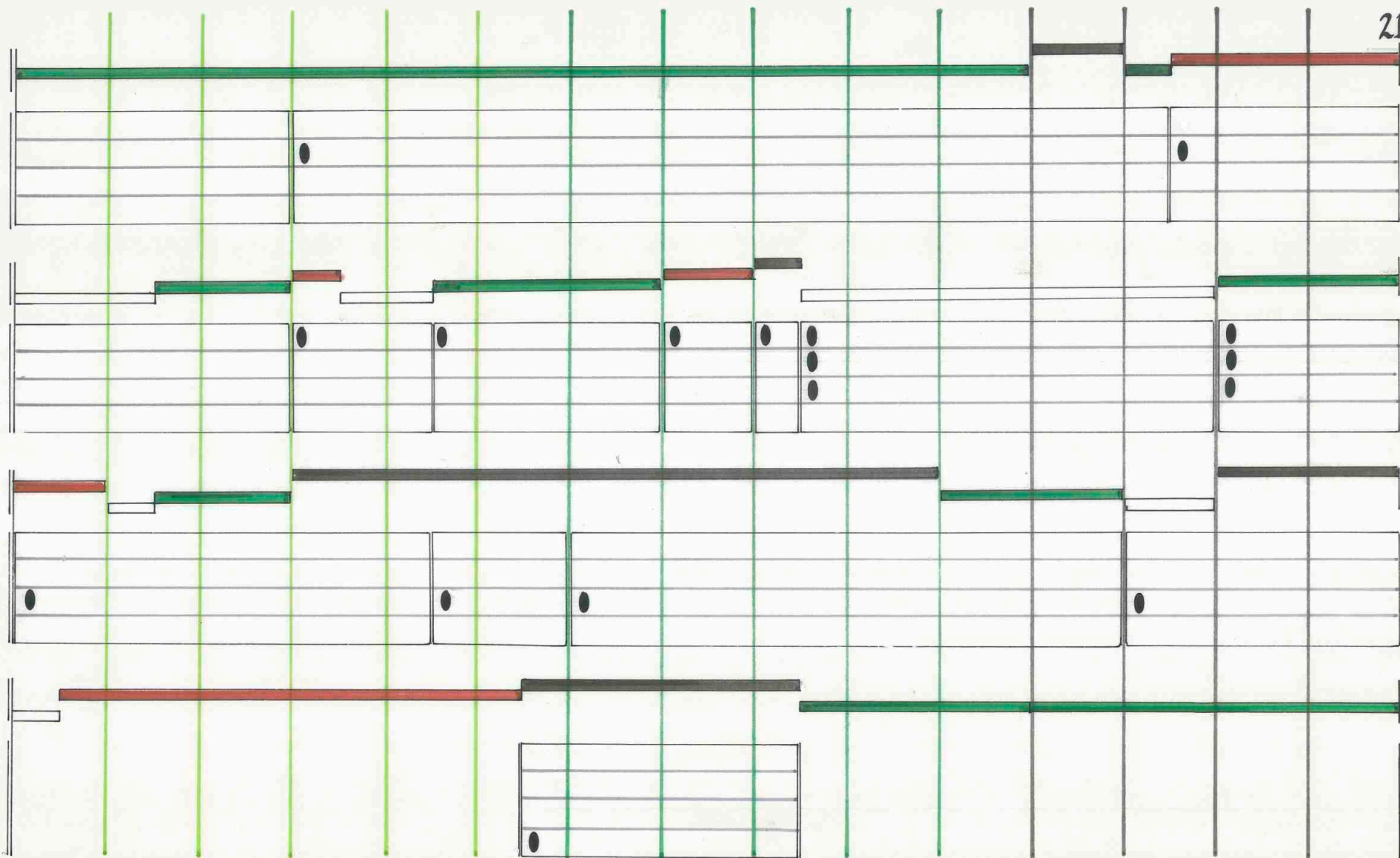


180"





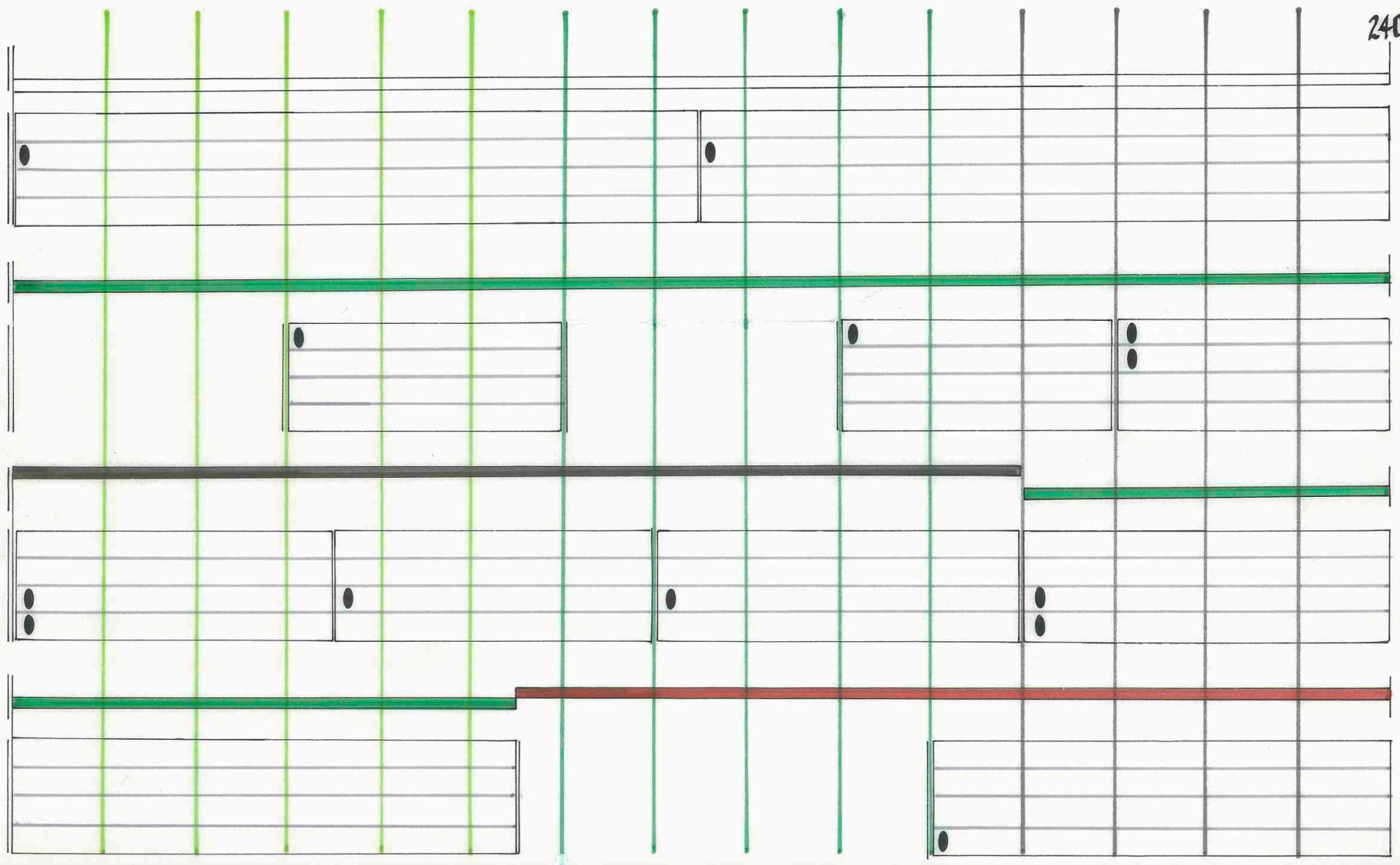
210"

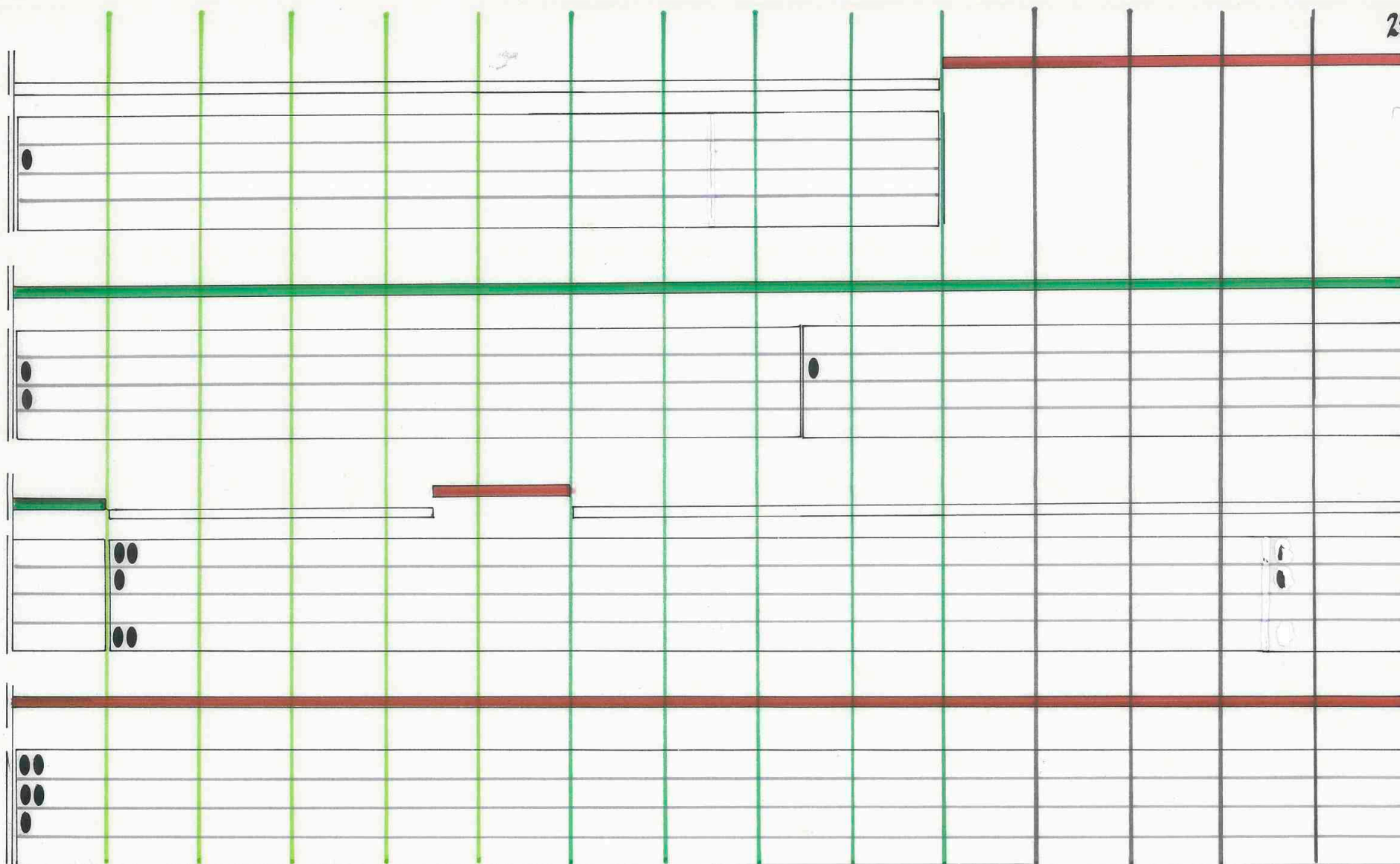


225"

