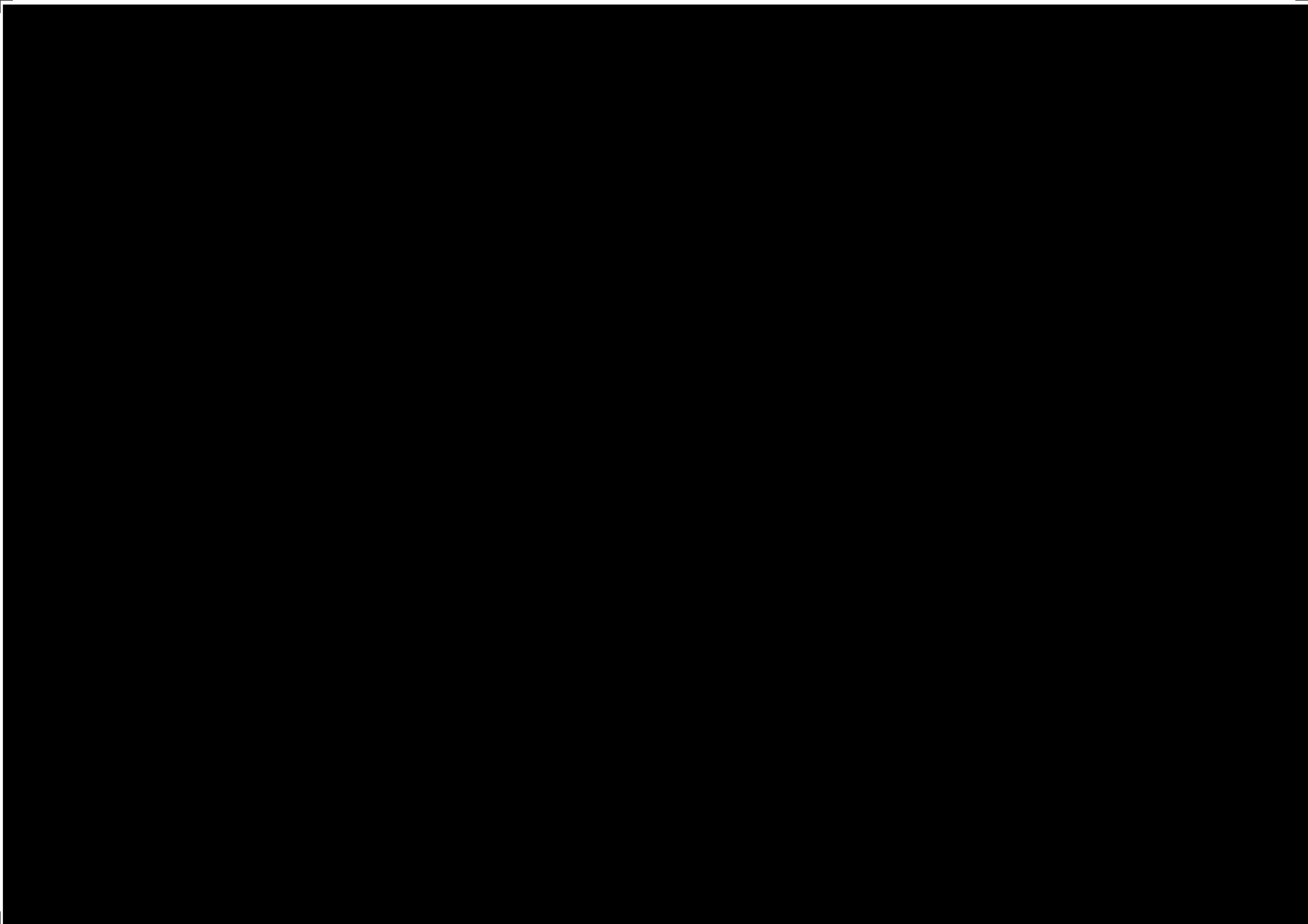
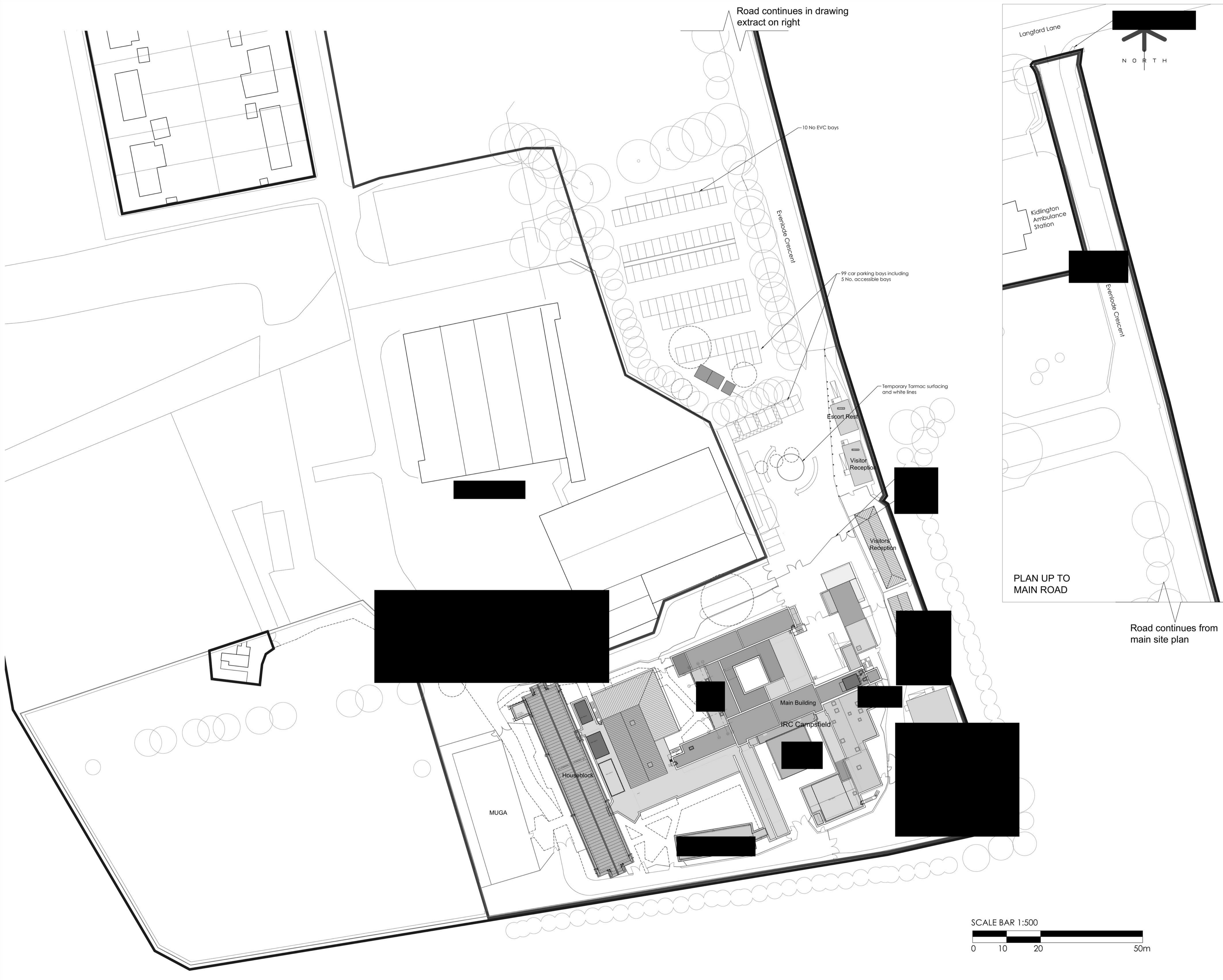


11 Appendices

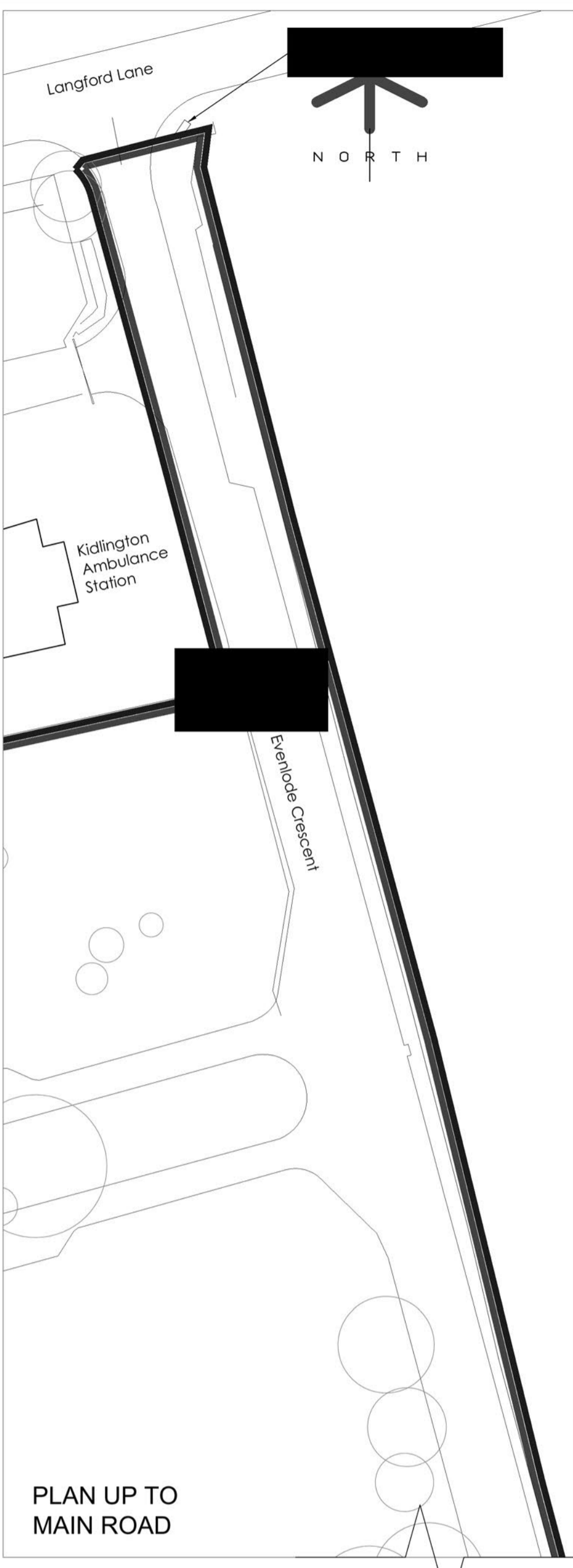
- 11.1 Appendix A – Refurbished IRC Proposed Site plans**
- 11.2 Appendix B – Proposed Development Site Plans**
- 11.3 Appendix C - Topographical Survey**
- 11.4 Appendix D - Thames Water Sewer Records**
- 11.5 Appendix E - GPR Survey**
- 11.6 Appendix F – Proposed Development Drainage Plan**
- 11.7 Appendix G – Infiltration Testing**
- 11.8 Appendix H – Proposed Development Causeway Flor Calculations**
- 11.9 Appendix I – Proposed Development Exceedance Plans**
- 11.10 Appendix J – Thames Water Pumping Station Discussion**
- 11.11 Appendix K – Option 2 Surface Water Strategy**
- 11.12 Appendix L - Operational and Maintenance Plan**

11.13 Appendix A – Refurbished IRC Proposed Site plans





Road continues in drawing extract on right



PLAN UP TO MAIN ROAD

Road continues from main site plan

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- Notes**
- Denotes extent of Ministry of Justice Ownership
 - IRC Campsfield - Phase 1

Key Plan

Project Status

Client	Project
 Ministry of Justice	Campsfield House
Ministry of Justice, 102 Petty France, London, SW1H 9AJ	

Project Description / Site
IRC Campsfield House
Phase 1 Refurbishment

Project Address
Kidlington, Oxfordshire
OX5 1RE

Building Type

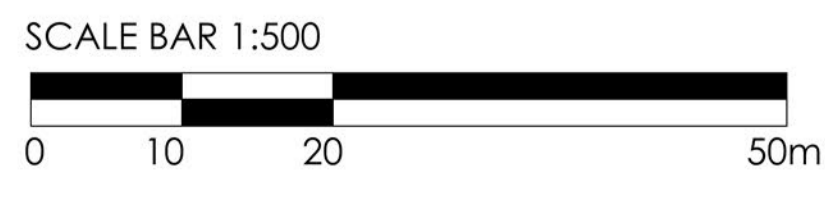
Drawing Title
Proposed Site Plan Phase 1

Originator Logo	Drawn By	VSK	Date	28.10.2022
	Checked By	TBK	Date	28.10.2022
	Approved By	TBK	Date	28.10.2022

Drawing Number
243925-8127-EDG-ZZZ-XX-DR-A-0006-CR-D0100

Sheet No.	Scale	Orig. Sheet Size	Rev.
1 of 1	1:500	@ A1	C09

Data Security Classification	Suitability
Official	CR



11.14 Appendix B – Proposed Development Site Plans

243925-15206-EDG-ZZZ-XX-DR-A-0013-S2-D0100

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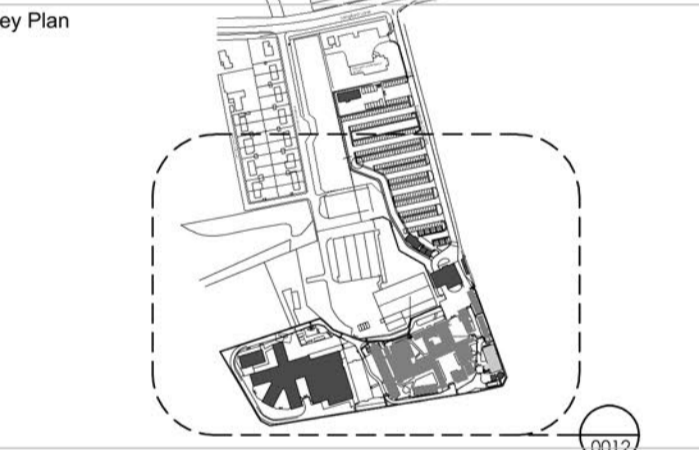
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- Notes**
- Denotes extent of Ministry of Justice Ownership
 - Denotes area of IRC Campsfield

- Trees to be removed

Rev.	Date	Description
P03	05.09.2025	Stage 2 Final Issue
P02	06.06.2025	Stage 2 Issue
P01	18.04.2025	First Issue



Project Status
RIBA Stage 2

Client Project
Home Office Campsfield IRC
Phase 2 Expansion

2 Marsham Street, London, SW1P 4DF, United Kingdom
Project Description / Site
Campsfield IRC
Phase 2 Expansion

Project Address
Kidlington, Oxfordshire
OX5 1RE

Building Type

Drawing Title
Proposed Site Plan Phase 2 - Sheet 1

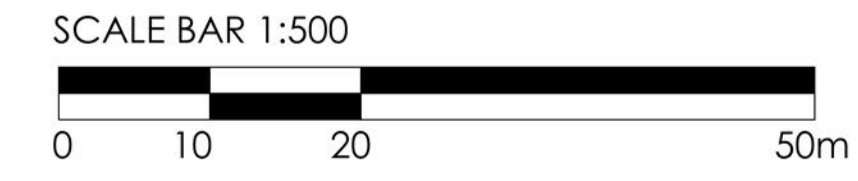
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	Approved By	ISR	Date	31.03.2025

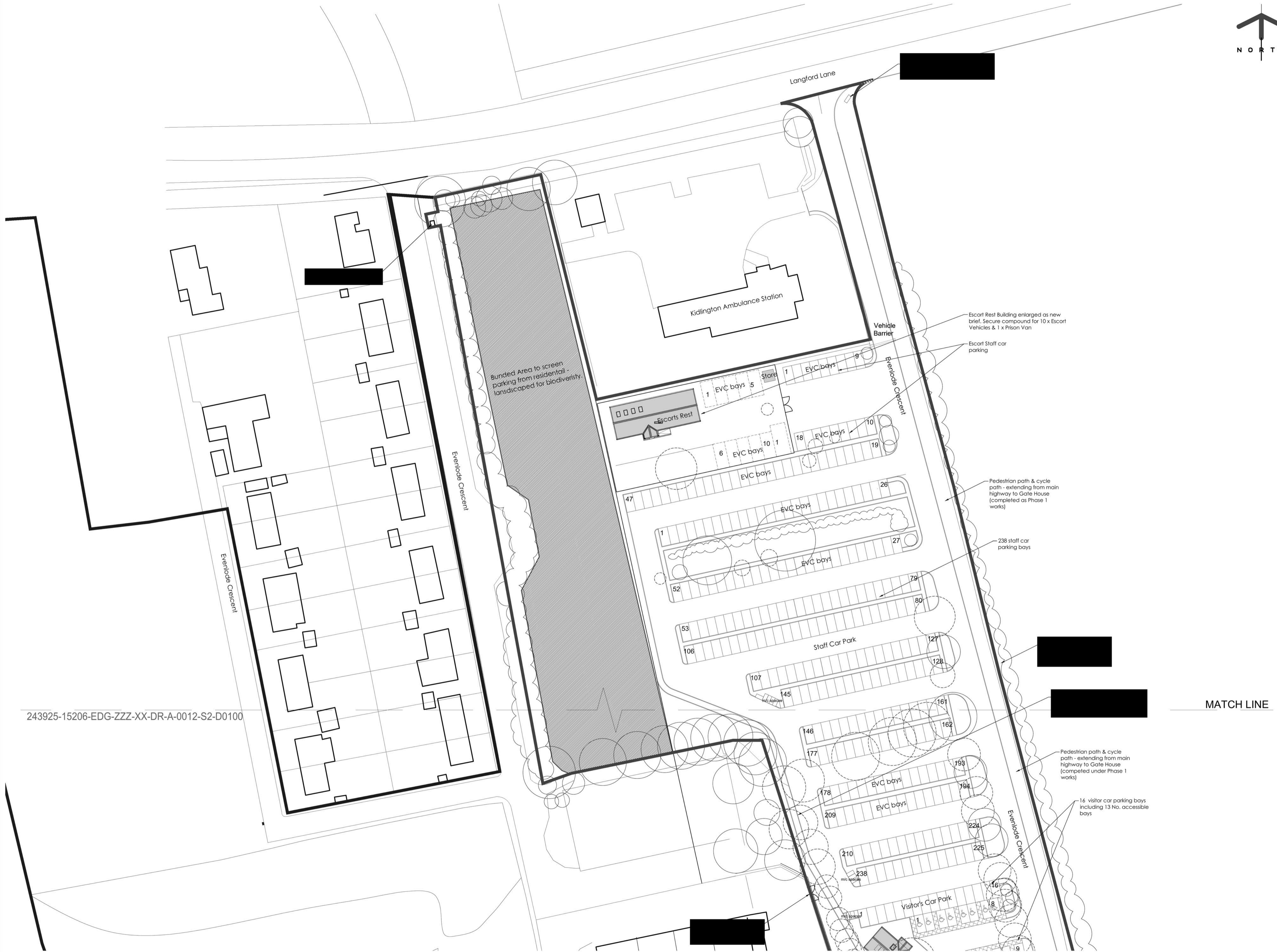
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Data Security Classification
Official Sensitive

Suitability
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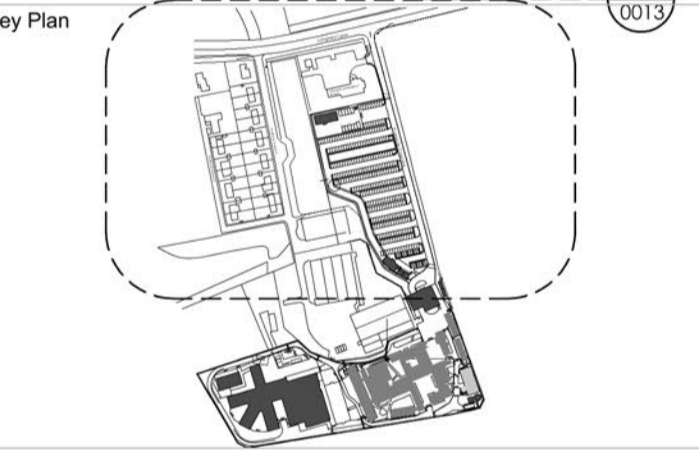


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Phase 2 Expansion

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Campsfield IRC Phase 2 Expansion

Project Address
Kidlington, Oxfordshire
OX5 1RE

Building Type

Drawing Title
Proposed Site Plan Phase 2 - Sheet 2

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	Approved By	MSR	Date	31.03.2025

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Data Security Classification
Official Sensitive

Suitability
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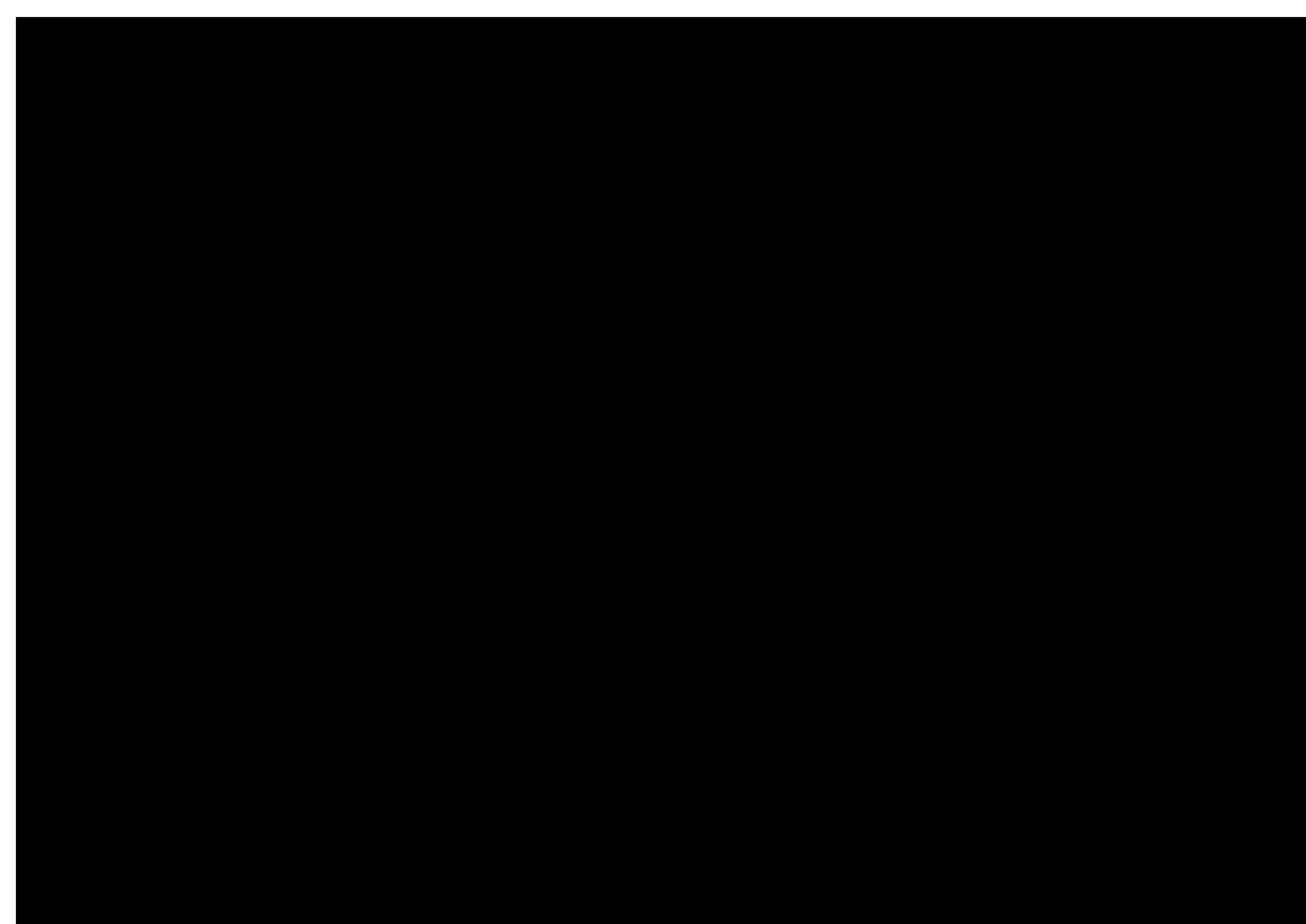
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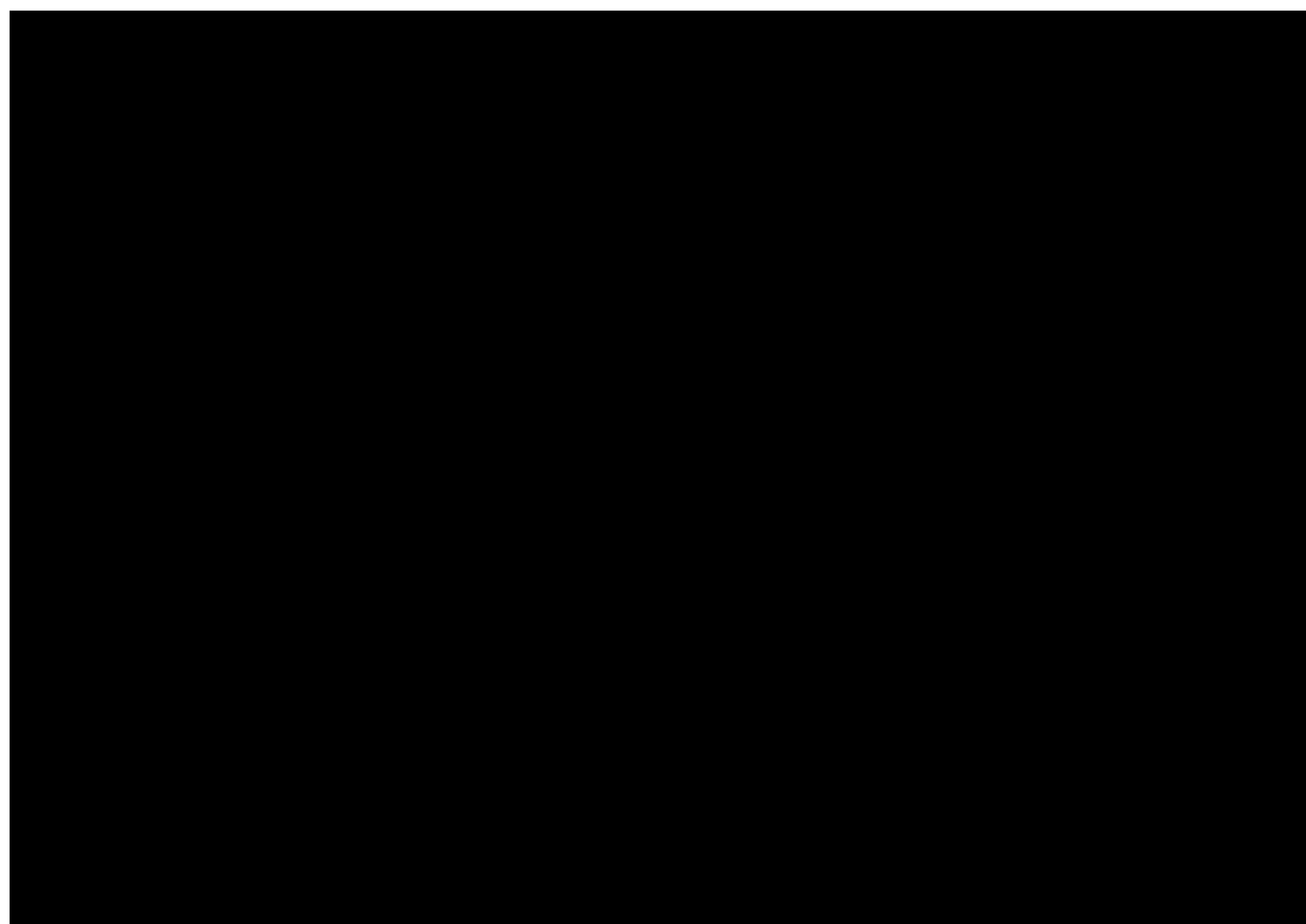
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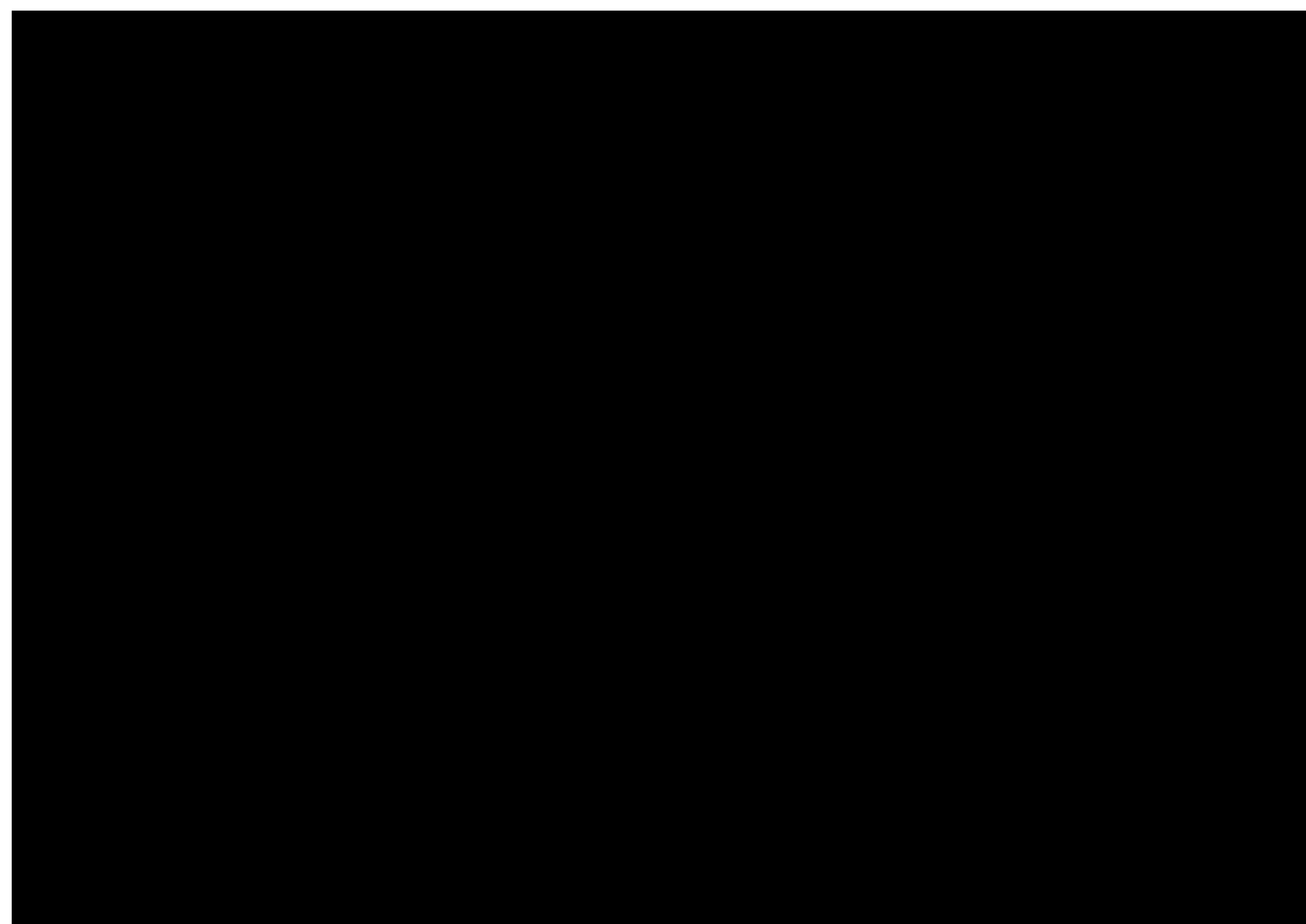