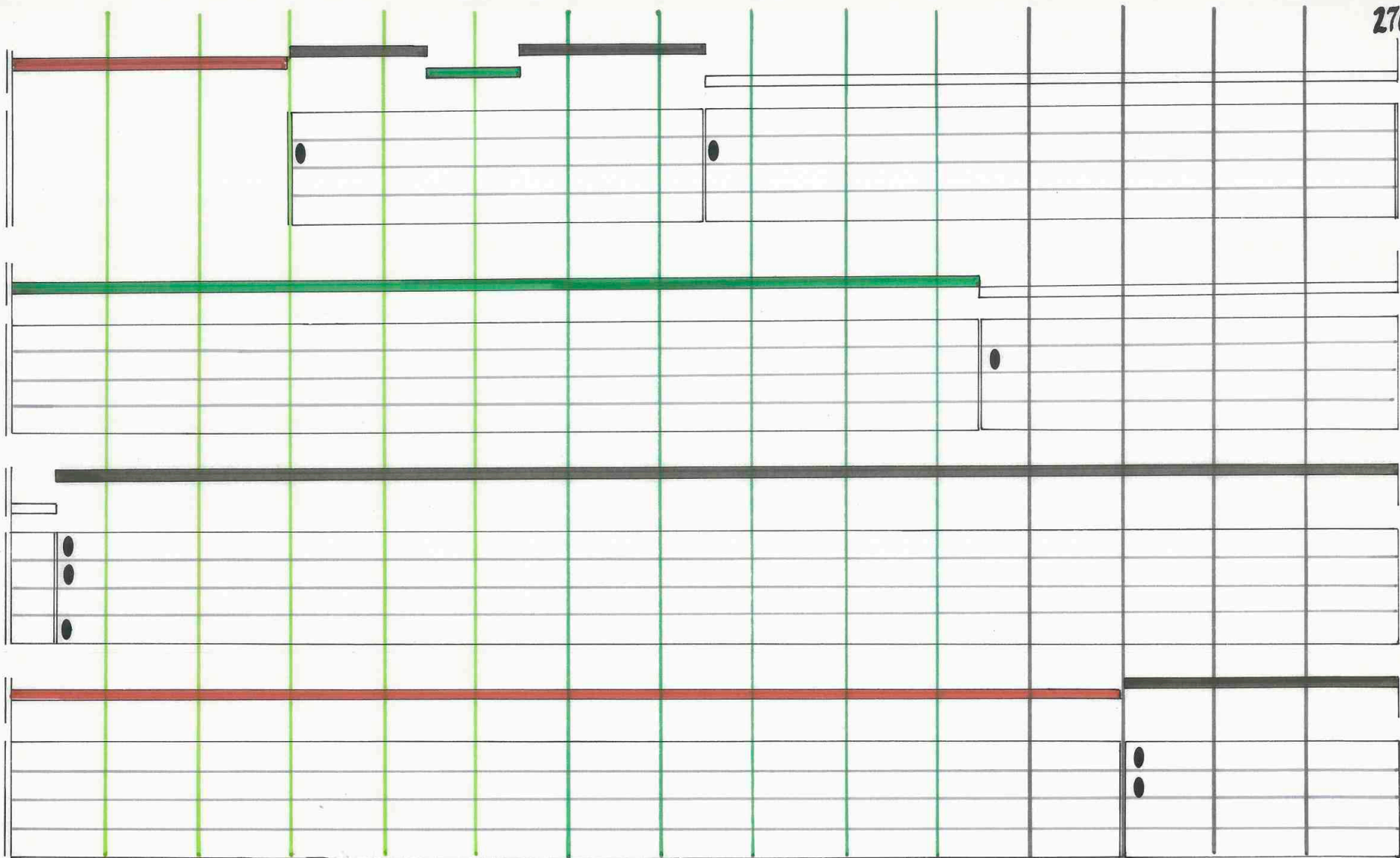


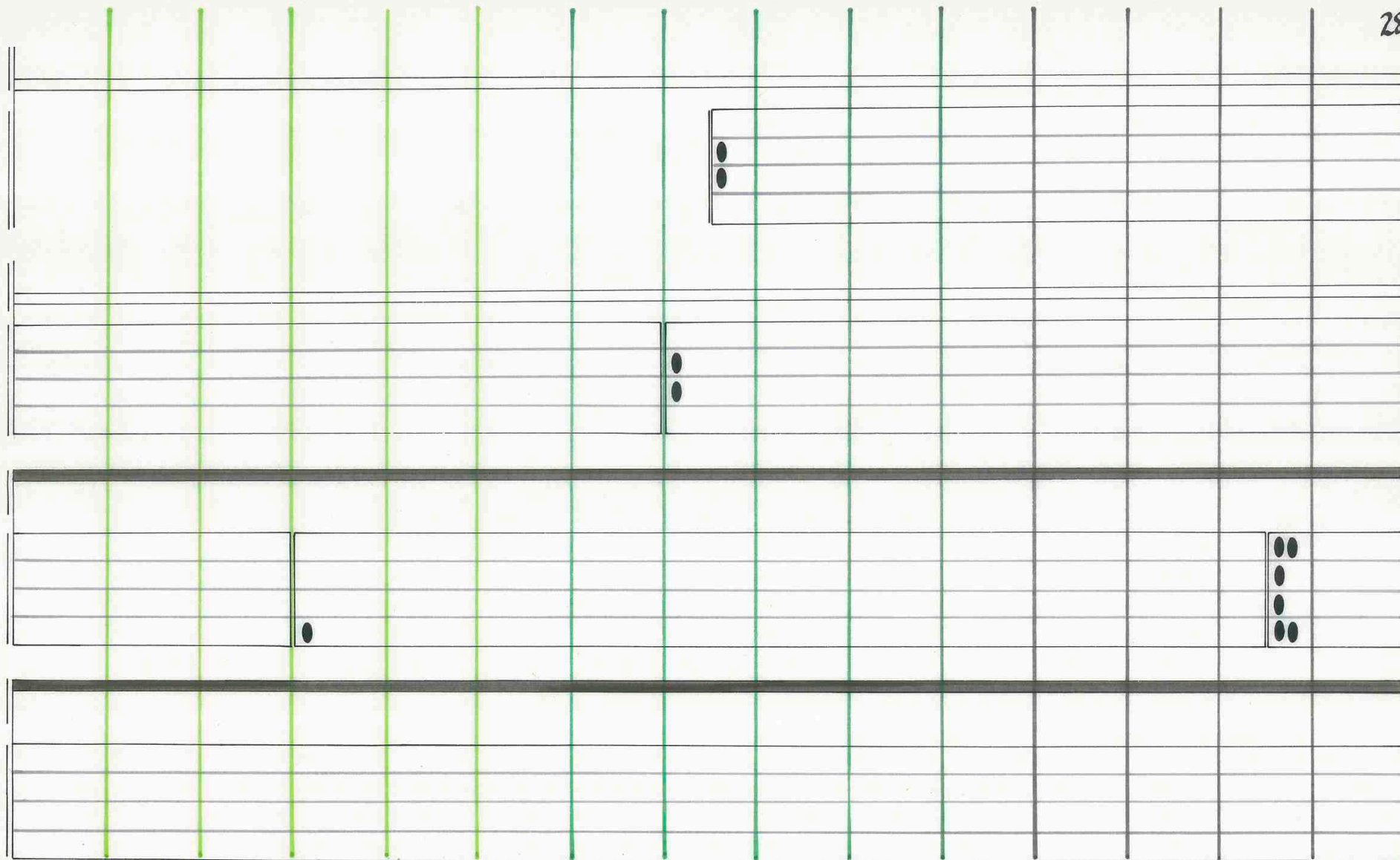
240"