11.15 Appendix C - Topographical Survey

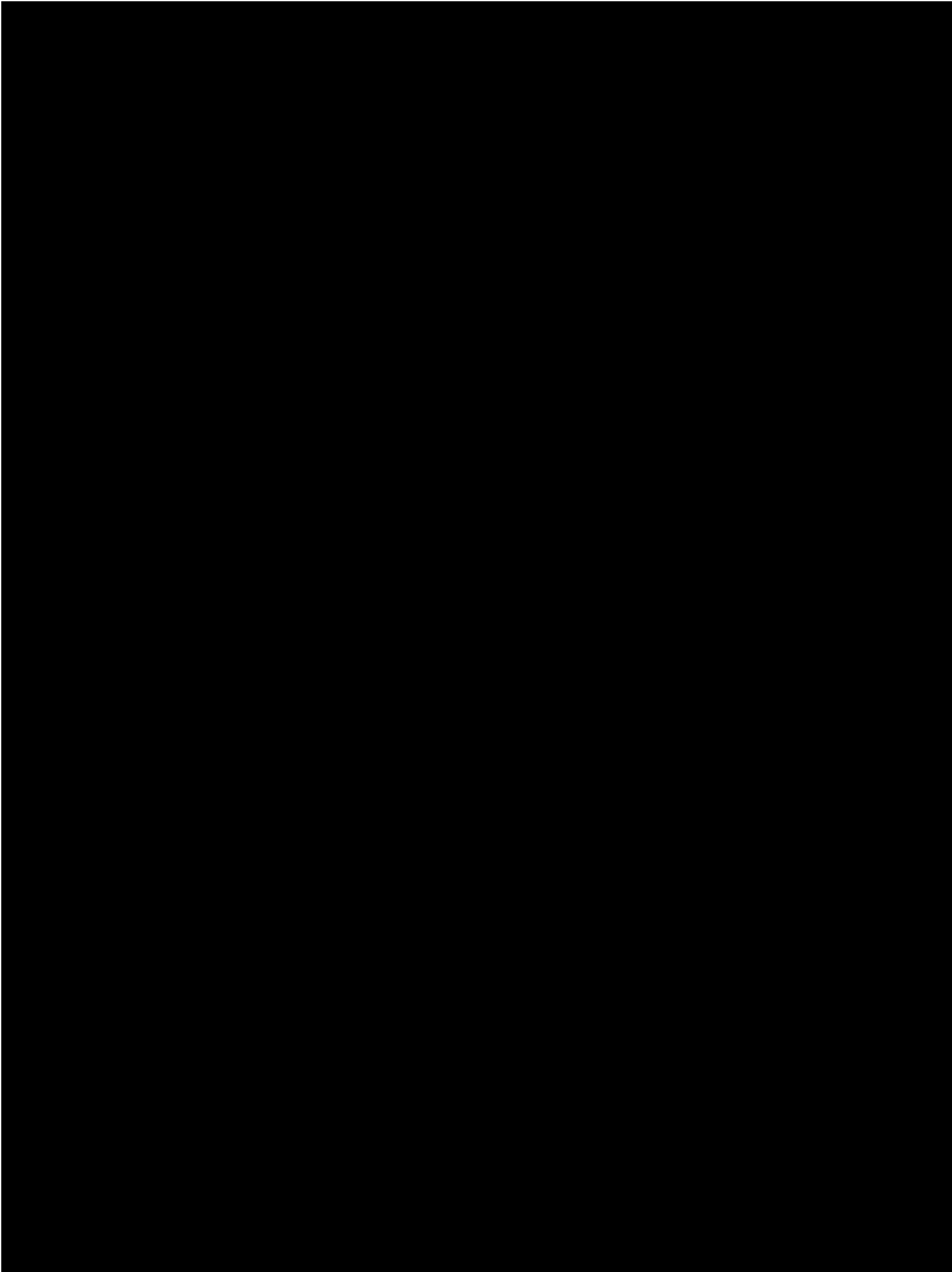


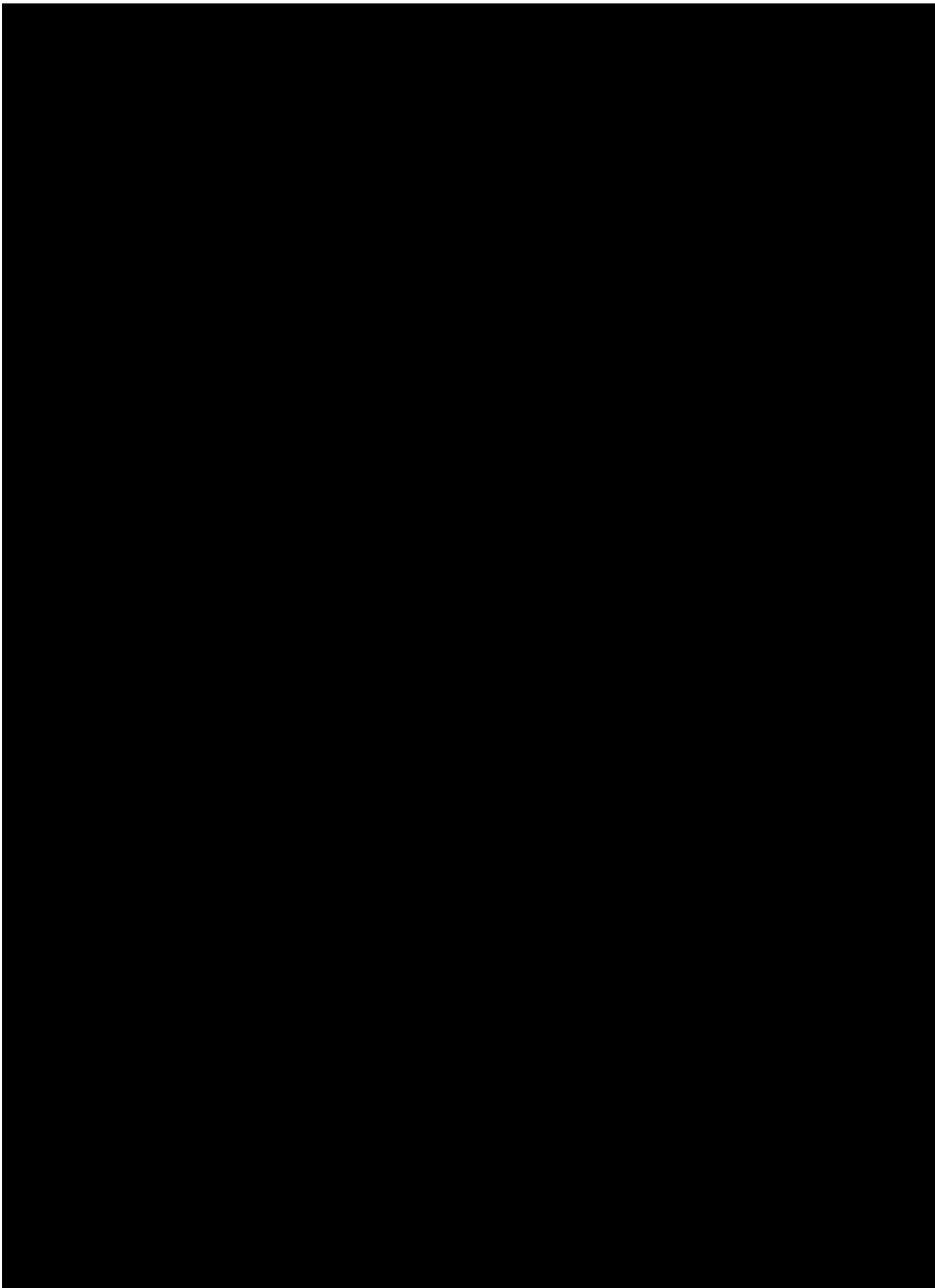


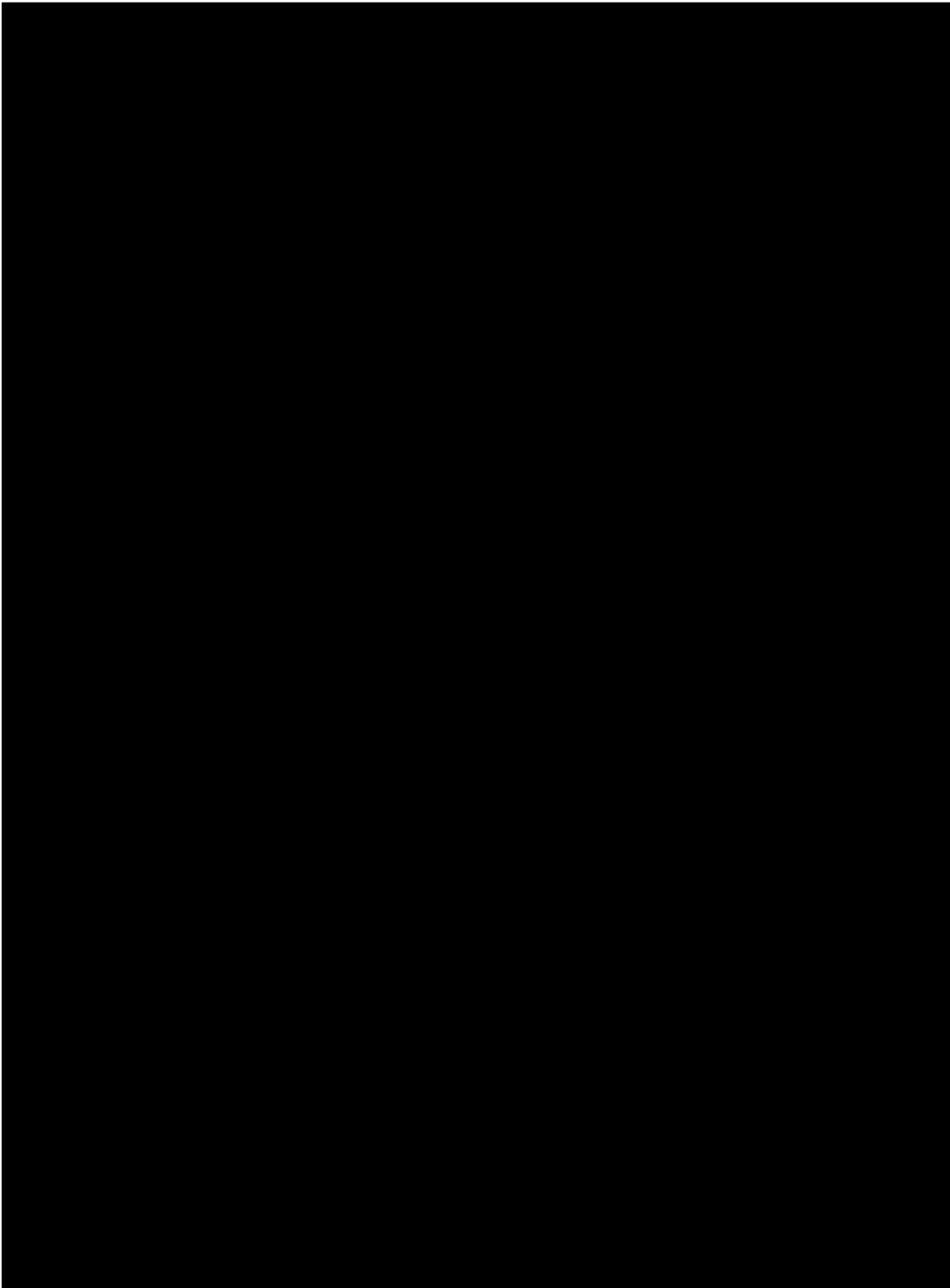


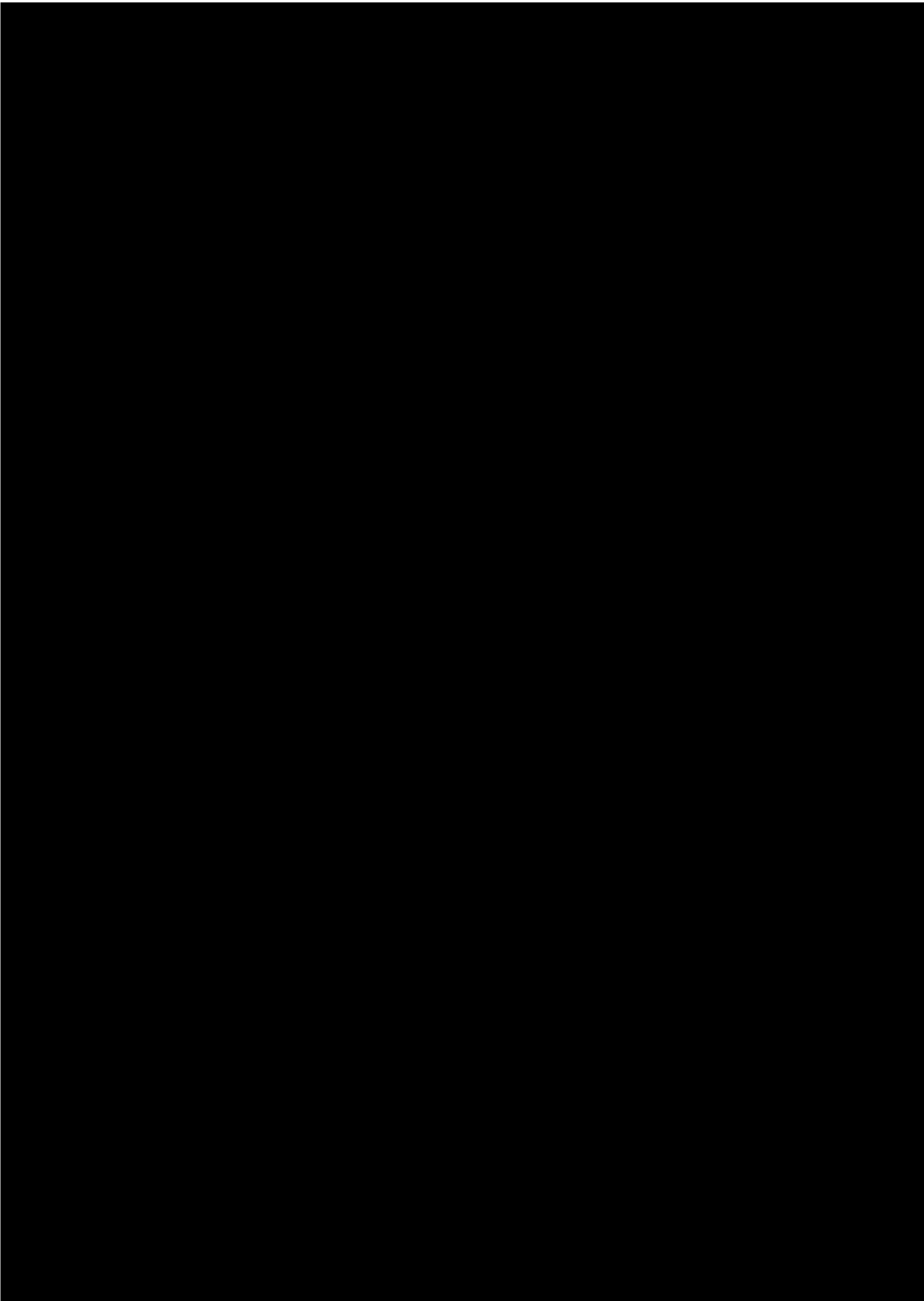


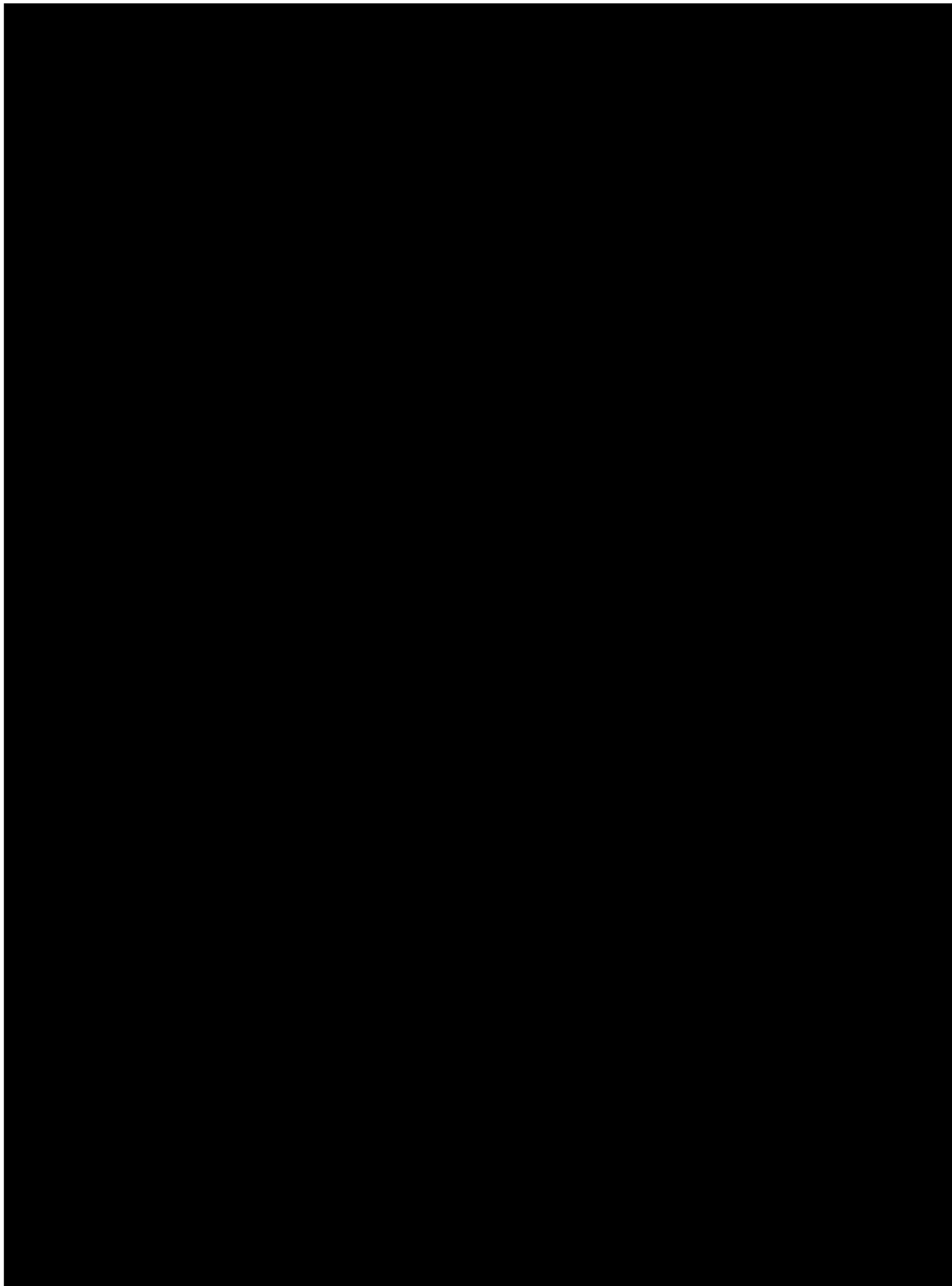
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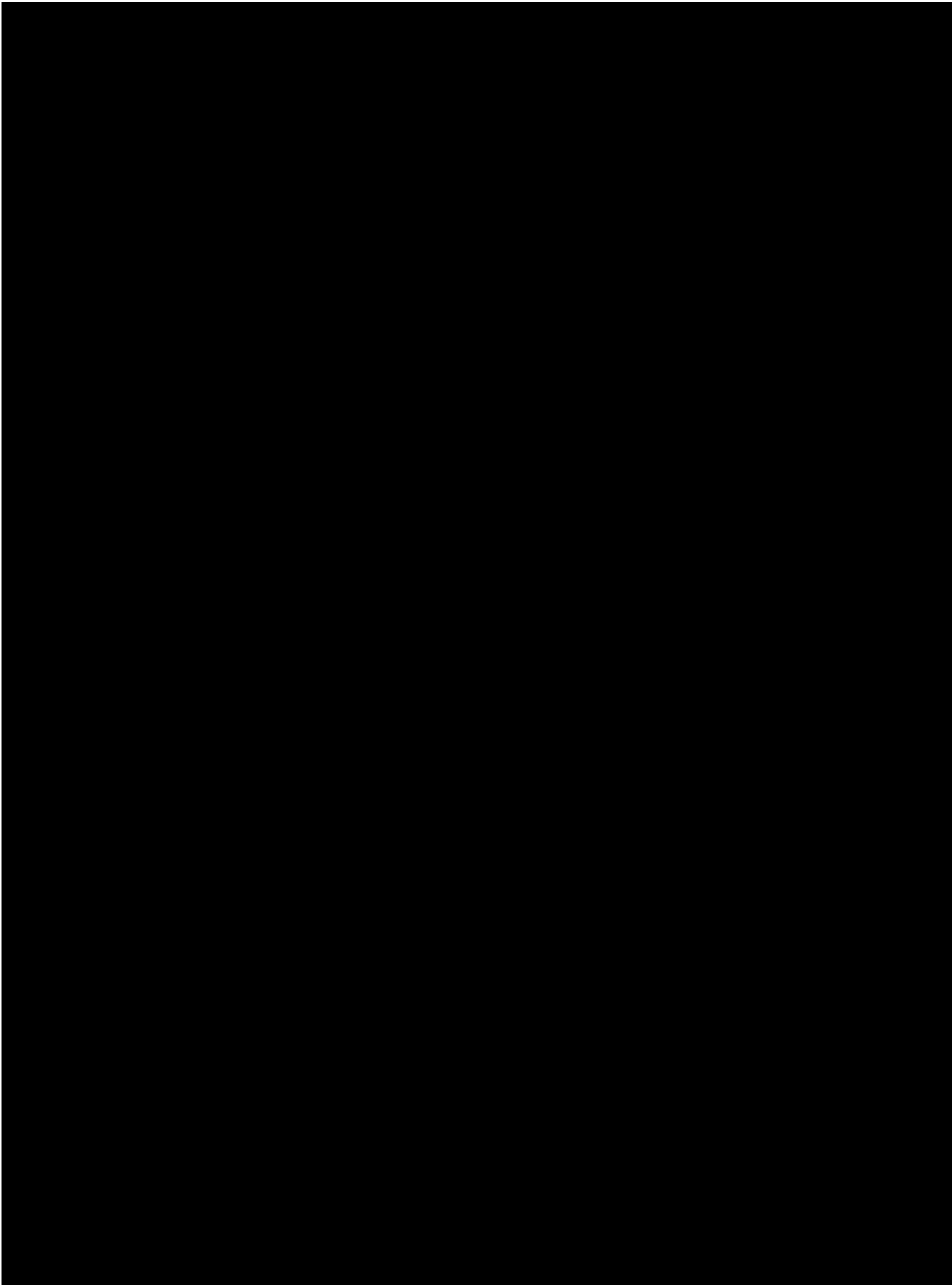