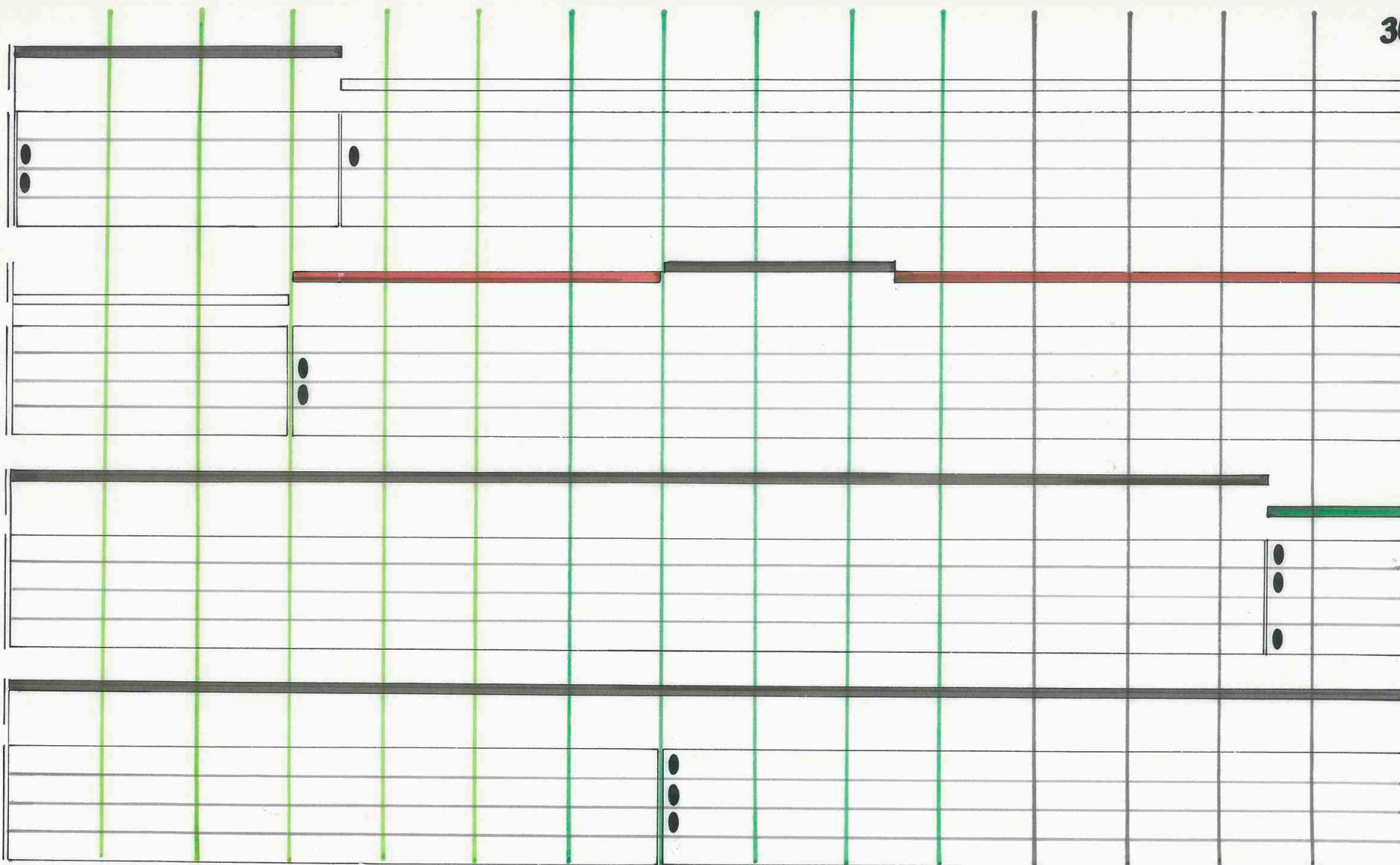


270"

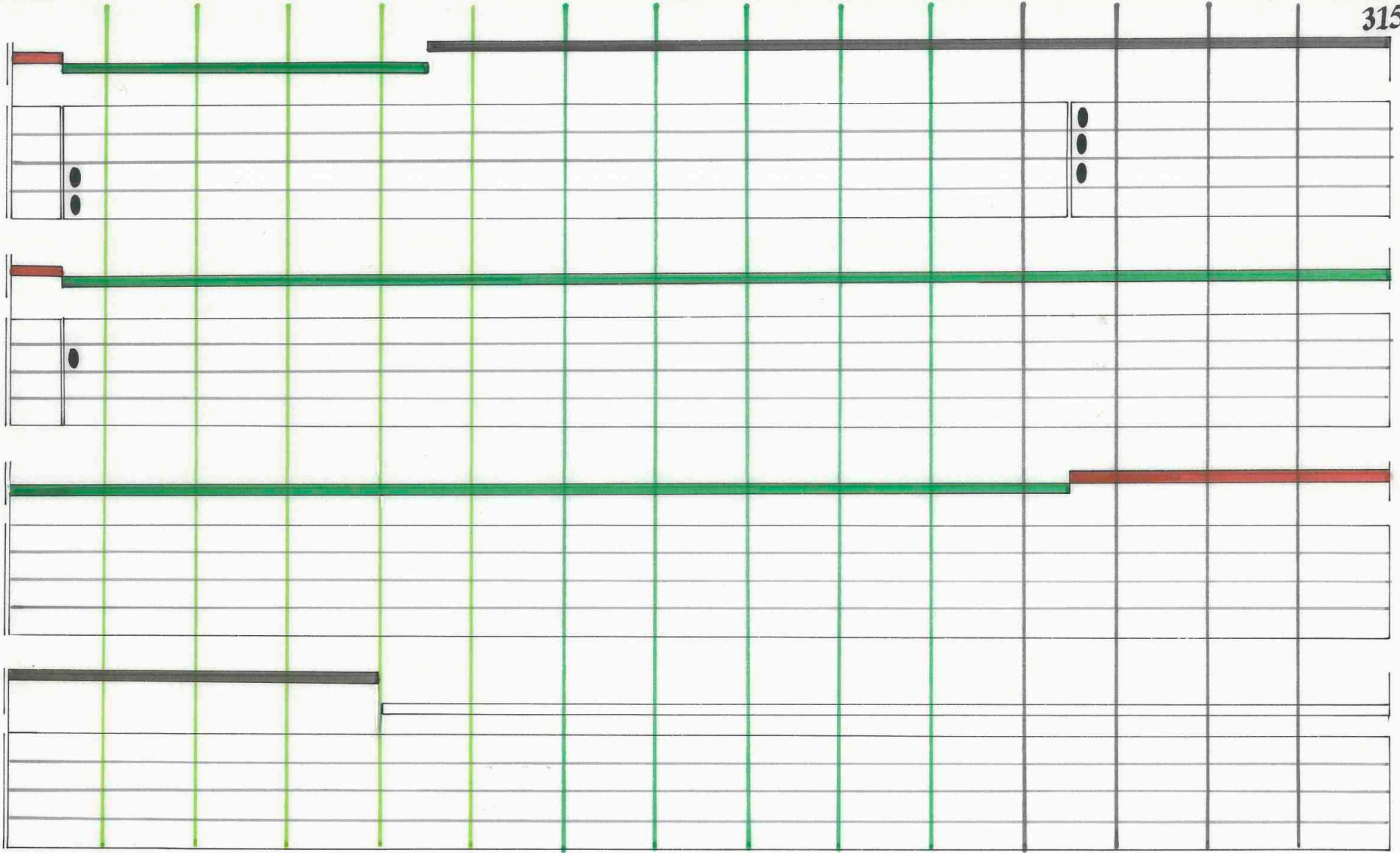




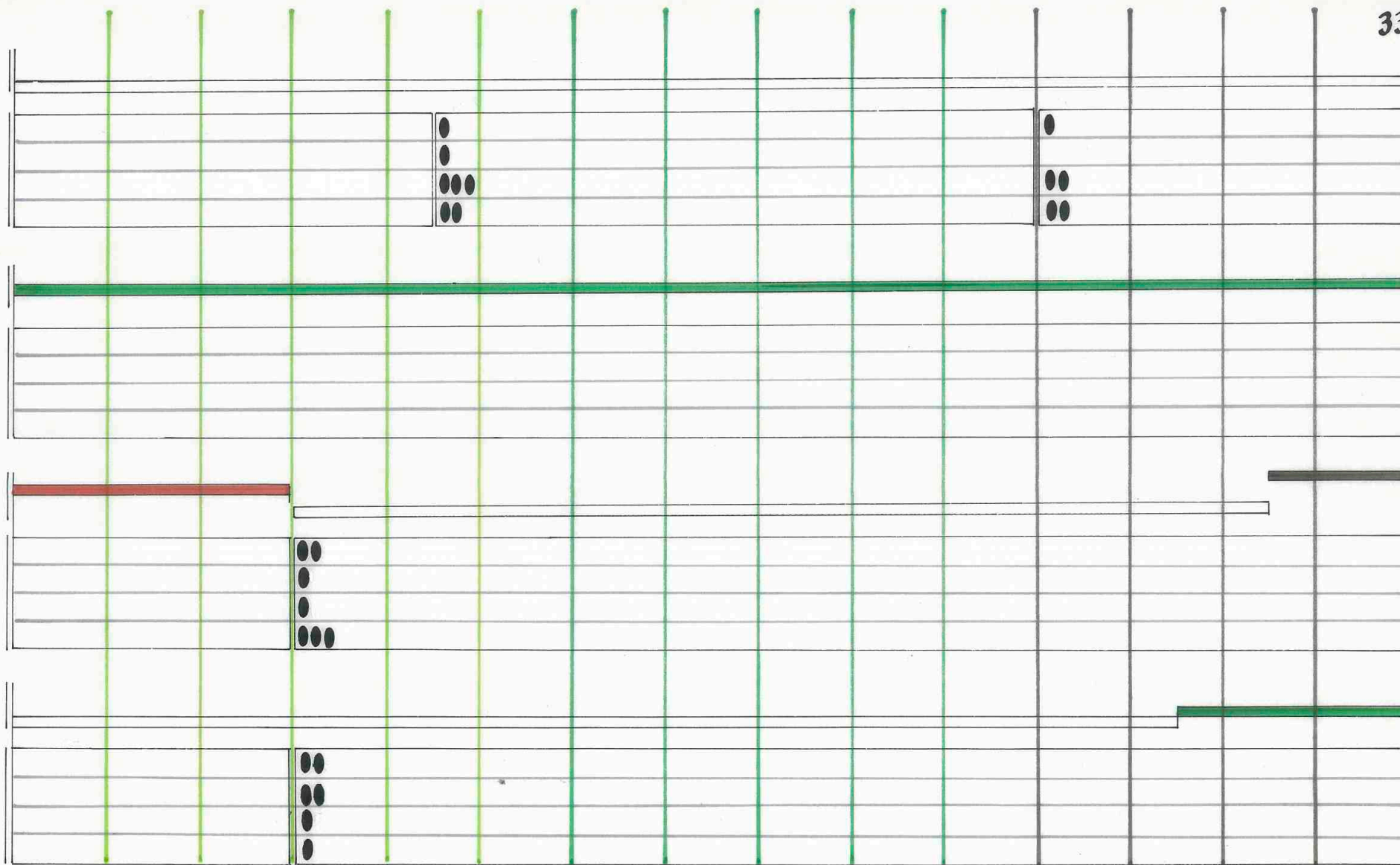
300"



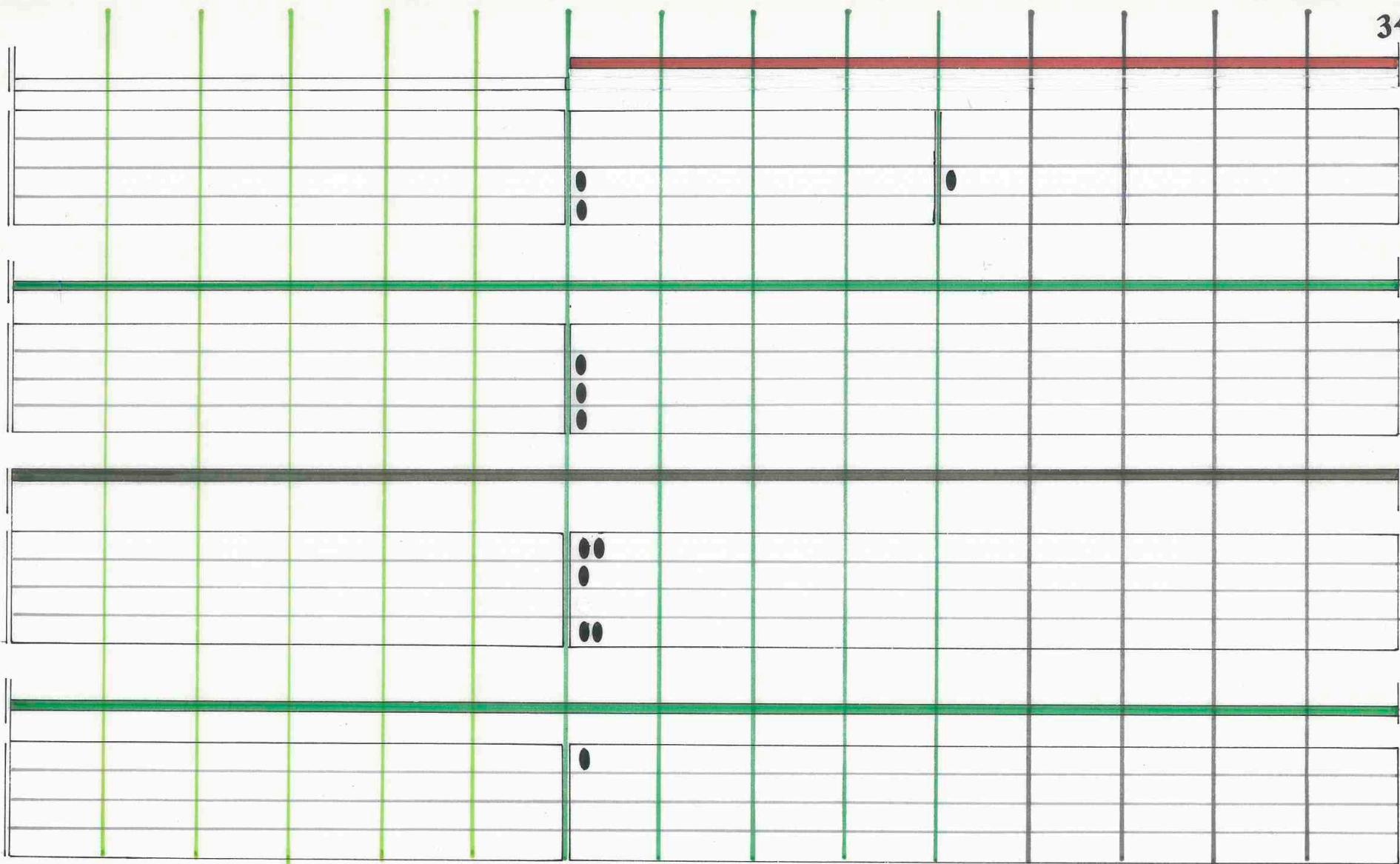
315"



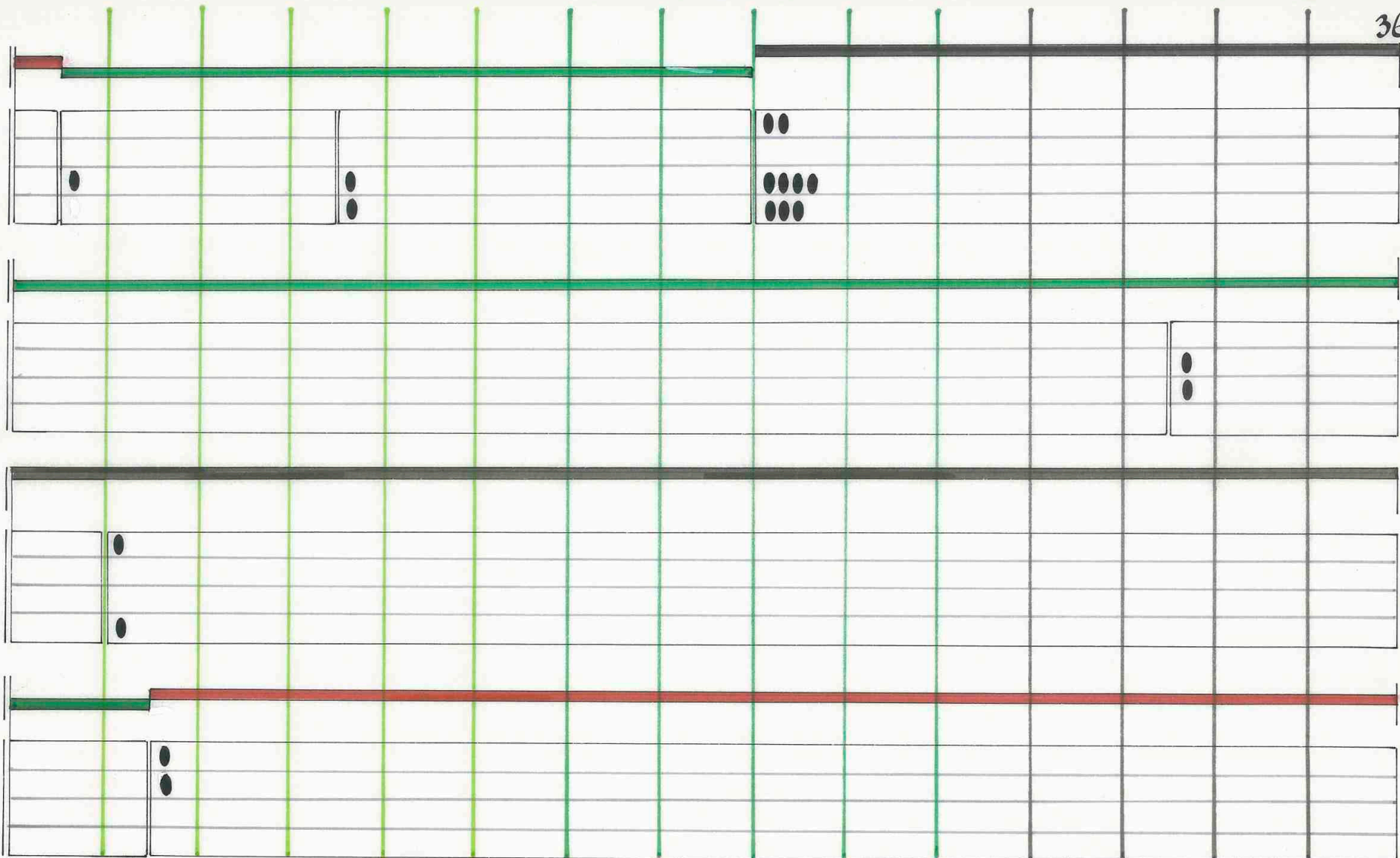
330"



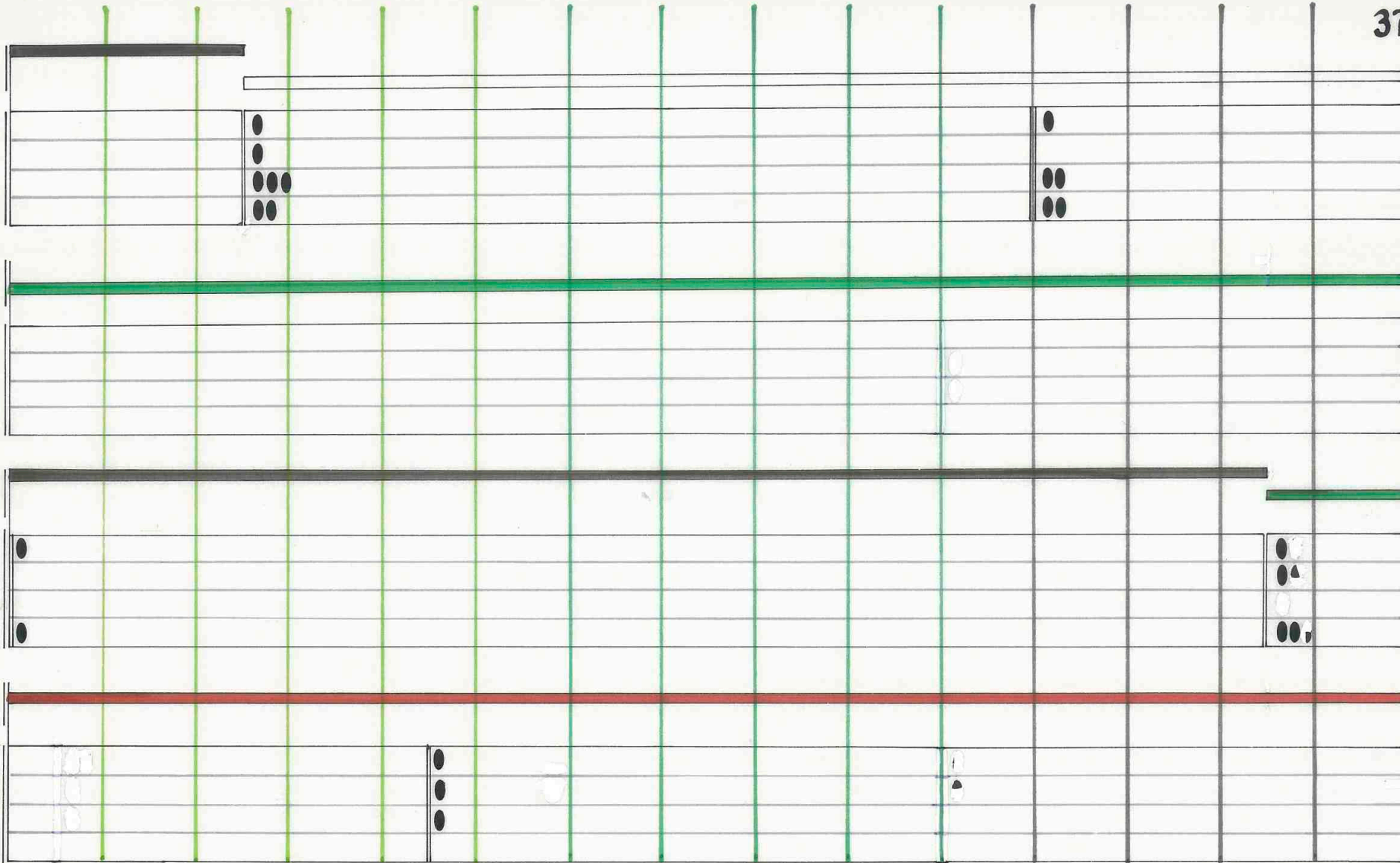
345"