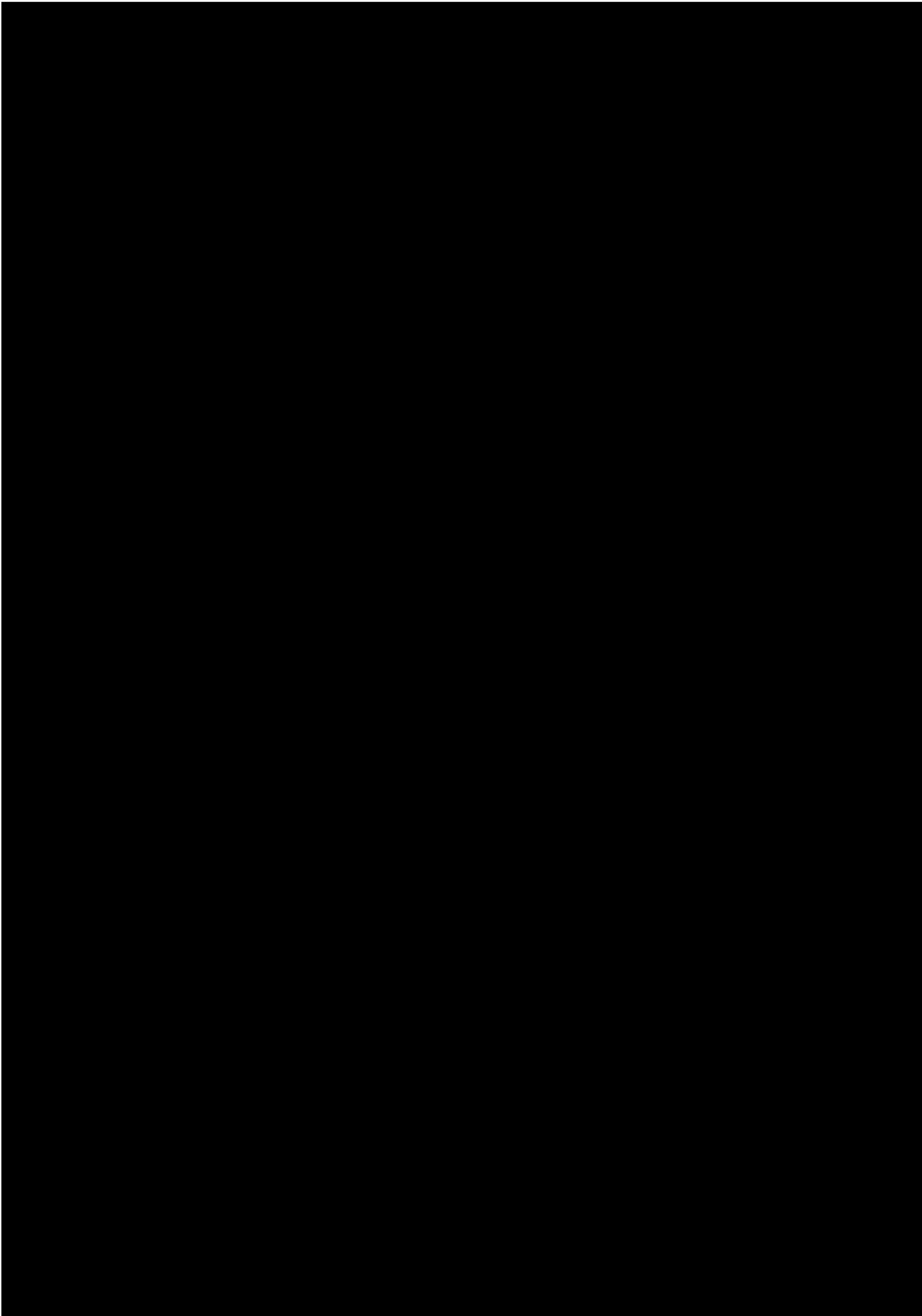


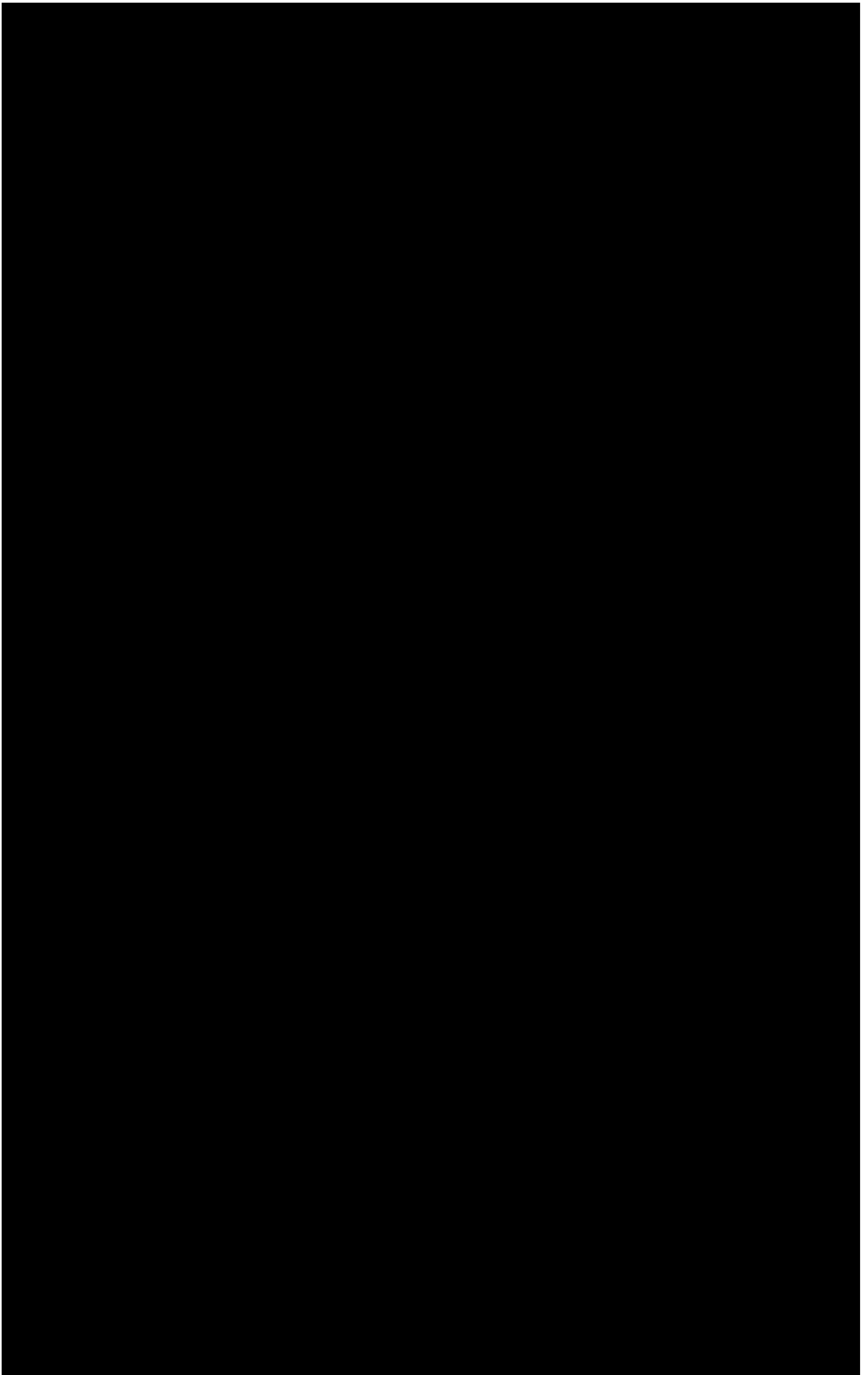


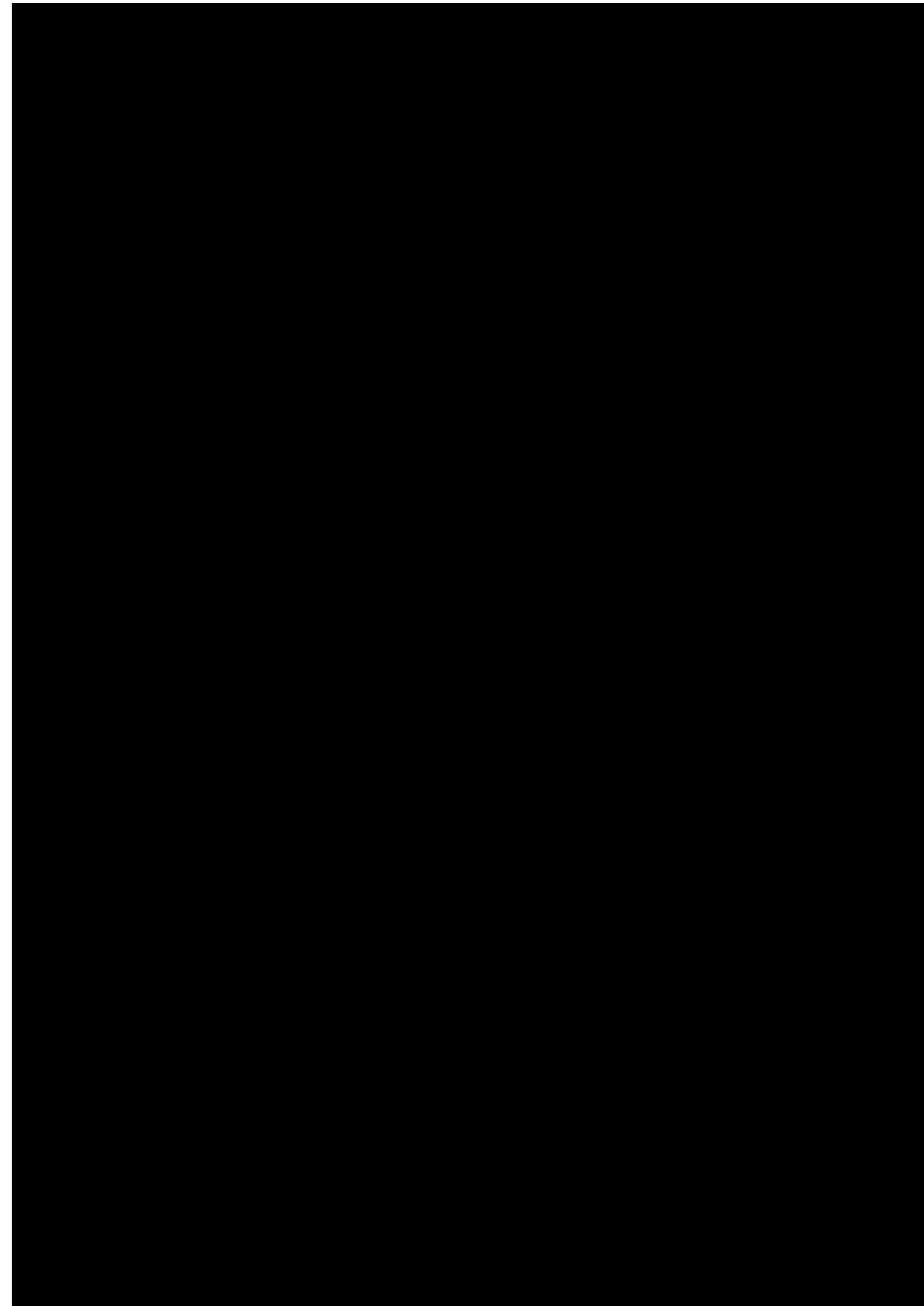


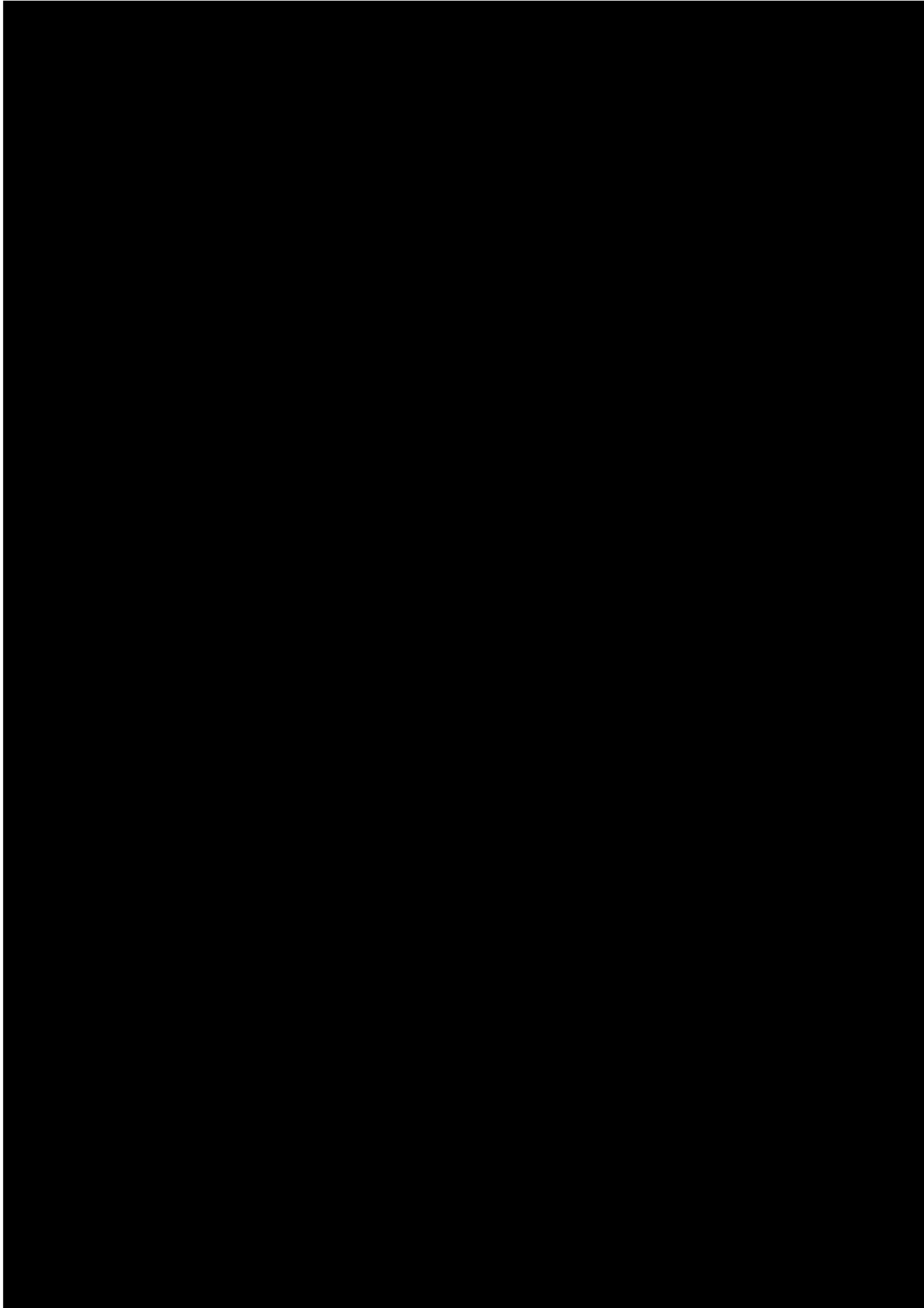


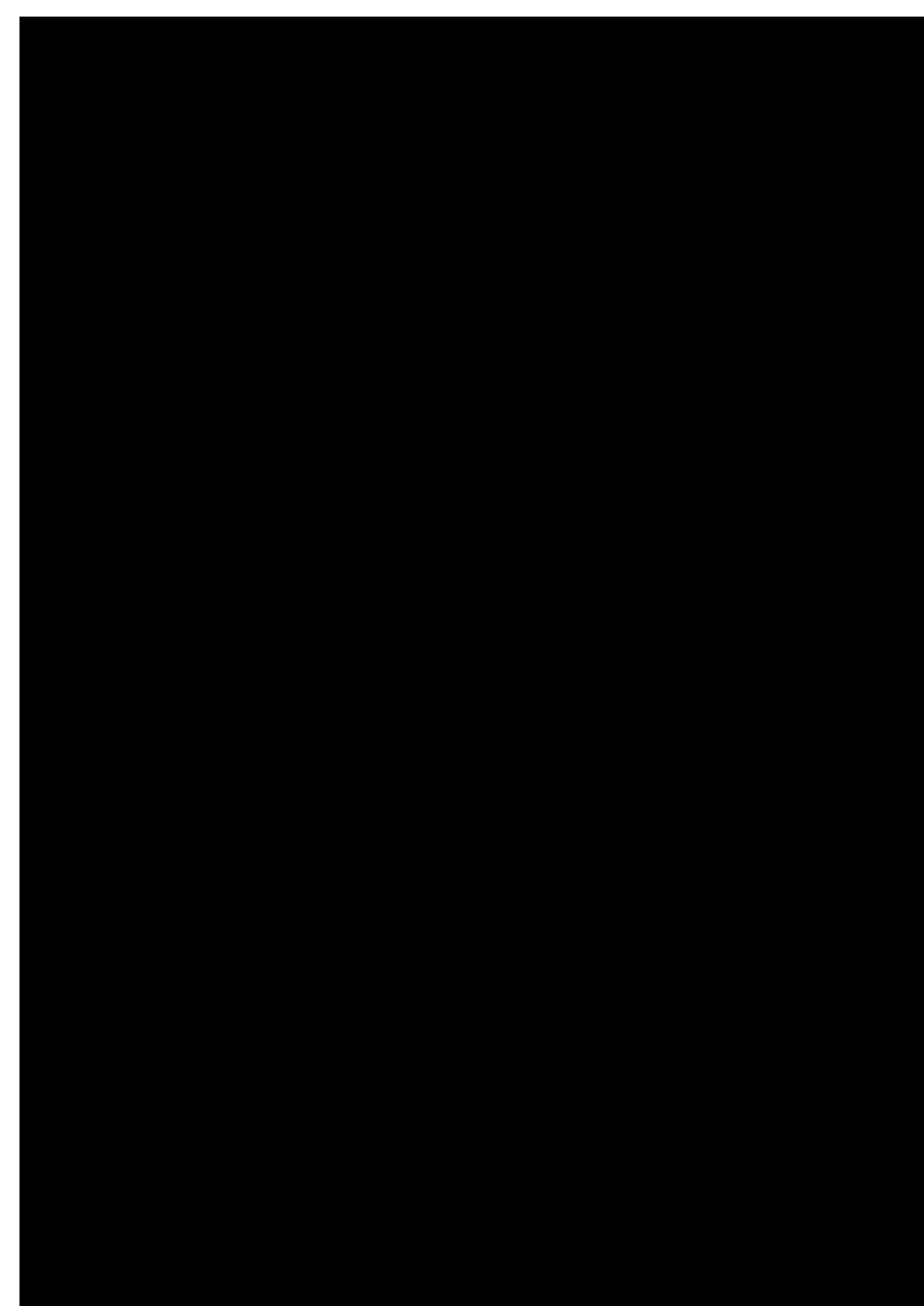


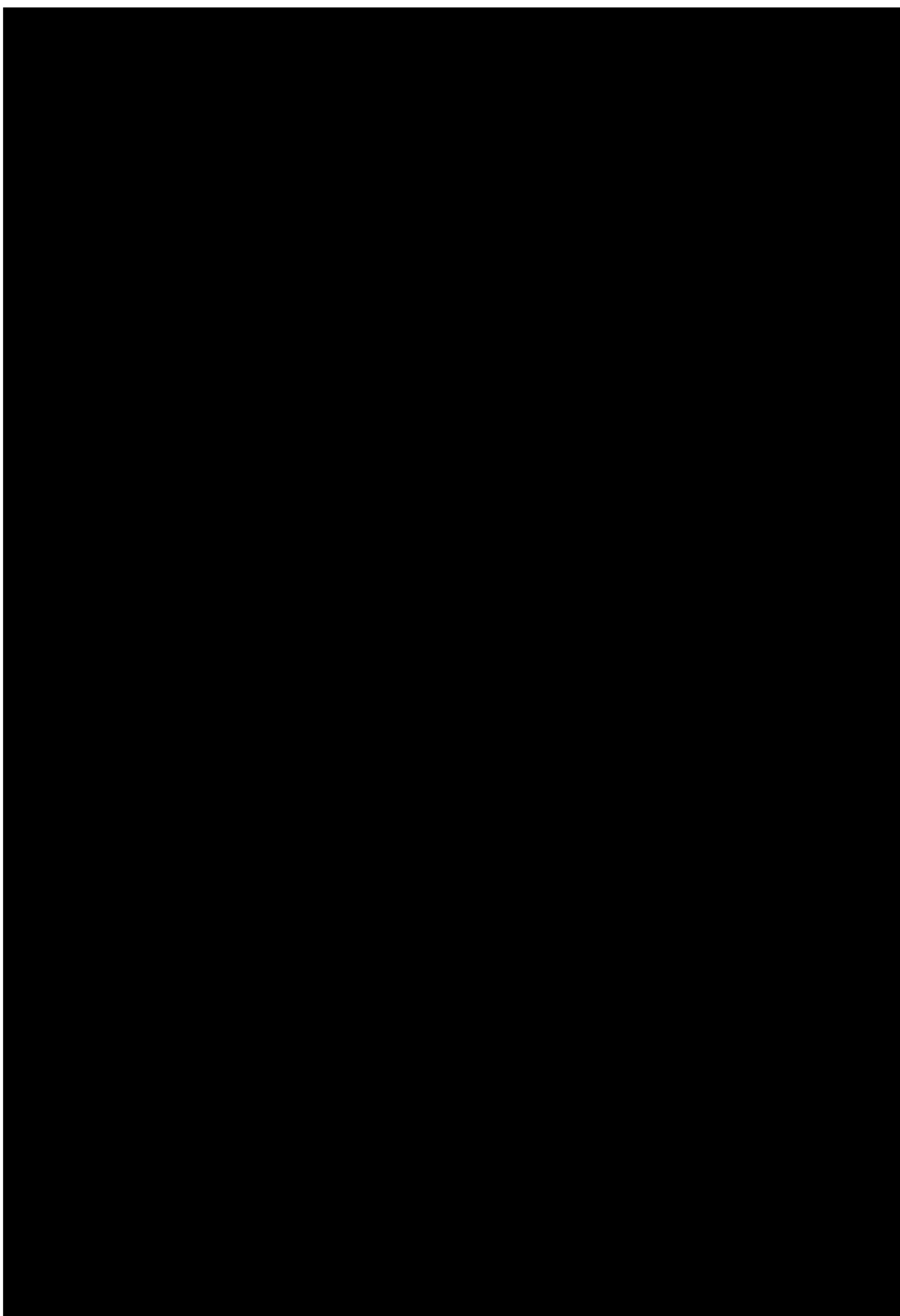