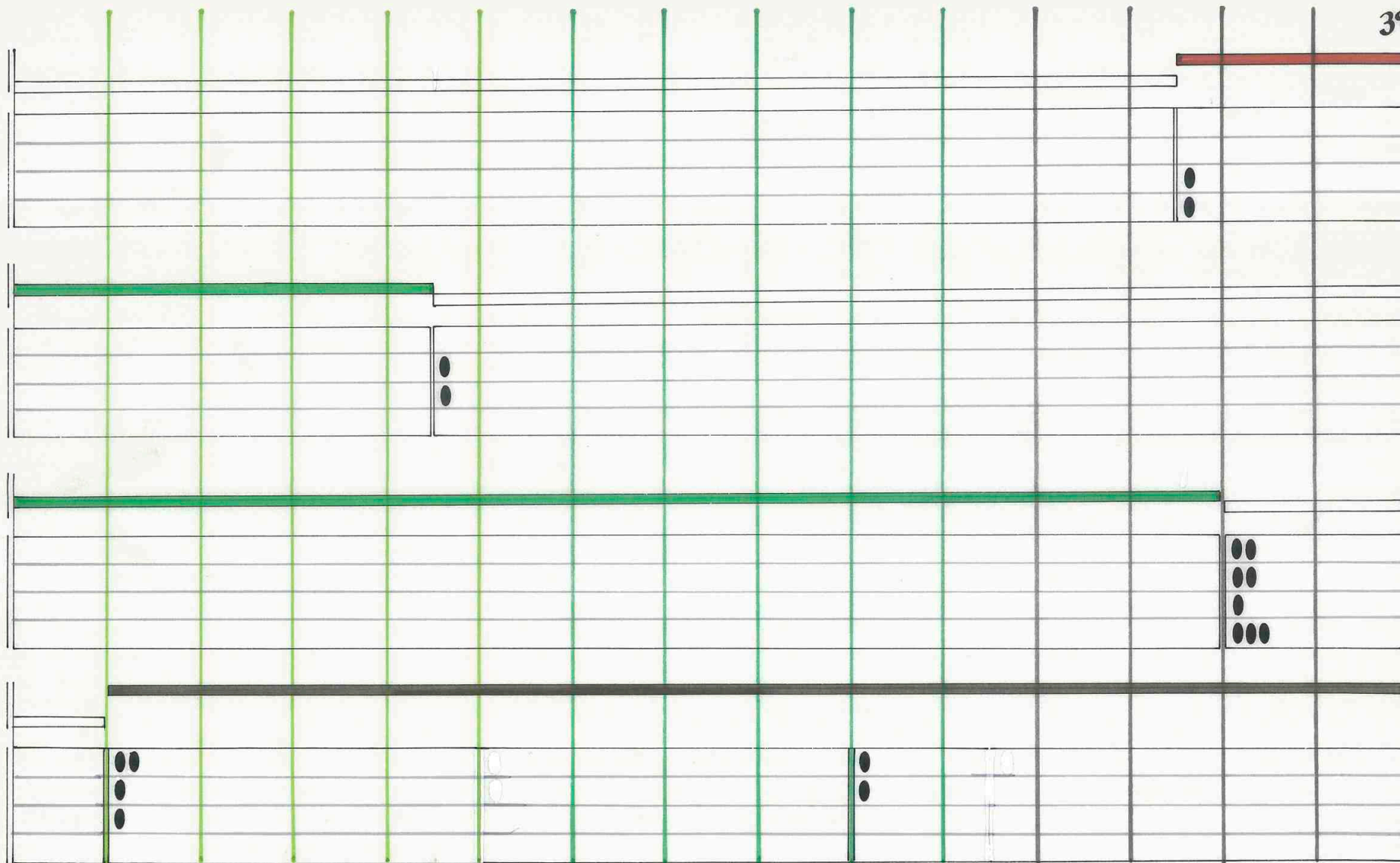
360"



375"

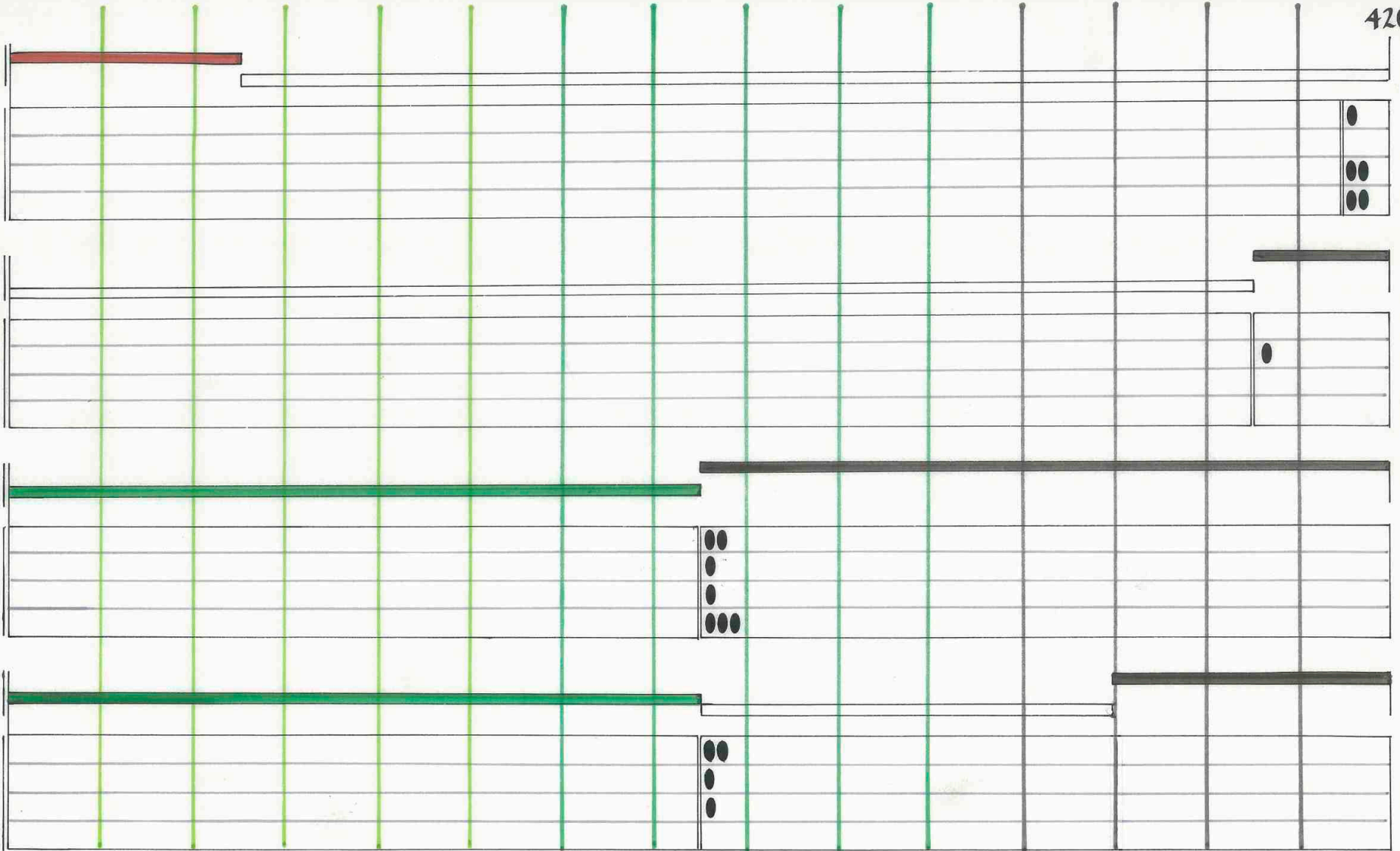


390"