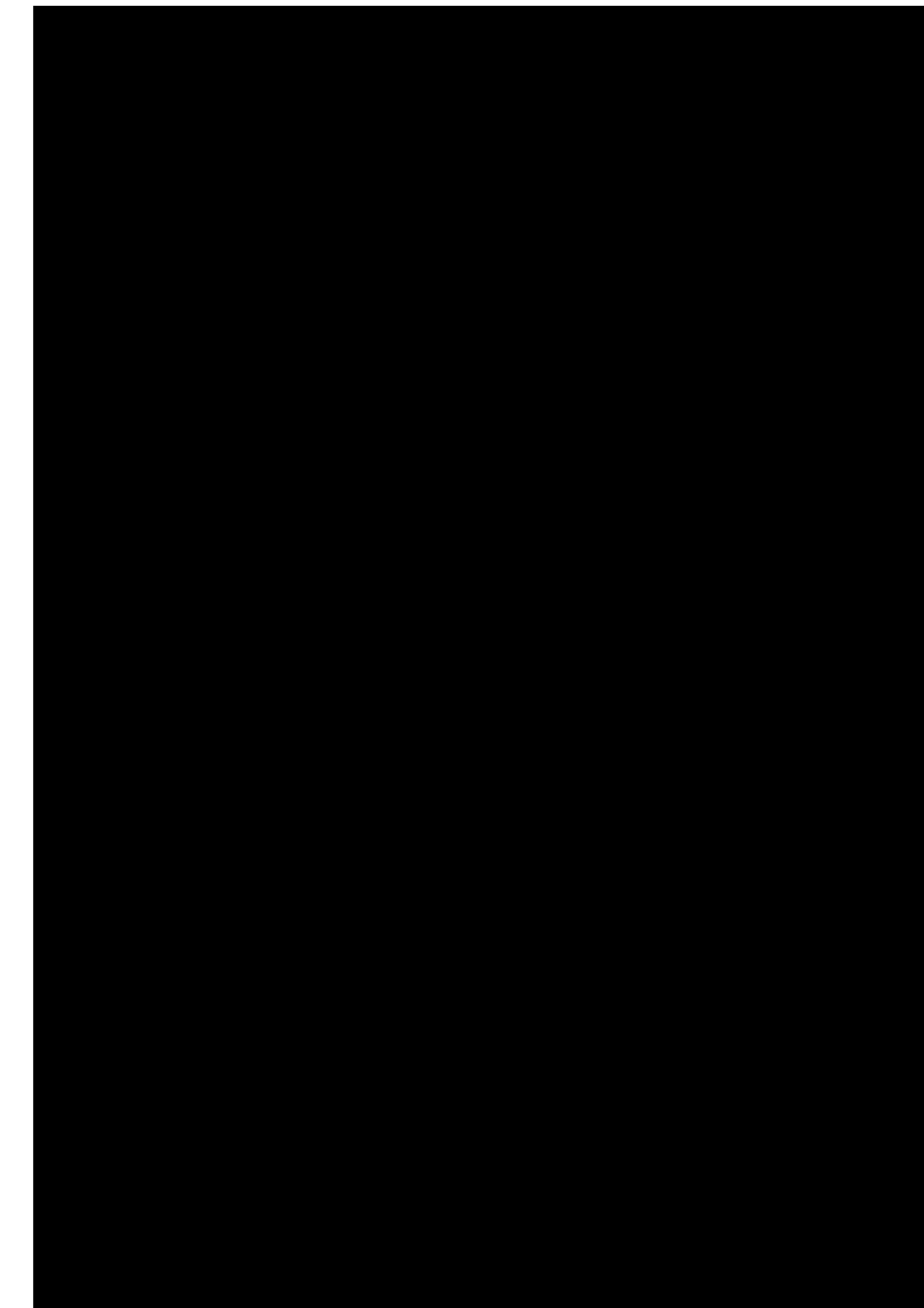


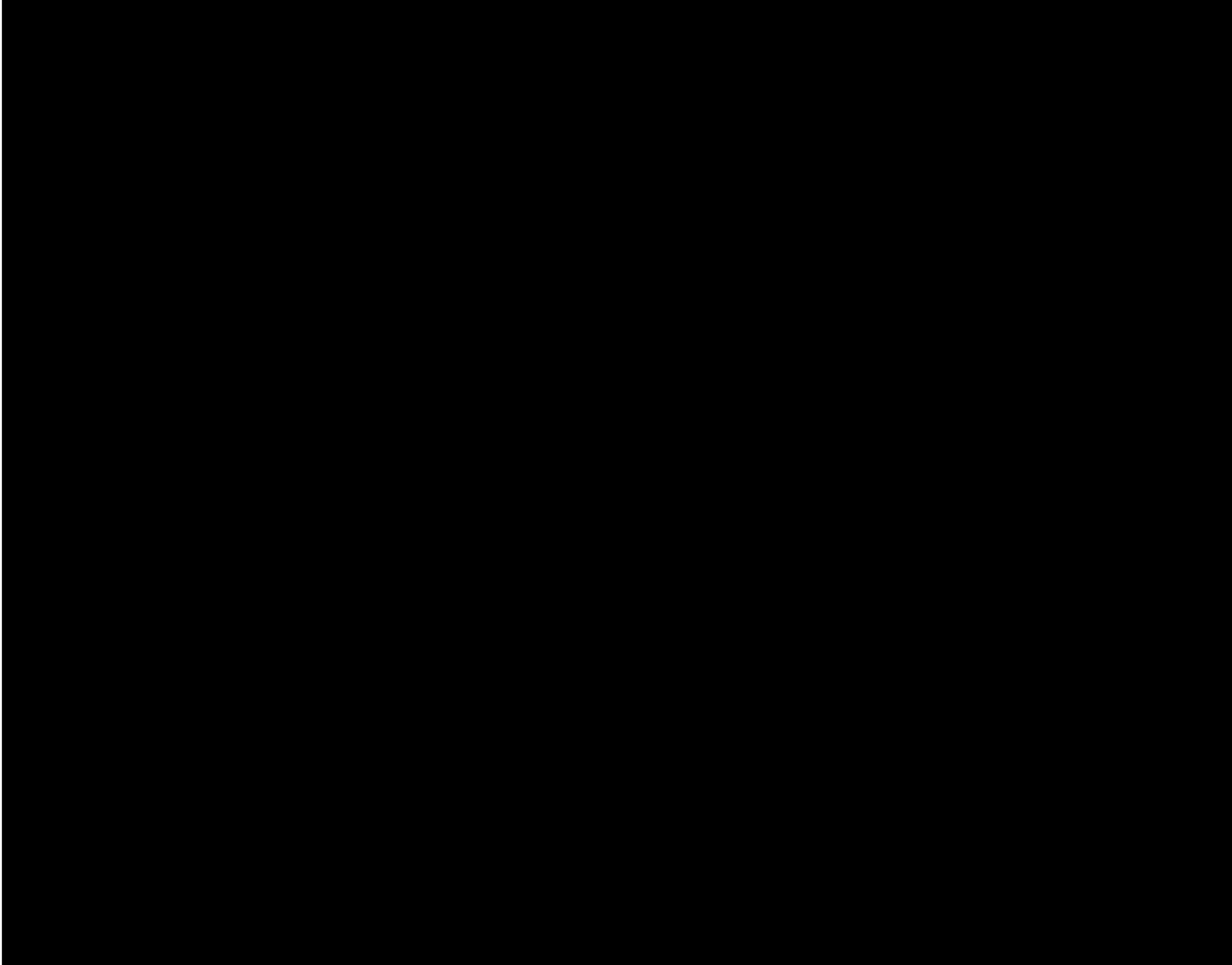


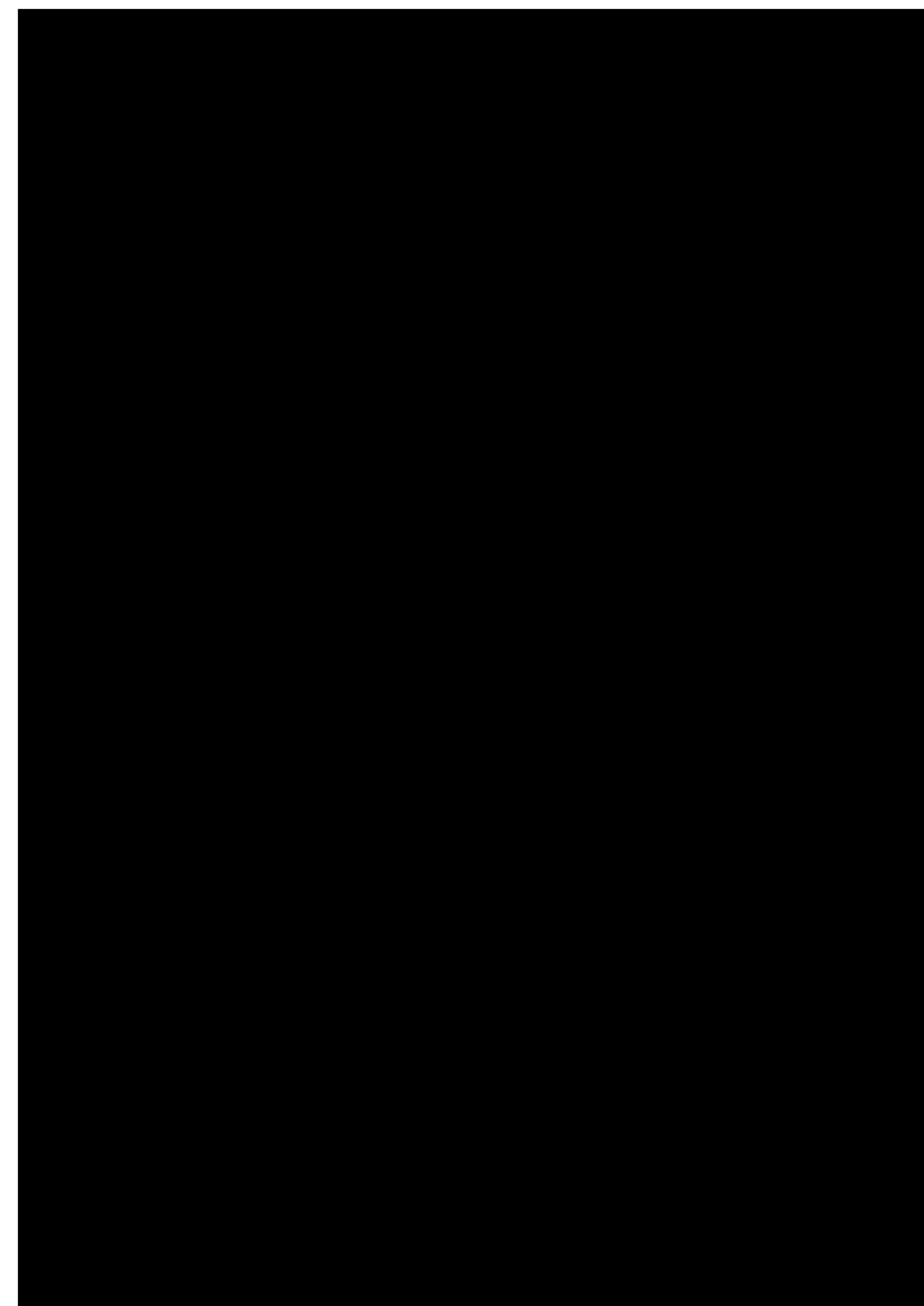


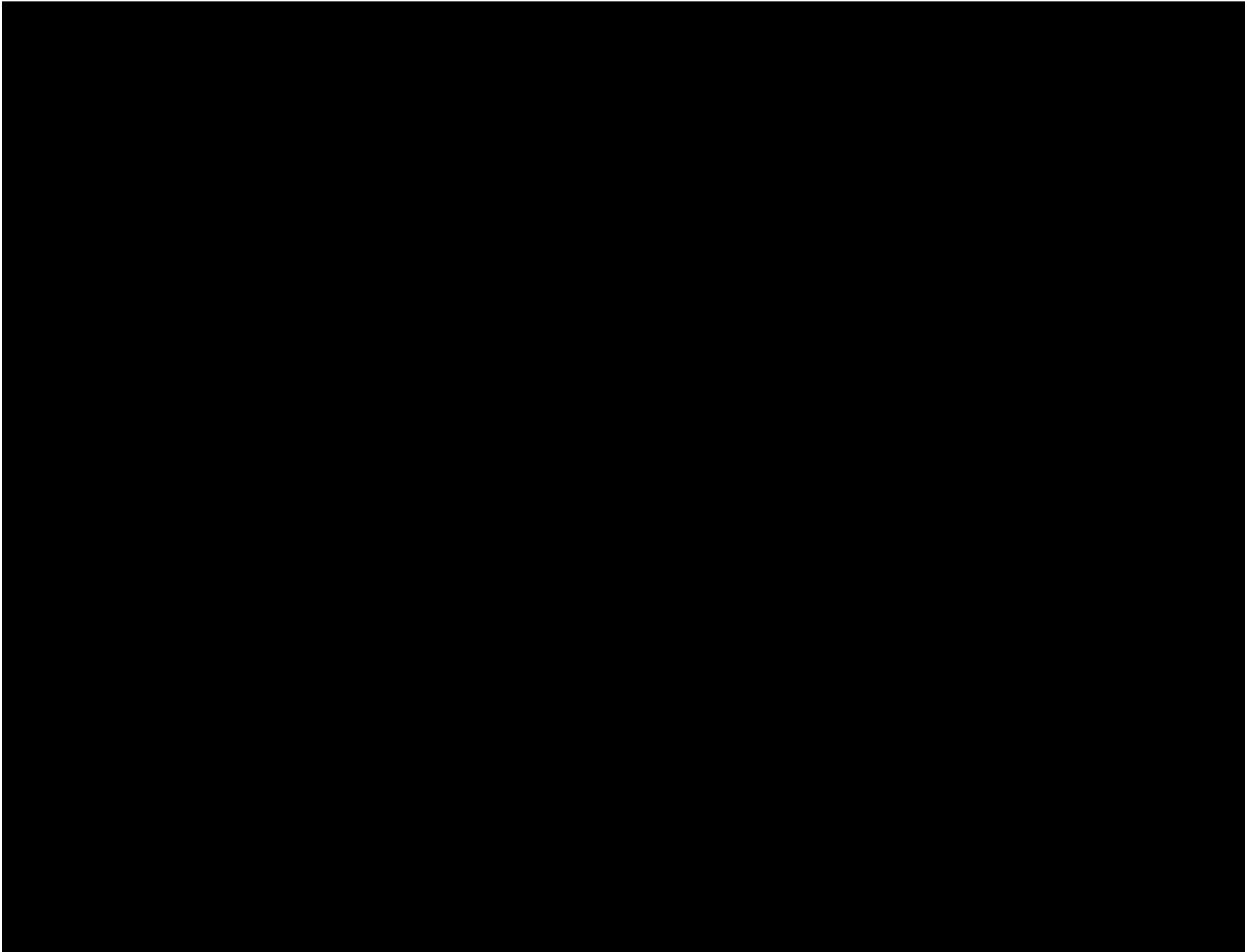


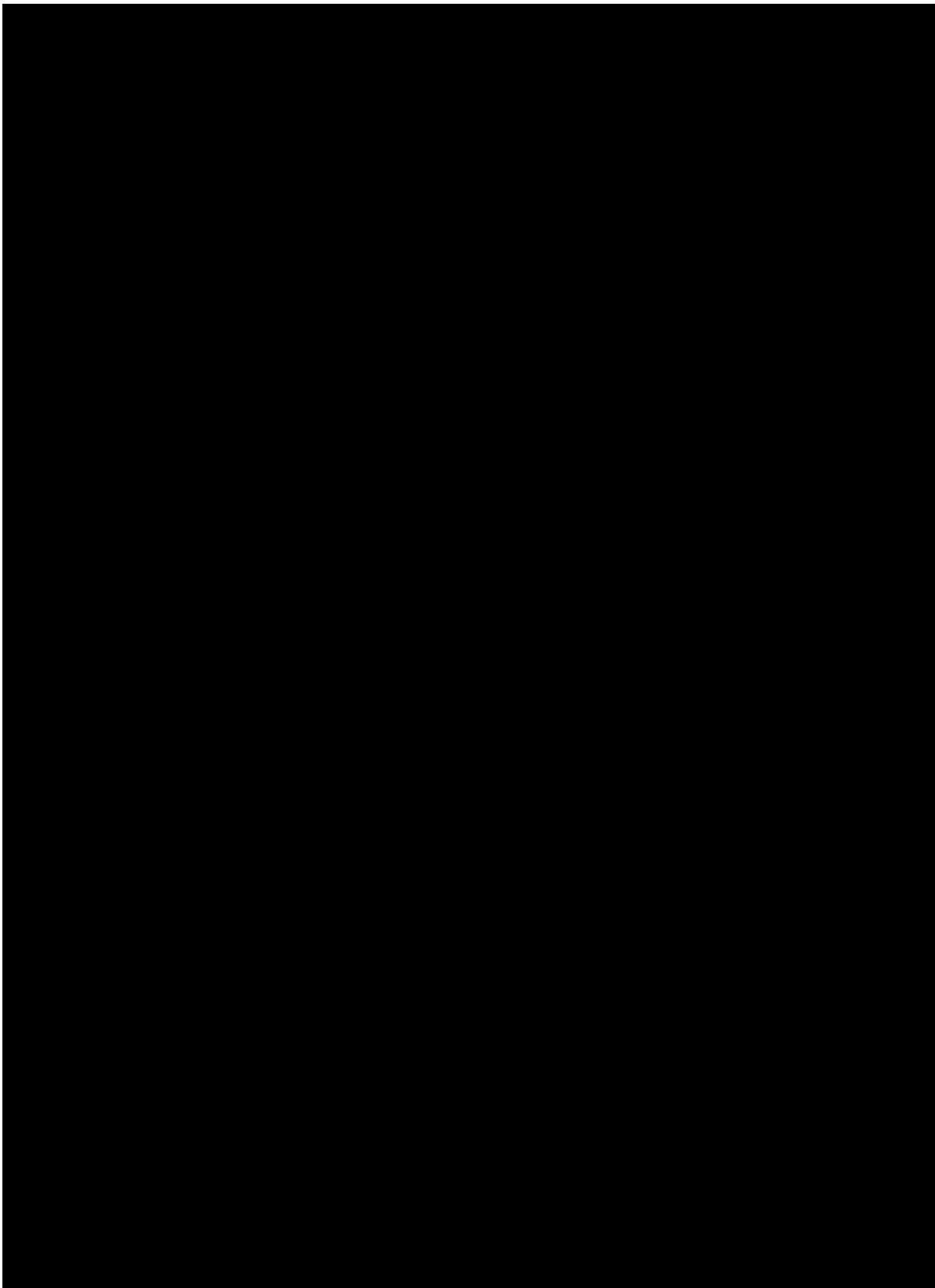