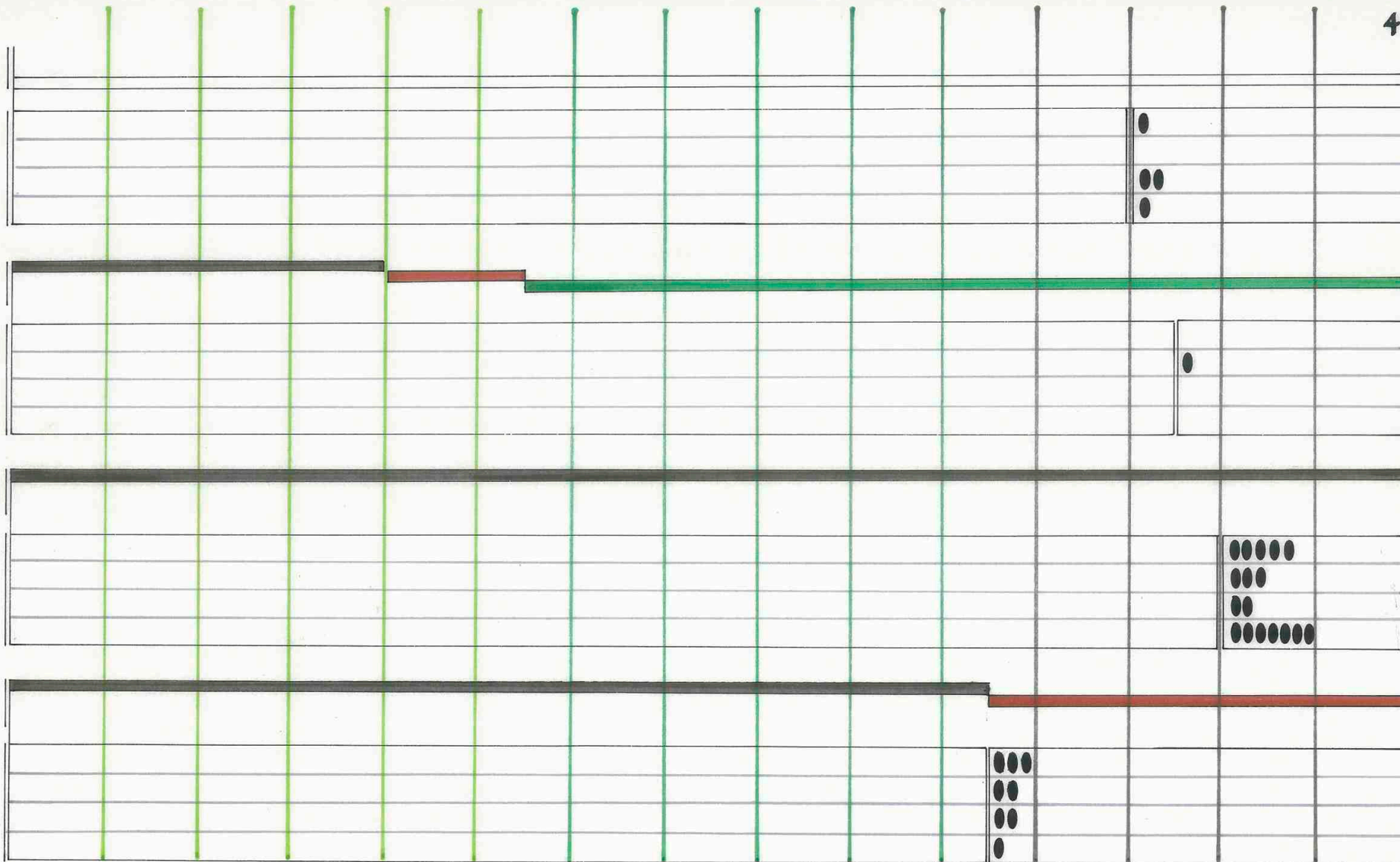


This image shows a page of handwriting practice paper. It features four horizontal staves, each consisting of five lines. Vertical green lines are drawn across the page to create columns for letter practice. The first staff has a red horizontal bar at the top, followed by a black bar, and then a green bar. The second staff has a black bar at the top, followed by a green bar, and then a red bar. The third staff has a red bar at the top, followed by a black bar, and then a green bar. The fourth staff has a green bar at the top, followed by a black bar, and then a red bar. There are also some small black dots and a small box on the left side of the page.

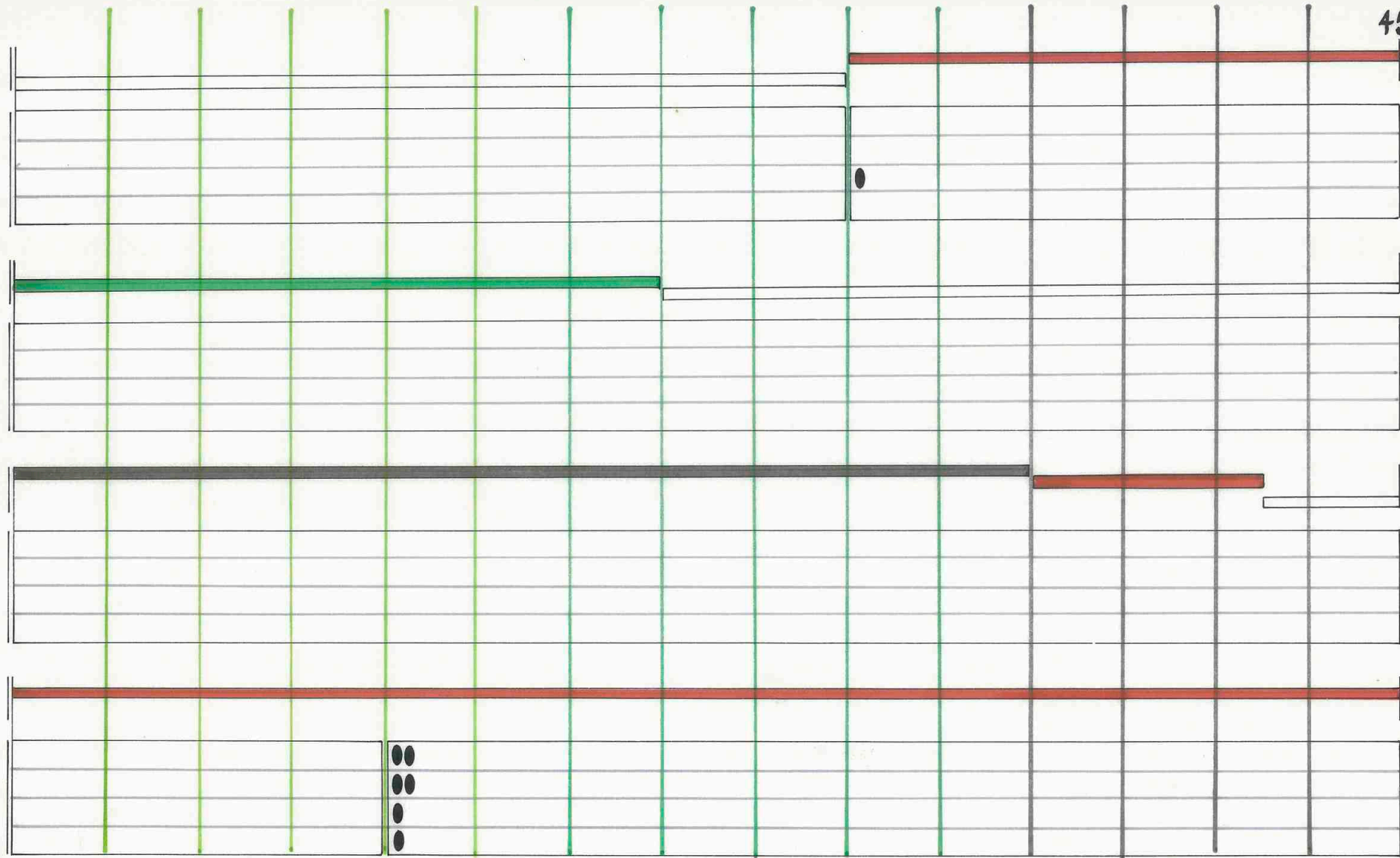
420"



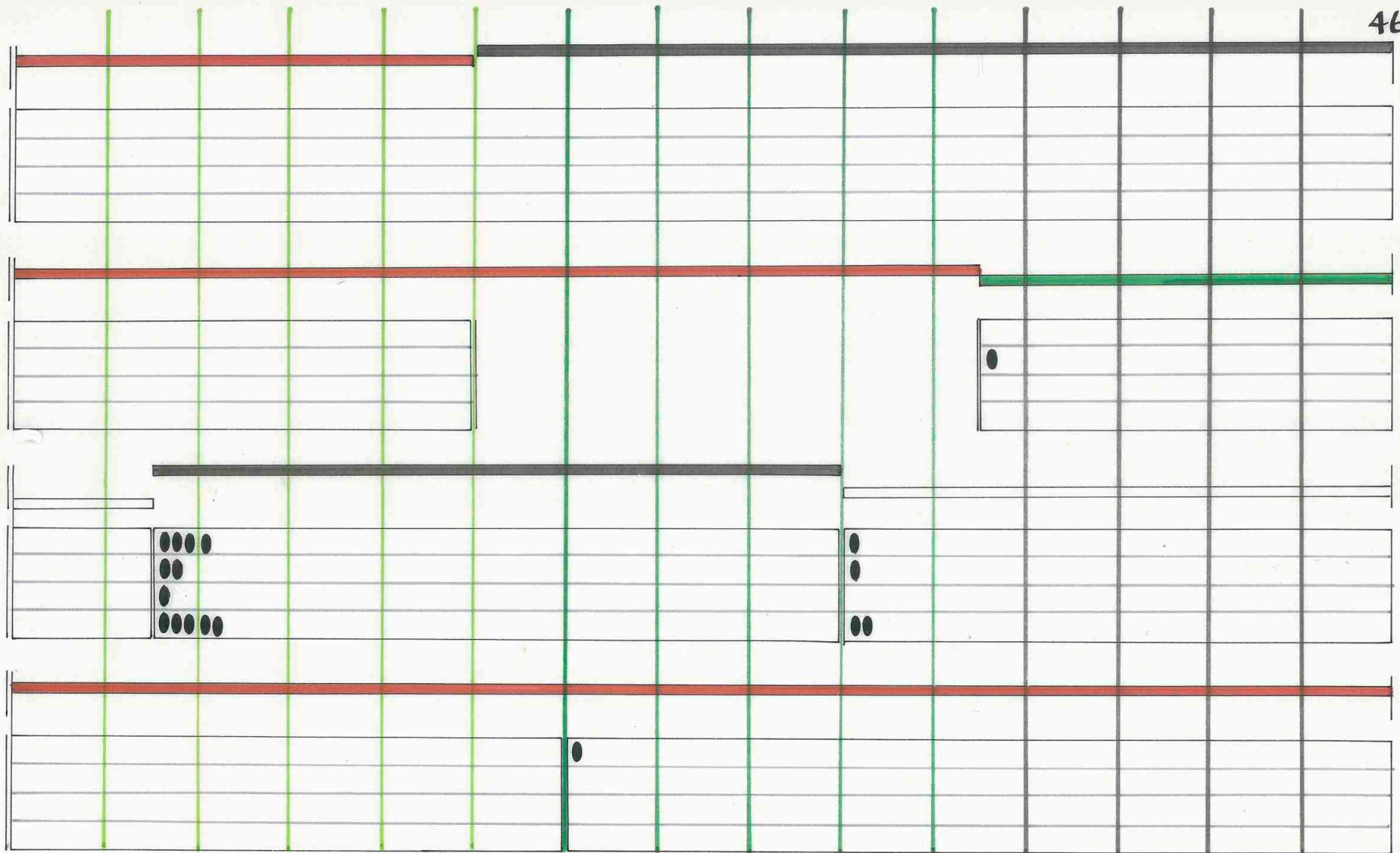
435"



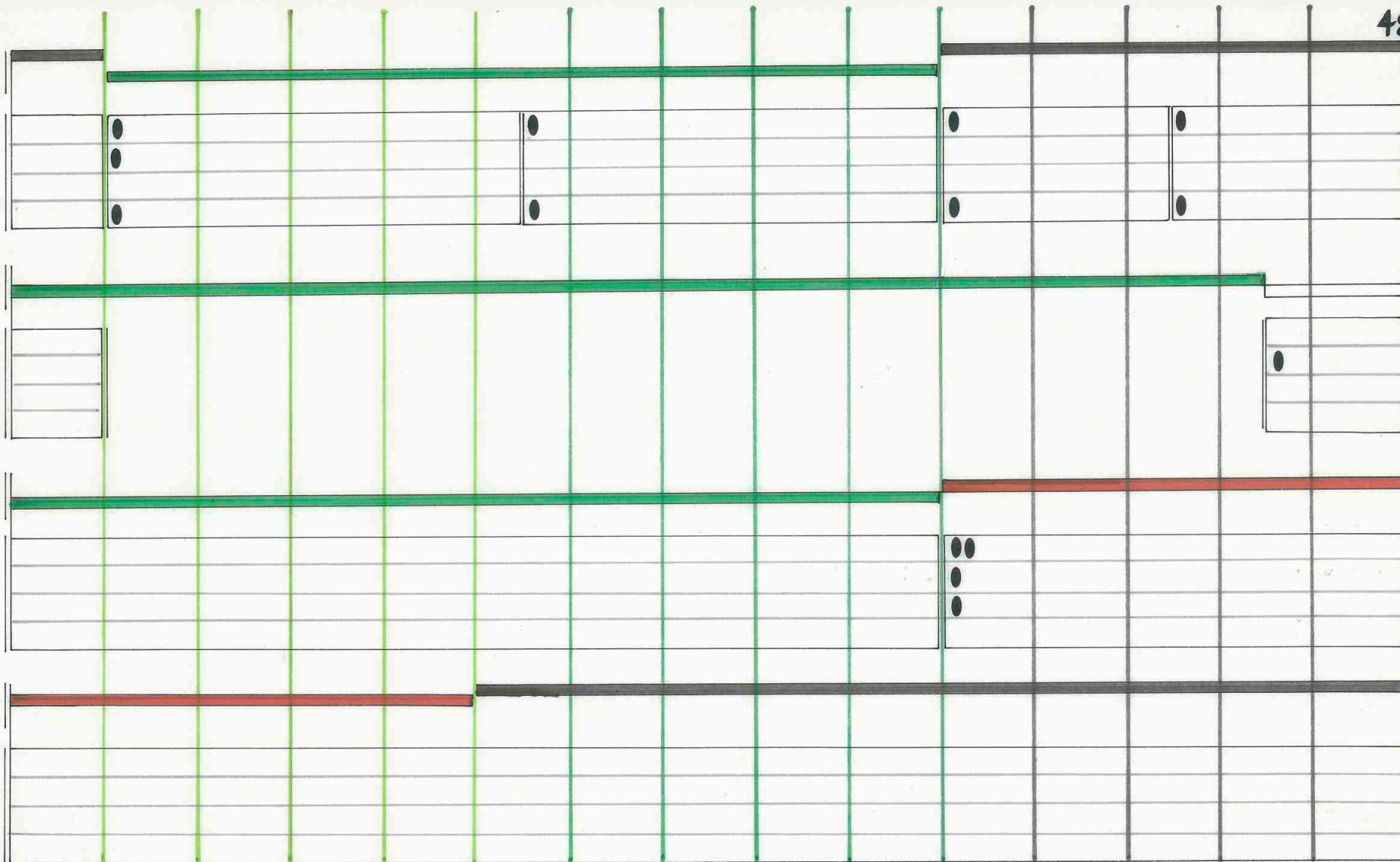
450"



465"

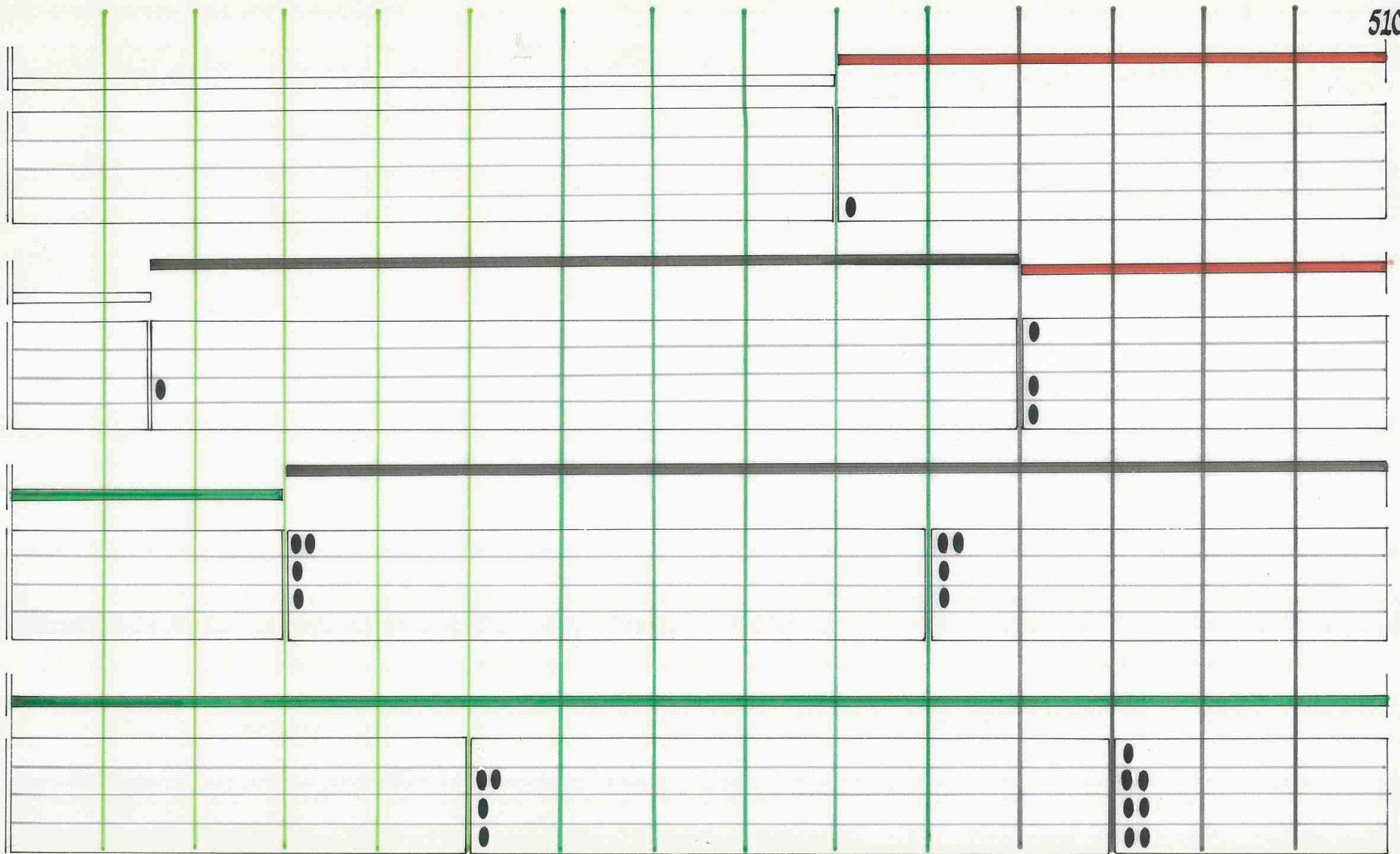


480"