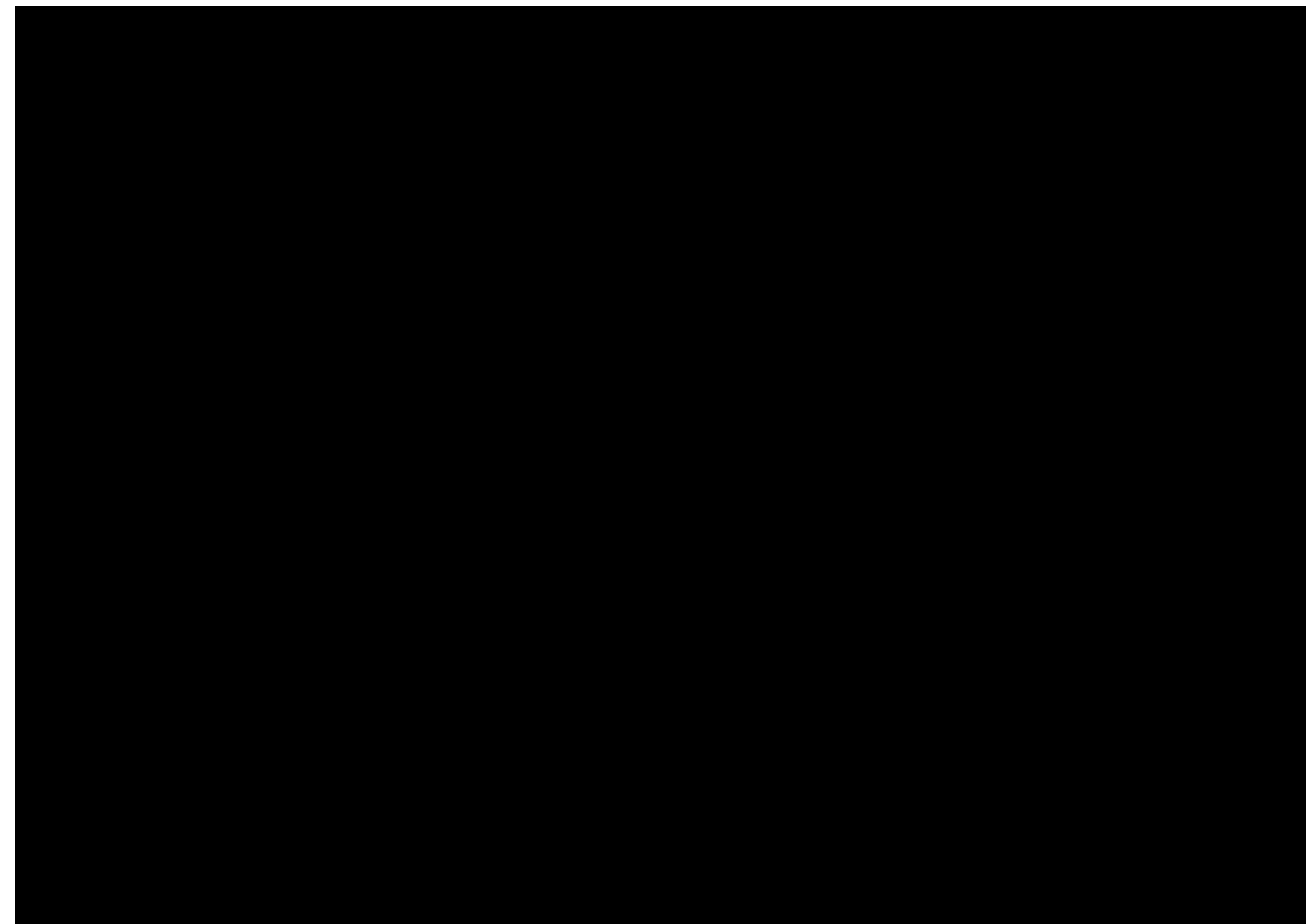


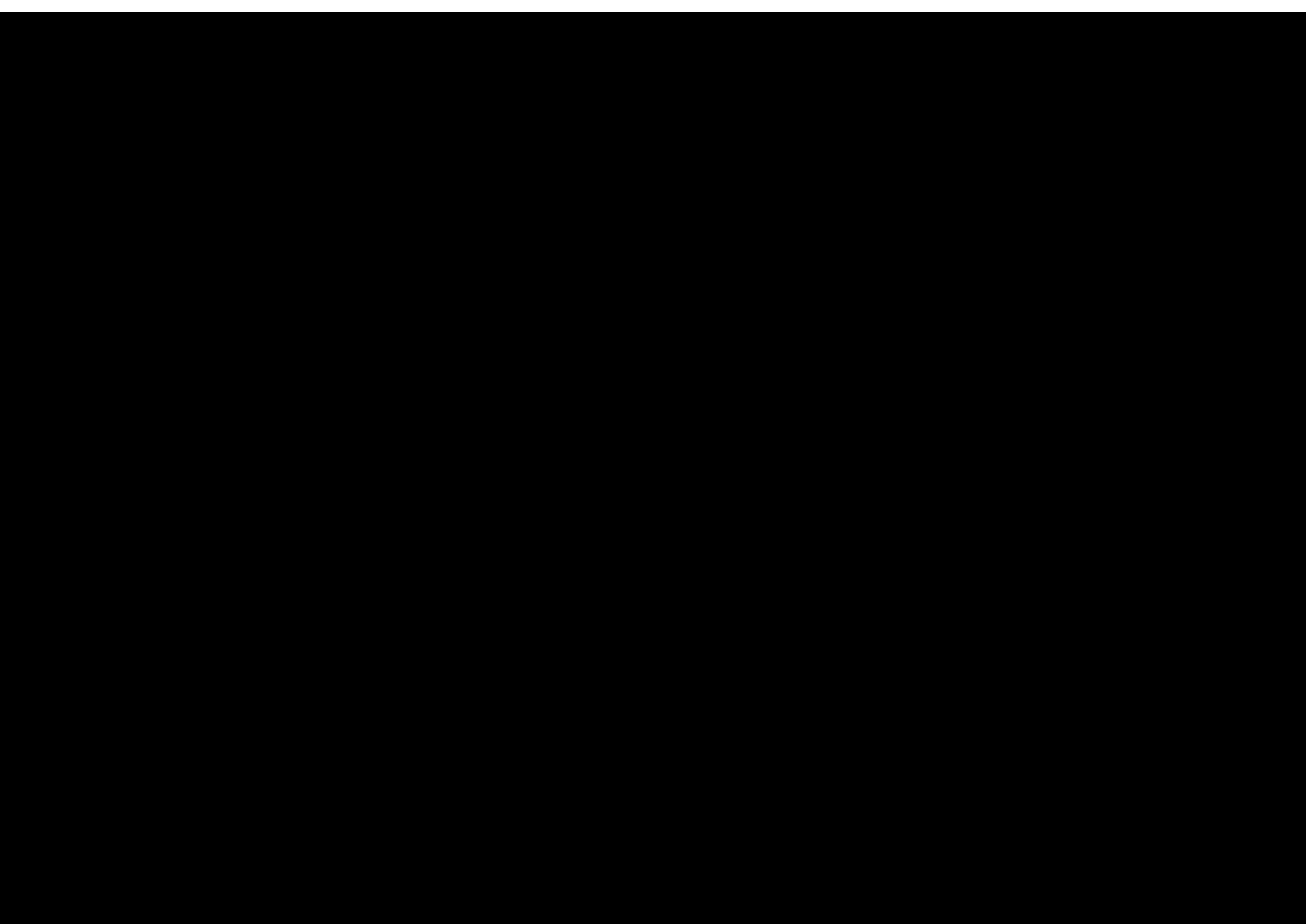


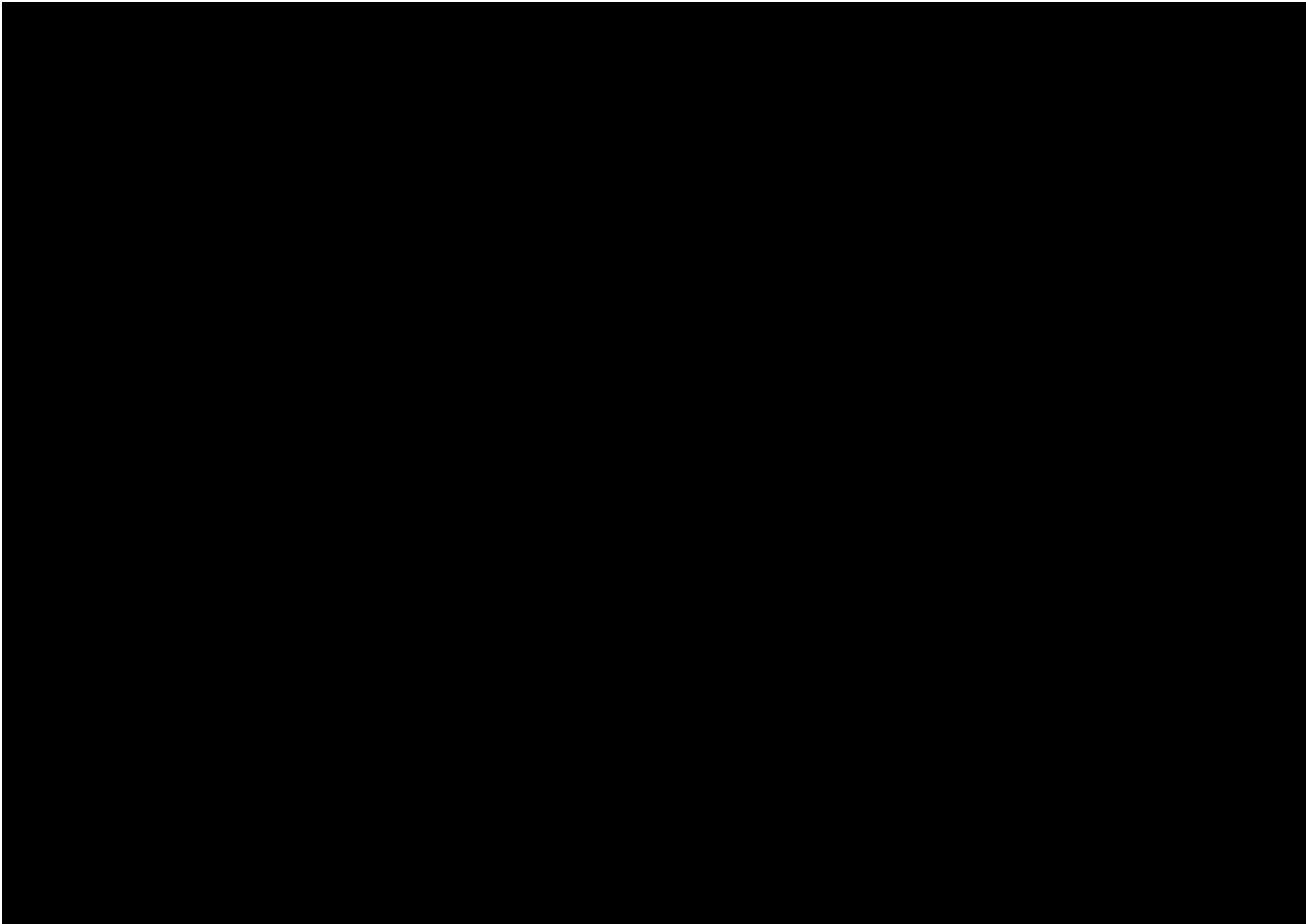


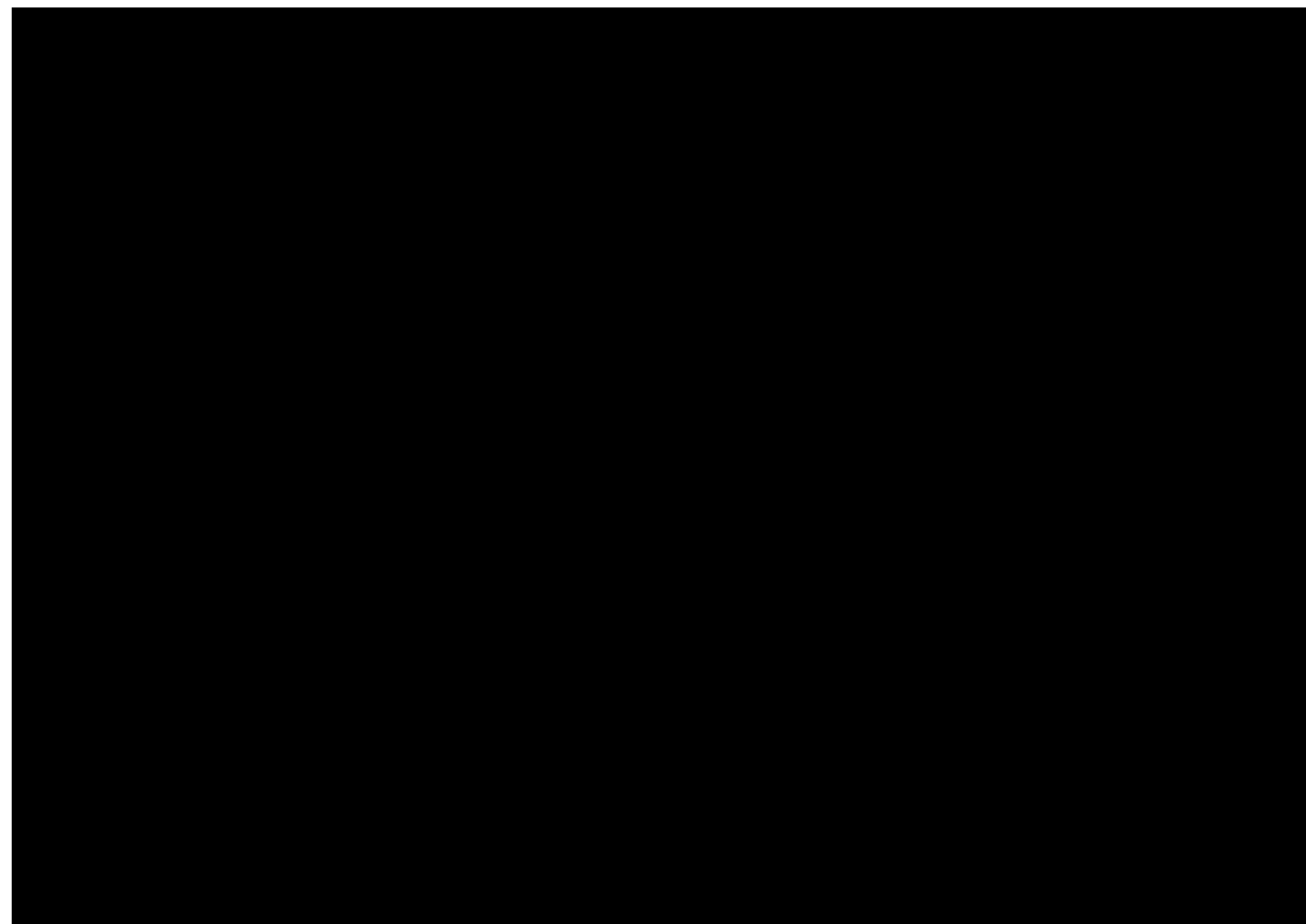


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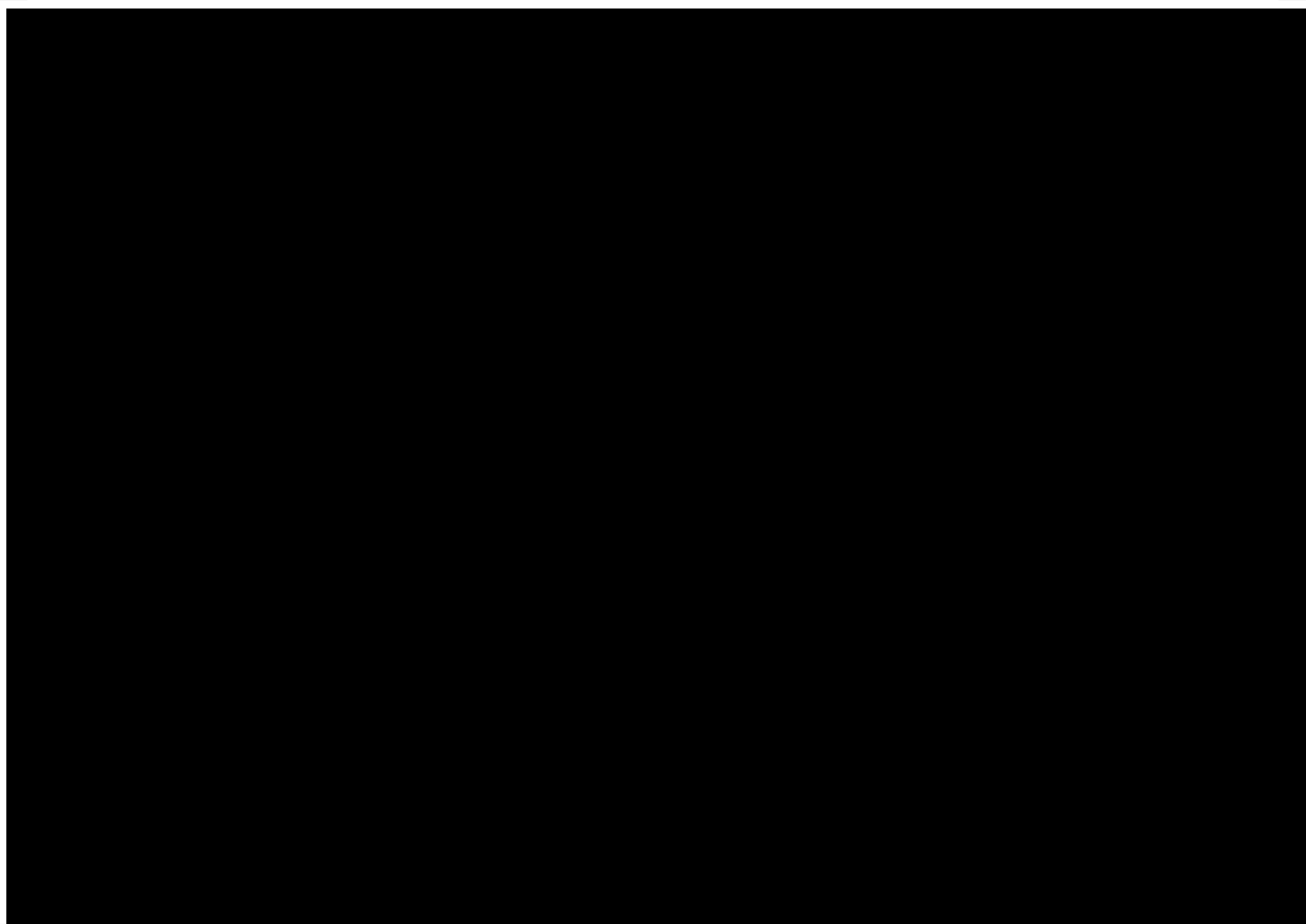