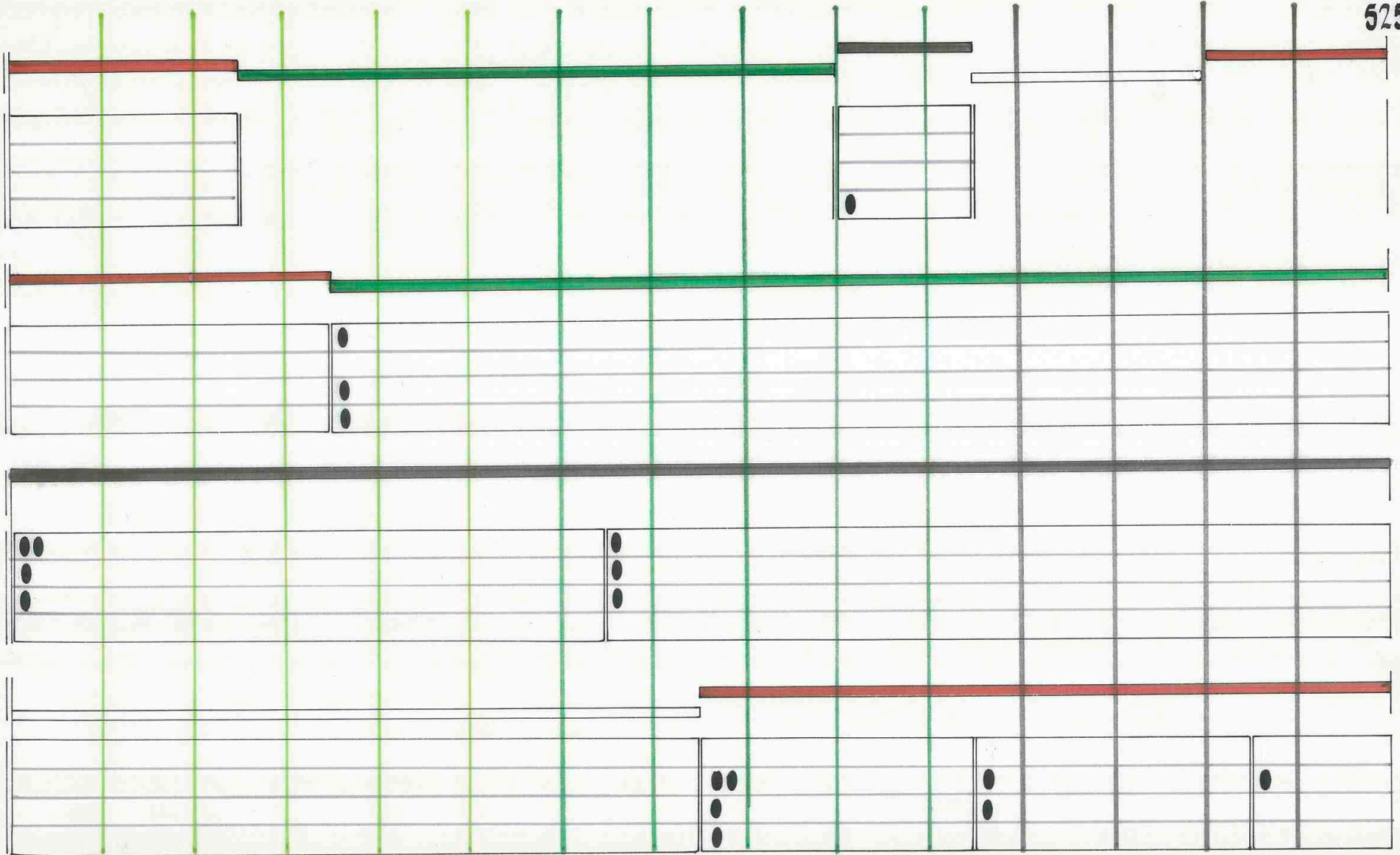


[illegible]

510"

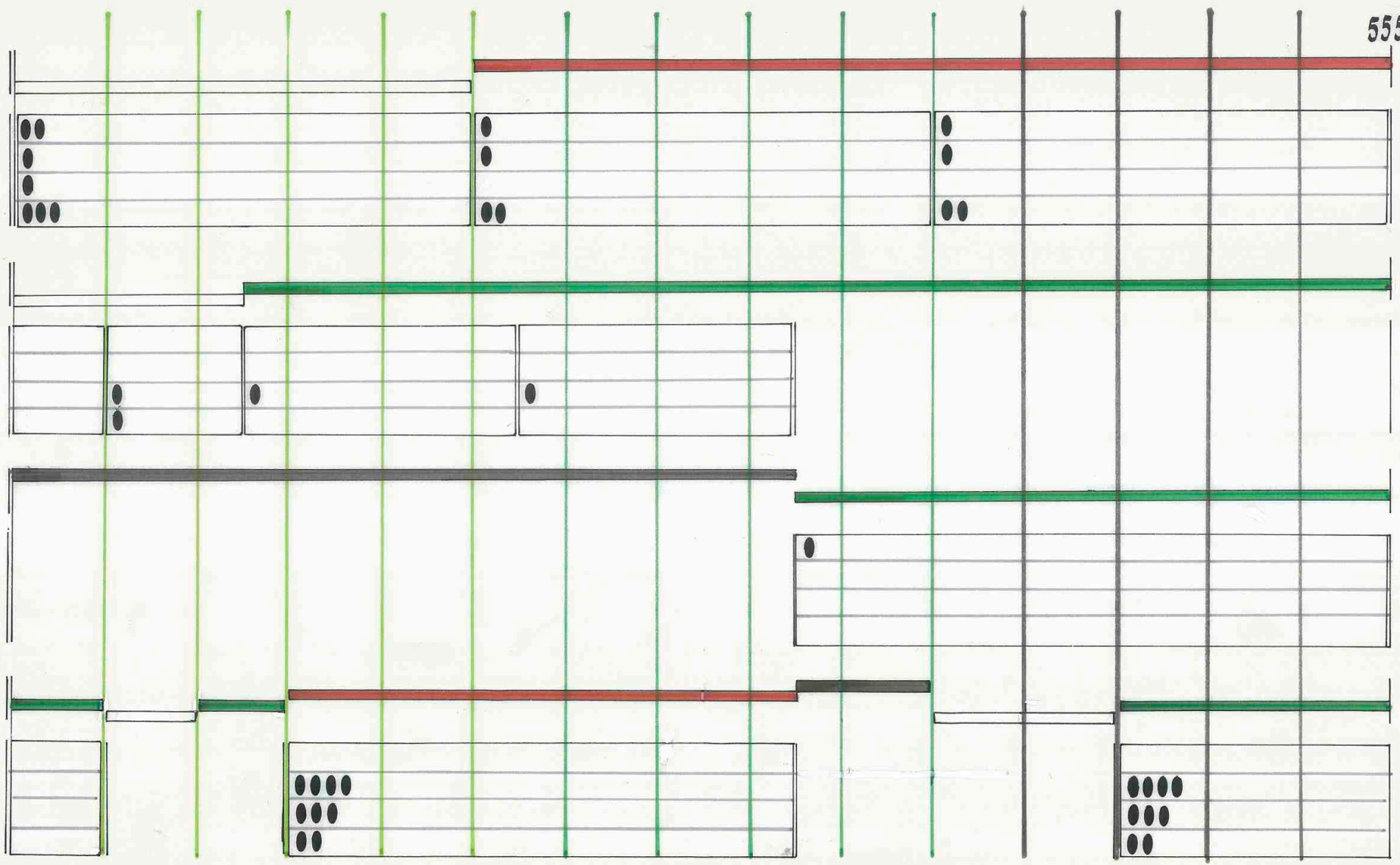


525"



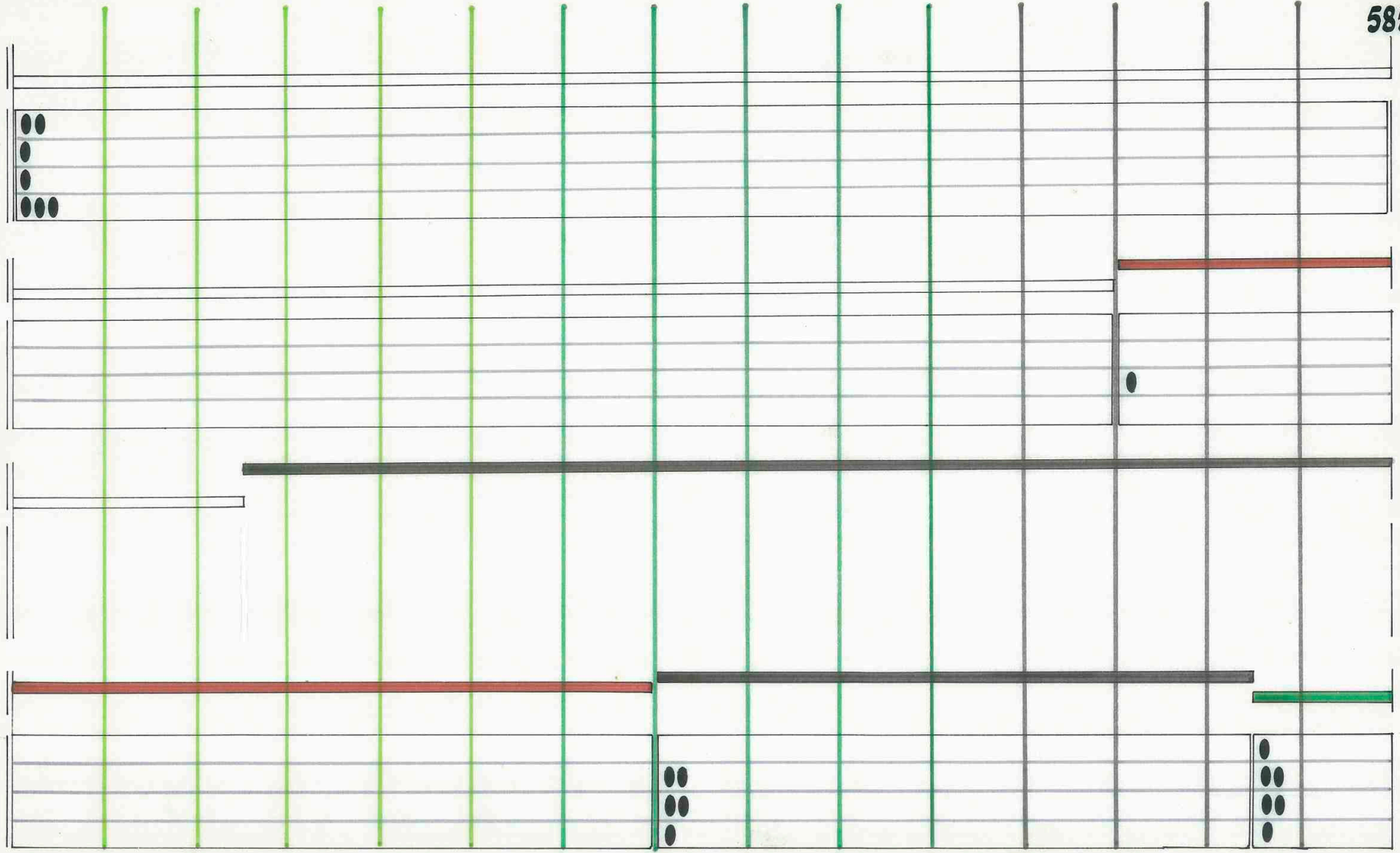
[illegible]

555"



A hand-drawn musical score on three staves. The first staff features a grey line, a green line, and a red line. The second staff has a green line, a red line, and a green line. The third staff has a green line, a red line, and a green line. The score includes various musical notations, including notes, rests, and bar lines. The notes are drawn in black ink. The rests are drawn in green ink. The bar lines are drawn in red ink. The score is written on a white background with green vertical lines.

585"



600"