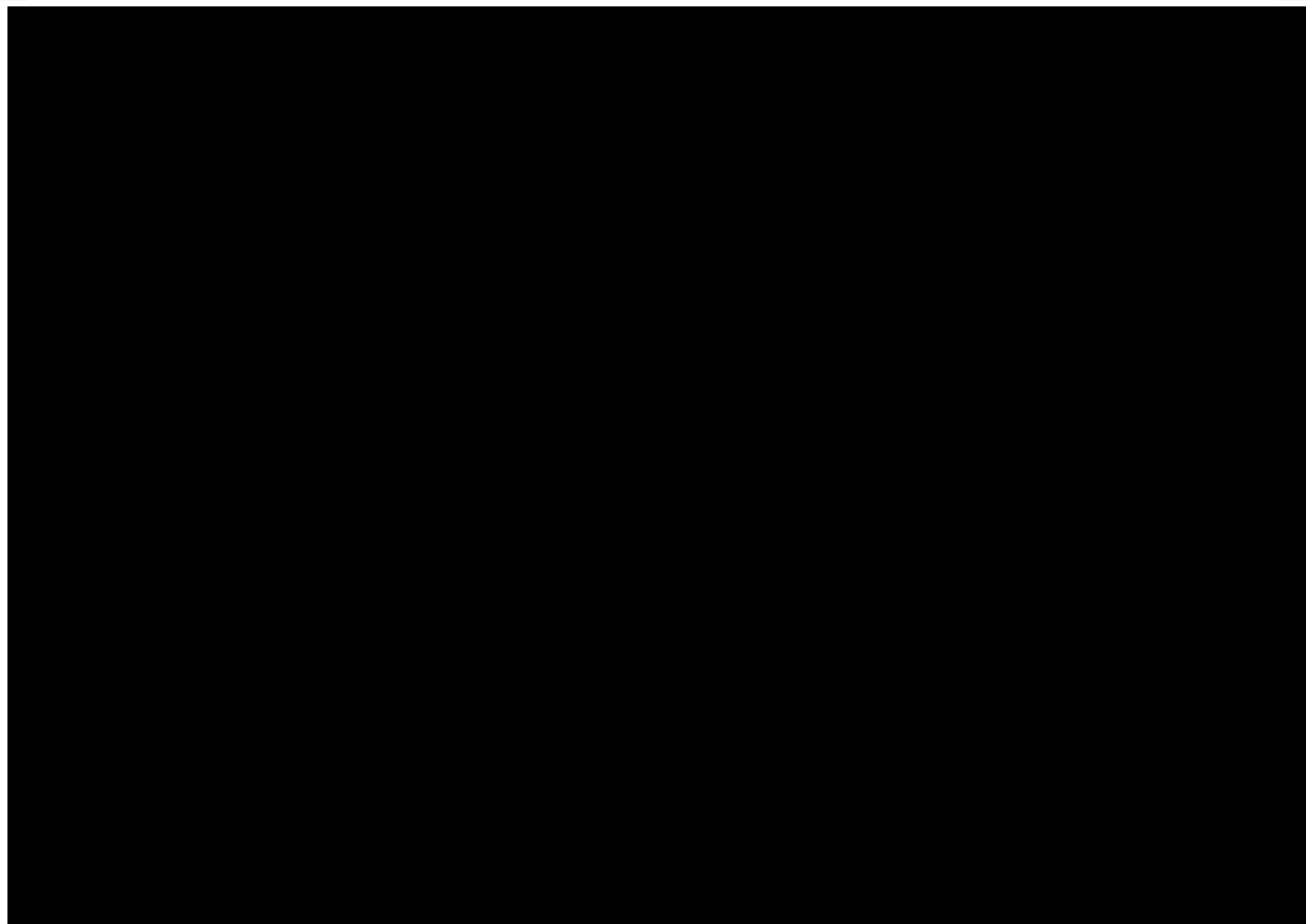


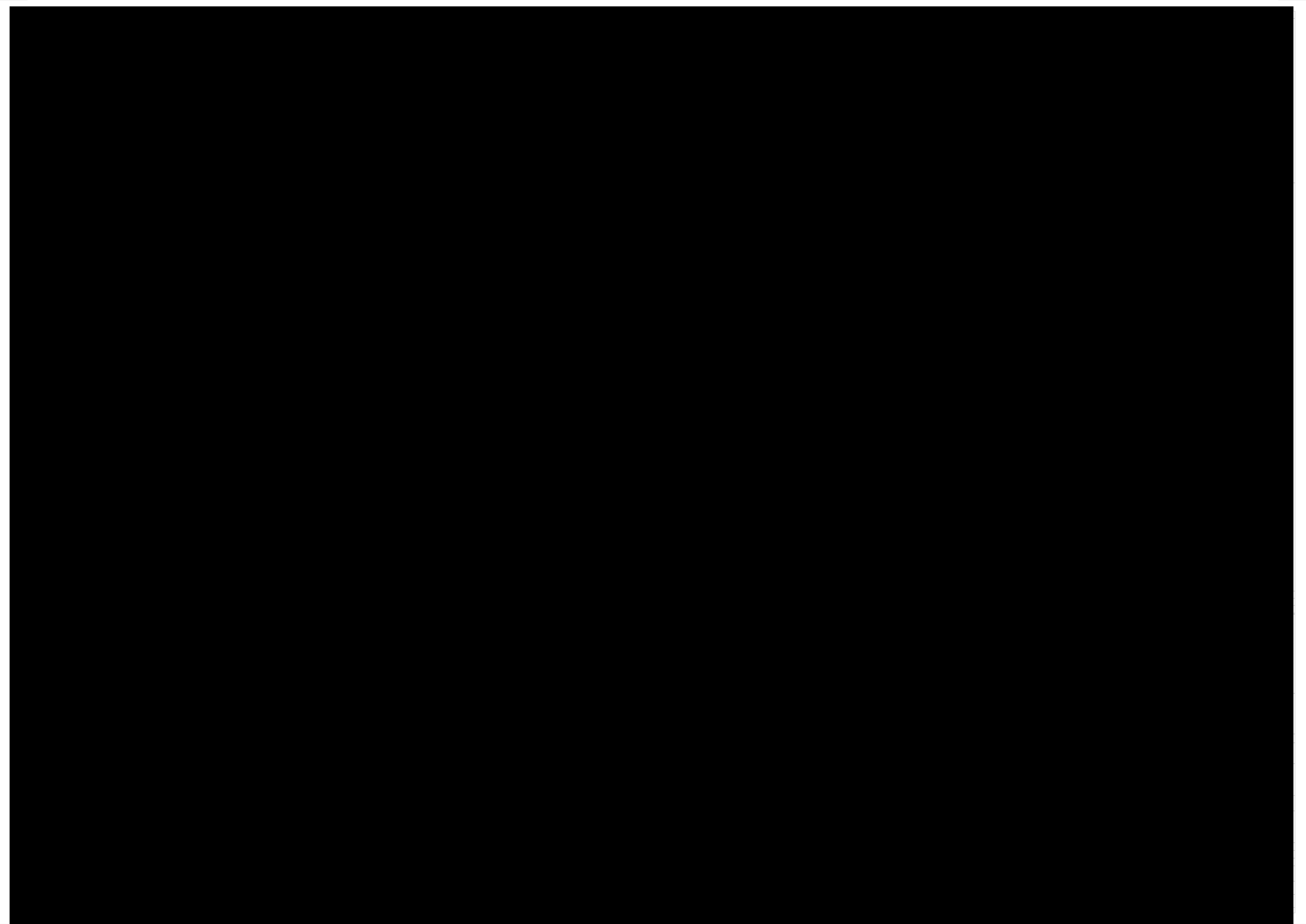




11.18 Appendix F – Proposed Development Drainage Plan







11.19 Appendix G – Infiltration Testing

Document Ref: 082153-CUR-XX-XX-LR-GE-0001

16/01/2026



IRC Campsfield House – Infiltration Testing

In November 2025, Curtins was instructed by Atkins Realis to undertake infiltration testing works and factual reporting at IRC Campsfield House, Kidlington, OX5 1GN.

1.0 Introduction

The proposed development of the site is to comprise the construction of a new three-storey main building, plant and pumping station, North Block/Care and Segregation Unit (CASU), Gate House, Visitors Centre, Cycle Shelter, Escort Rest Building, and a new hardstanding car park. Curtins have previously issued a Phase 1 Preliminary Risk Assessment (ref. 243925-15206-CUR-XX-XX-T-GE-00002).

1.1 Existing Geology

With reference to online BGS mapping and Curtins previous reporting, the area of the proposed infiltration testing is recorded to be underlain by bedrock geology of the Kellaways Clay Member comprising mudstone which is potentially weathered in its upper horizons to a clay, followed by the Cornbrash Formation (limestone).

1.2 Site History

A review of the historical mapping highlights that the infiltration area has remained as open undeveloped land since the earliest available maps from 1878, with the line of trees running east to west through the site first being recorded in 1974. Little other change is noted to present day.

2.0 Fieldworks Undertaken and Rationale

The investigation was undertaken by Curtins between the 10th and 11th of December 2025. A summary of the scope and rationale for the intrusive works undertaken is summarised in Table 1 below. The ground investigation was designed by Curtins in order to provide preliminary data in support of proposed soakaway design and in general accordance with current UK guidance including BS5930:2020 (2). Curtins Exploratory Hole Location Plan drawing records the locations of all exploratory holes, a copy of which is contained as an attachment.

Table 1 Ground Investigation Scope and Rationale

Activity	Rationale
Two machine excavated trial pits (SA01 and SA02) to a depth of up to 2.50m bgl to inform shallow ground conditions and undertake infiltration testing in general accordance with BRE Digest 365.	<ul style="list-style-type: none">• Confirm shallow ground conditions• Undertake infiltration testing

The logs, including details of ground conditions, soil sampling and in situ testing, are presented as an attachment.

2.1 Encountered Ground Conditions

The following section discusses the ground conditions determined from the ground investigation and laboratory testing described with detailed information presented on the exploratory hole logs.

Table 2 below presents a summary of ground conditions encountered with the exploratory trial pit locations.

Table 2 Summary of Ground Conditions Encountered

Stratum	Depth to top of strata	Thickness (m)		General Description
	m BGL	Min	Max	
Topsoil	0.0	0.40	0.50	Grass over brown slightly sandy slightly gravelly SILT. Gravel is fine to coarse of subangular to subrounded flint.
Kellaways Clay Member	0.40 - 0.50	1.79	1.89	Brown to grey mottled brown soft to firm CLAY. Occasional pockets of orangish brown silty sand at depth. Becoming firmer at depth.
Cornbrash Formation (limestone)	2.29	0.01*	0.01*	Light grey to off-white LIMESTONE

*Base not encountered

2.1.1 Topsoil

Topsoil was encountered at both trial pit locations proven to depths of 0.40m and 0.50m bgl in SA02 and SA01 respectively. The unit typically comprised brown slightly sandy slightly gravelly SILT.

2.1.2 Kellaways Clay Member

Underlying the topsoil was the bedrock geology of the Kellaways Clay Member comprising predominantly cohesive material proven to a maximum depth of 2.29m bgl. The unit initially comprised a brown to grey mottled brown soft to firm CLAY and was encountered at depths ranging from 0.40m (SA02) to 0.50m bgl (SA01) and was proven to a maximum depth of 2.29m. Rare pockets of orangish brown silty SAND were recorded throughout SA02, which became frequent and containing fine to medium, sub-angular limestone gravels from 2.00m bgl. In SA01, occasional pockets of orangish brown silty sand were encountered from 1.80m bgl only.

2.1.3 Cornbrash Formation

The Cornbrash Limestone Formation was encountered underlying the Kellaways Clay Member, the thickness of which of which was not proven. The unit was generally described as a light grey to off-white moderately strong LIMESTONE.

The underlying site soils described by Curtins' generally correlates anticipated geology from the Curtins Phase 1 desk study completed in 2022.

No in-situ geotechnical testing was undertaken during the ground investigation. Full details of the geotechnical laboratory testing are included in Table 3 below. All tests were undertaken on samples within the Kellaways Clay Member and are presented as factual only.

Table 3 Summary of geotechnical testing results

Parameter	Quantity	Values
	Laboratory Test	
Particle Size Distribution (PSD)	2	Yellowish-brown to mottled light grey sandy CLAY to gravelly very sandy CLAY.
Atterberg 4 Point	2	Clay of very high plasticity.

2.1.4 Groundwater

Groundwater seepages were not encountered within either of the intrusive locations (termination depth of 2.30m bgl).

3.0 Infiltration Testing

Infiltration testing was undertaken within both trial pit locations with tested strata comprising variably sandy CLAY and LIMESTONE with the results presented within Table 4 below and as an attachment.

Table 4.0 Summary of Infiltration Testing Results

Location	Test No.	Approximate Permeability (m/s)	Strata (Field Description)
SA01	1	Insufficient infiltration to calculate approximately permeability rate.	0.50 – 2.29: Brown mottled greyish brown soft to firm CLAY. Occasional dark grey to black silt speckling. ... from 1.80m occasional pockets of orangish brown silty sand.
SA01	2	Insufficient infiltration to calculate approximately permeability rate.	2.29 – 2.30: Light grey to off-white moderately strong LIMESTONE.
SA02	1	2.1E-5	0.40 – 2.29: Grey mottled brown soft to firm CLAY. Rare pockets of orangish brown silty sand. ... from 2.00m frequent pockets of orangish brown silty sand and occasional fine to medium subangular limestone fragments.
SA02	2	1.6E-5	
SA02	3	1.8E-5	2.29 – 2.30: Light grey to off-white moderately strong LIMESTONE.

Within SA01, two infiltration tests were undertaken. The first test was recorded for 90 minutes with infiltration occurring from 1.30m to 1.56m bgl, with a pit base of 2.30m bgl. The second test was recorded for 240 minutes with infiltration occurring from 1.305m to 1.718m bgl. For both of these tests, the 25% effective depth was not achieved due to predominantly cohesive nature of encountered soils. As such, insufficient infiltration was recorded within SA01 for soil infiltration rate to be reliably determined.

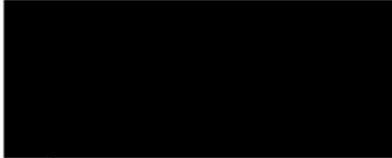
40 Compton Street
London
EC1V 0BD

t: [REDACTED]
e: london@curtins.com
w: www.curtins.com

Curtins

Within SA02, three infiltration tests were undertaken over a maximum elapsed time of 150 minutes, determining soil infiltration rates ranging from 1.6E-5 m/s to 2.1E-5 m/s. It is anticipated that the water infiltrated at a faster rate compared to SA01 due to the more frequent granular lenses recorded within SA02 as described in the trial pit logs attached with both trial pits encountering limestone at 2.29m bgl.

Yours sincerely,



Geo-Environmental Engineer
Curtins
Inc. Exploratory Hole Location Plan
Exploratory Hole Logs
Infiltration Testing Results
Geotechnical Testing Results

243925-15206-EDG-ZZZ-XX-DR-A-0013-S2-D0100

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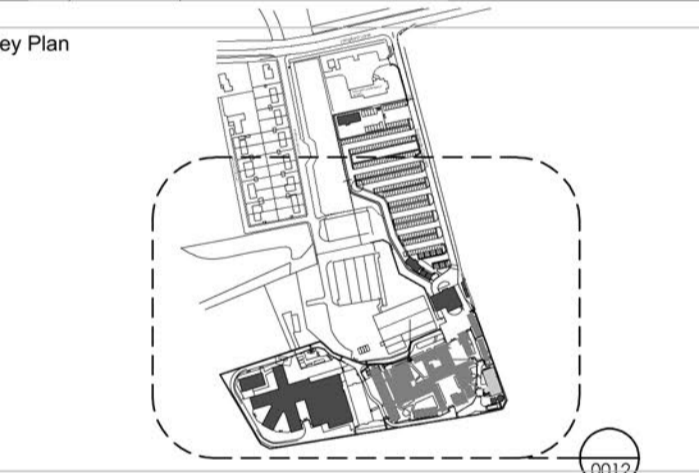


MATCH LINE



- Notes**
- Denotes extent of Ministry of Justice Ownership
 - Denotes area of IRC Campsfield
 - New External Plant
 - Trees to be removed

Rev.	Date	Description
P03	05.09.2025	Stage 2 Final Issue
P02	06.06.2025	Stage 2 Issue
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Project Status
RIBA Stage 2

Client
Home Office

Project
Campsfield IRC
Phase 2 Expansion

2 Marsham Street, London, SW1P 4DF, United Kingdom

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Building Type

Drawing Title
Proposed Site Plan Phase 2 - Sheet 1

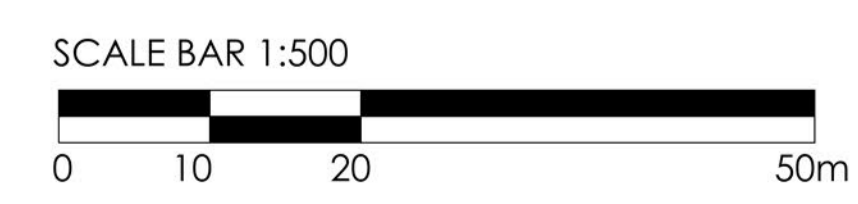
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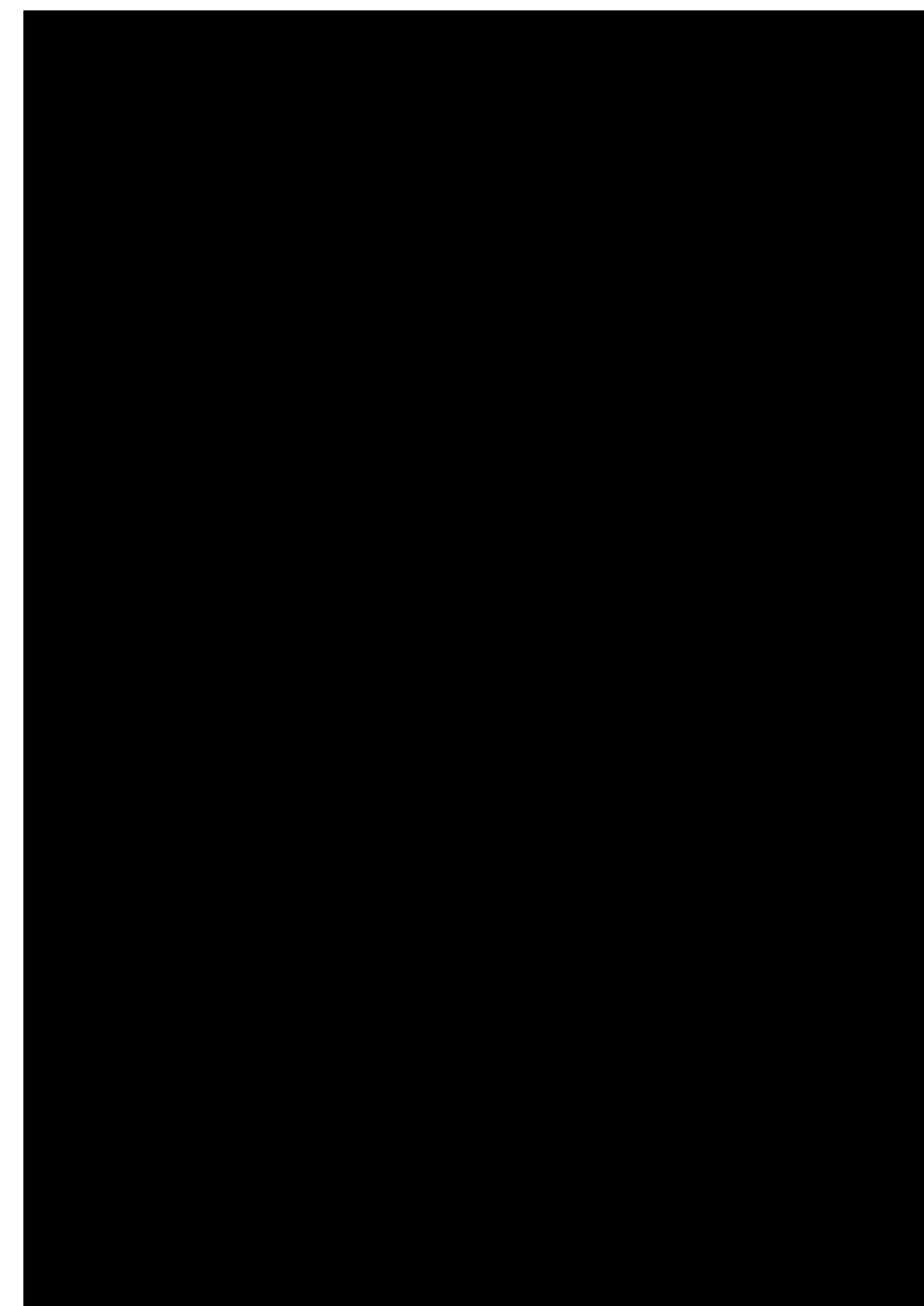
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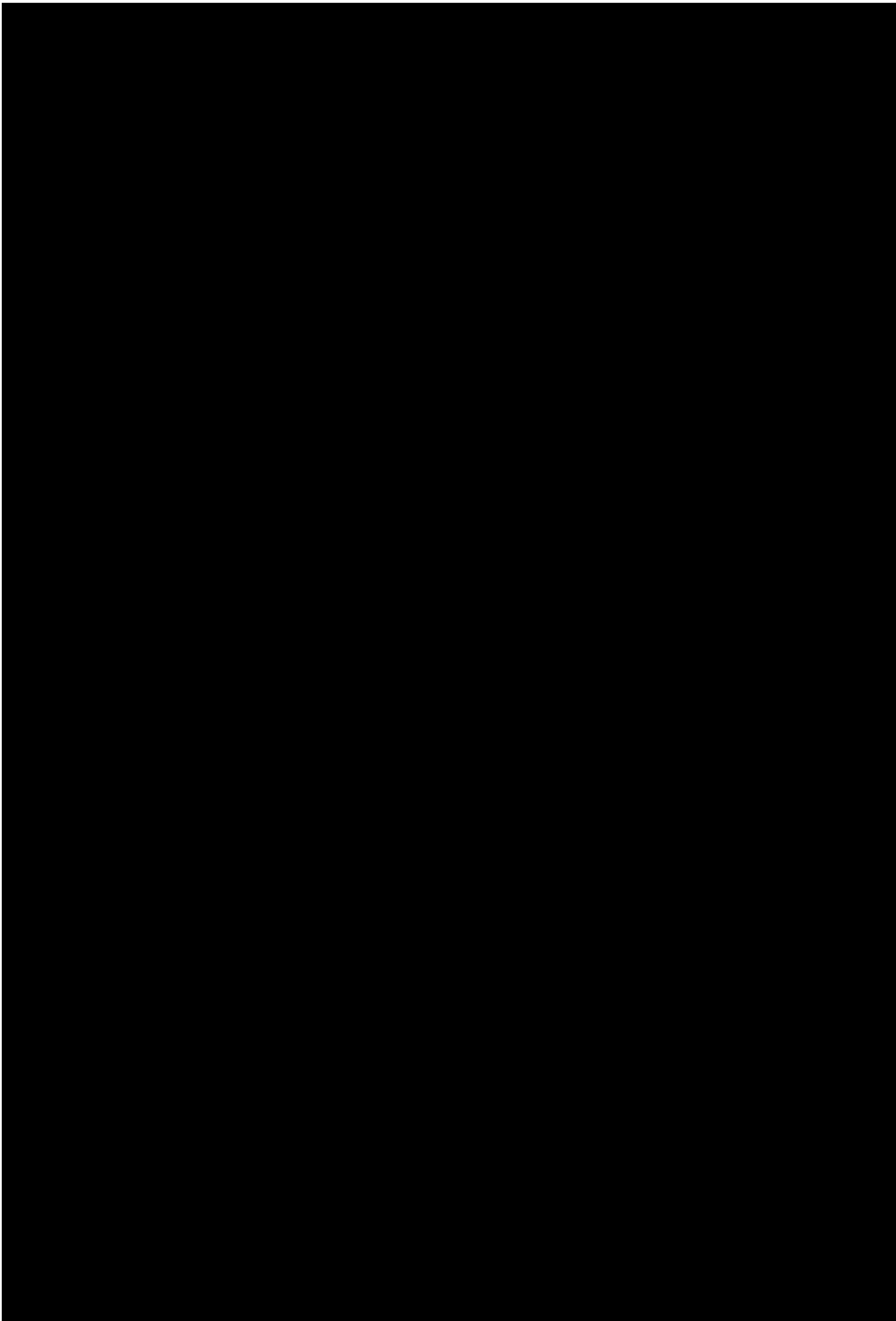
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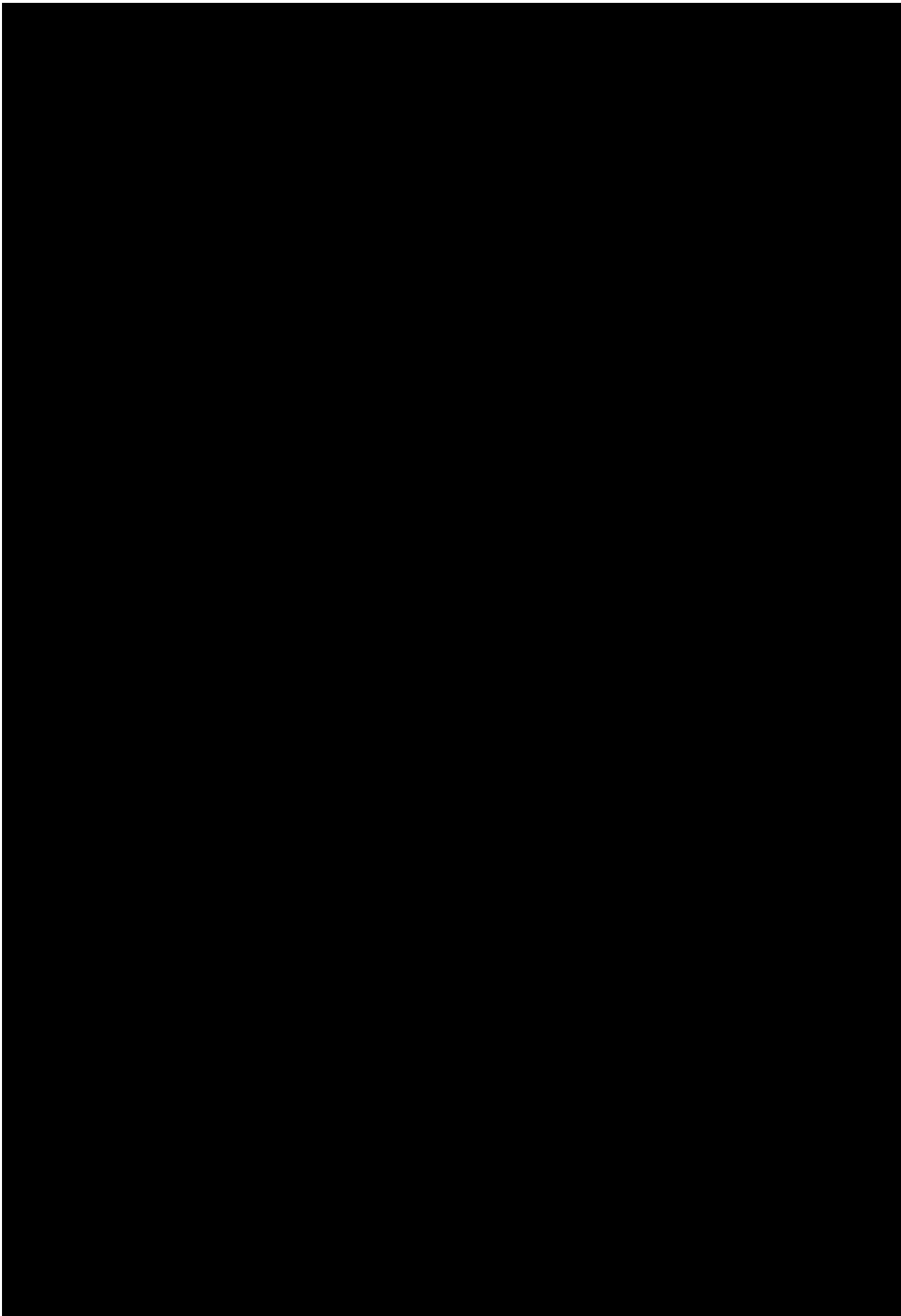
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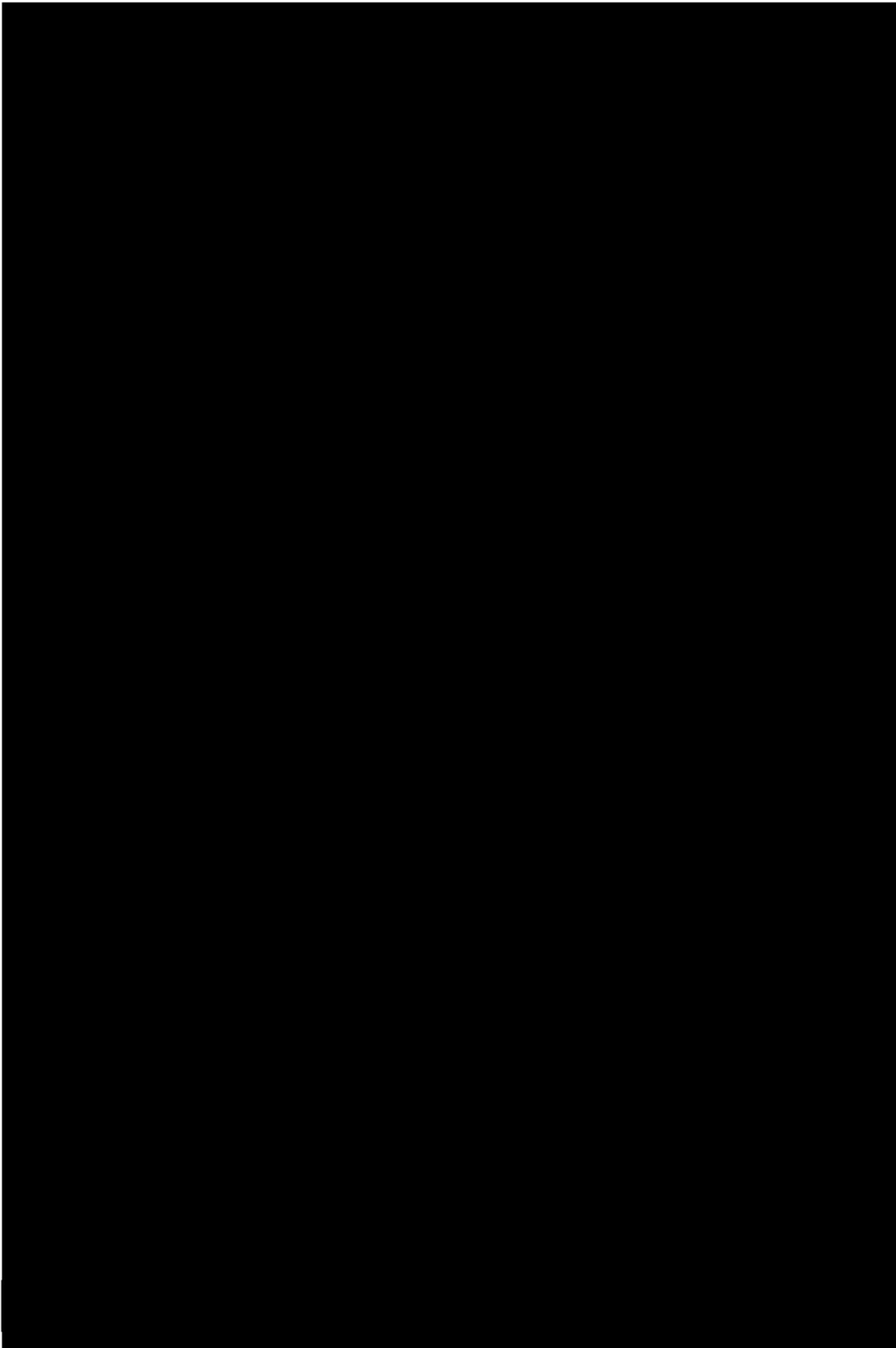
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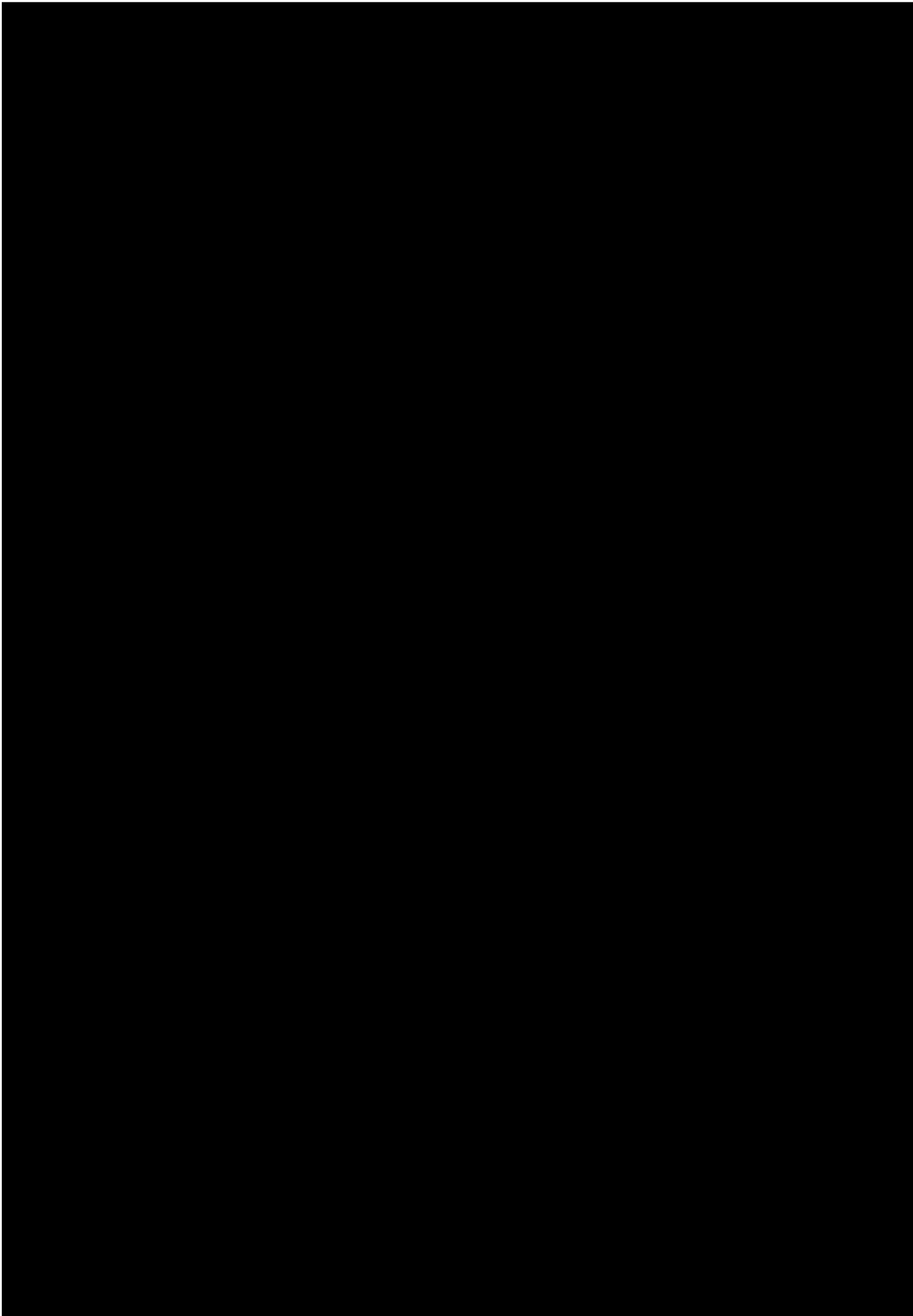


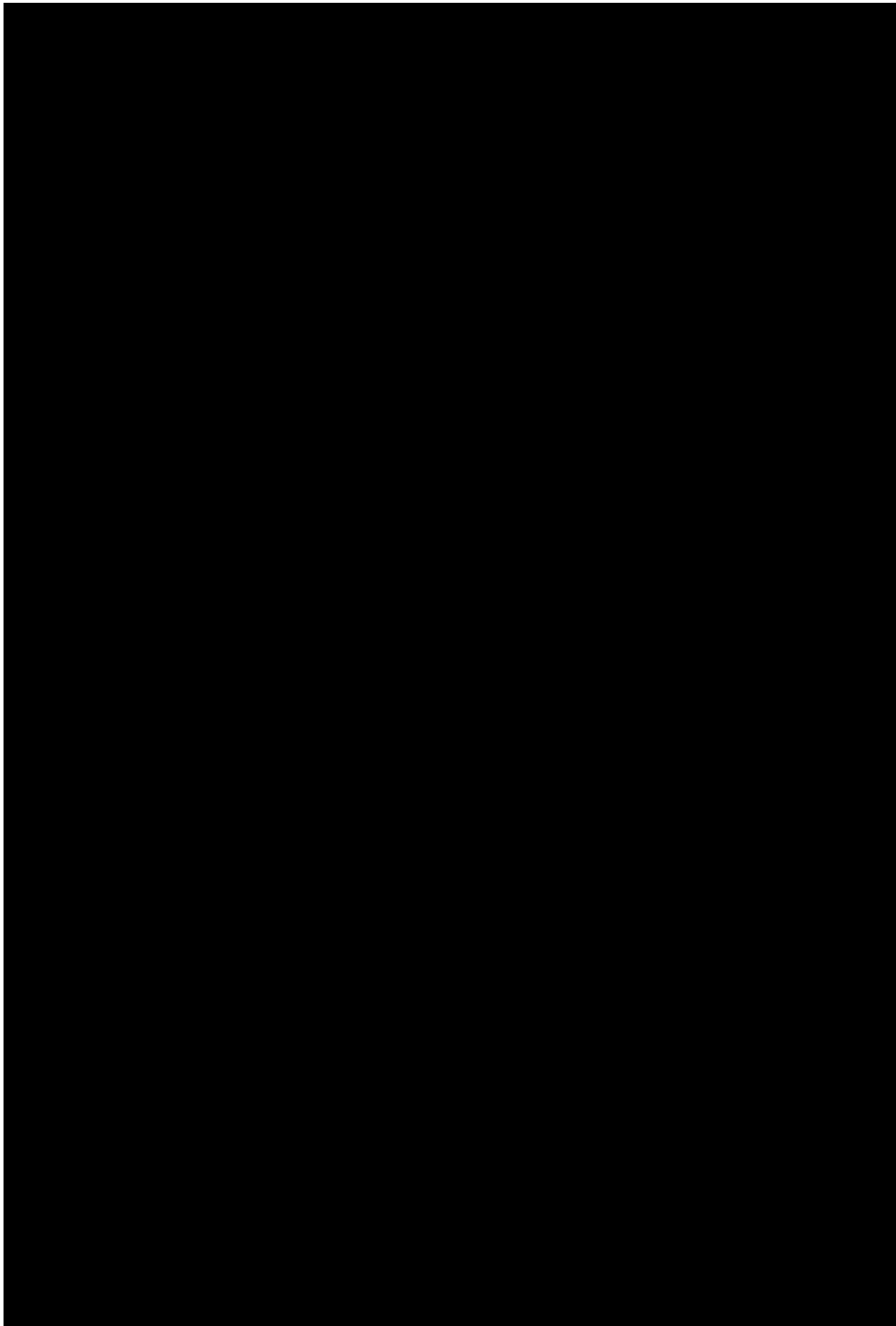


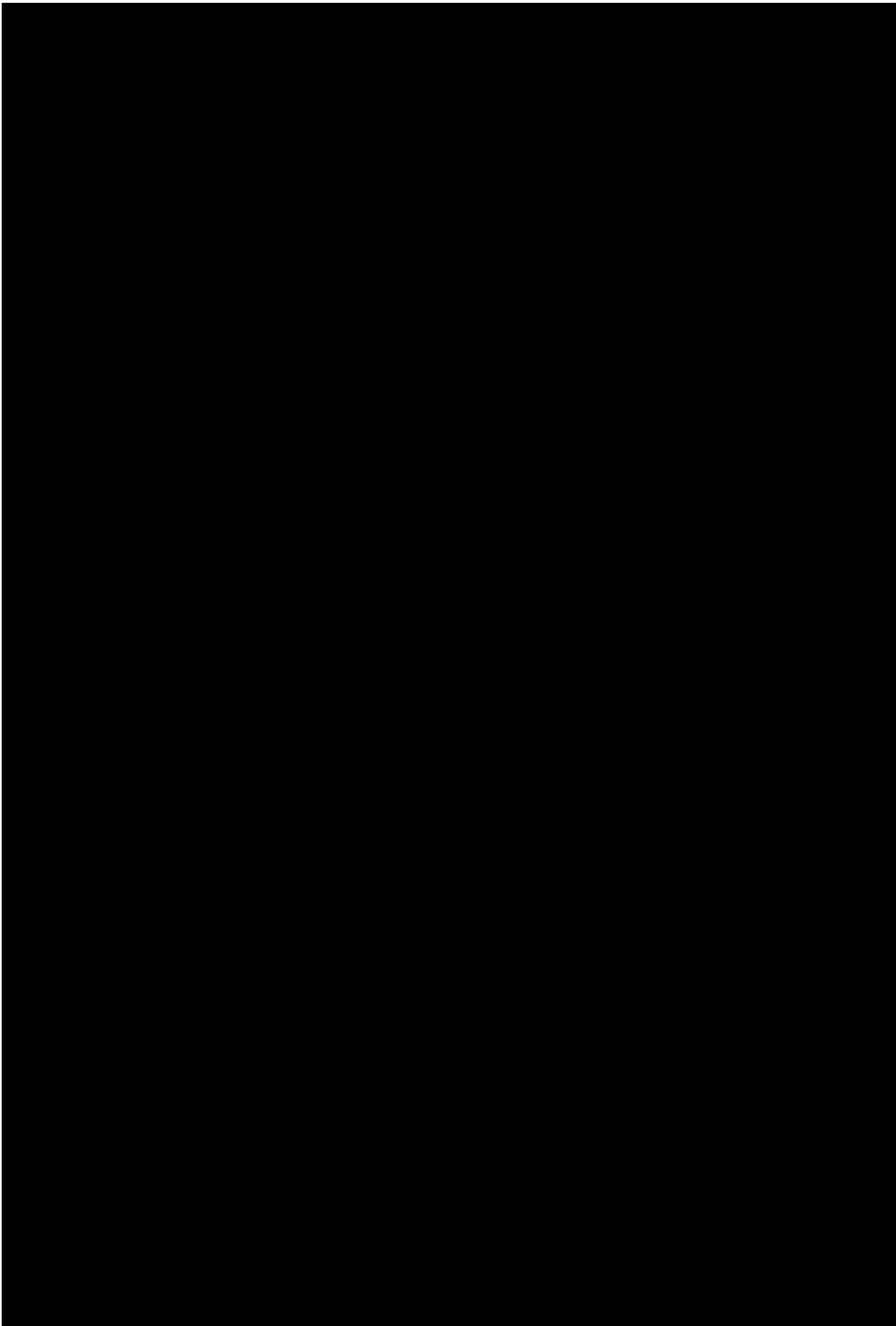


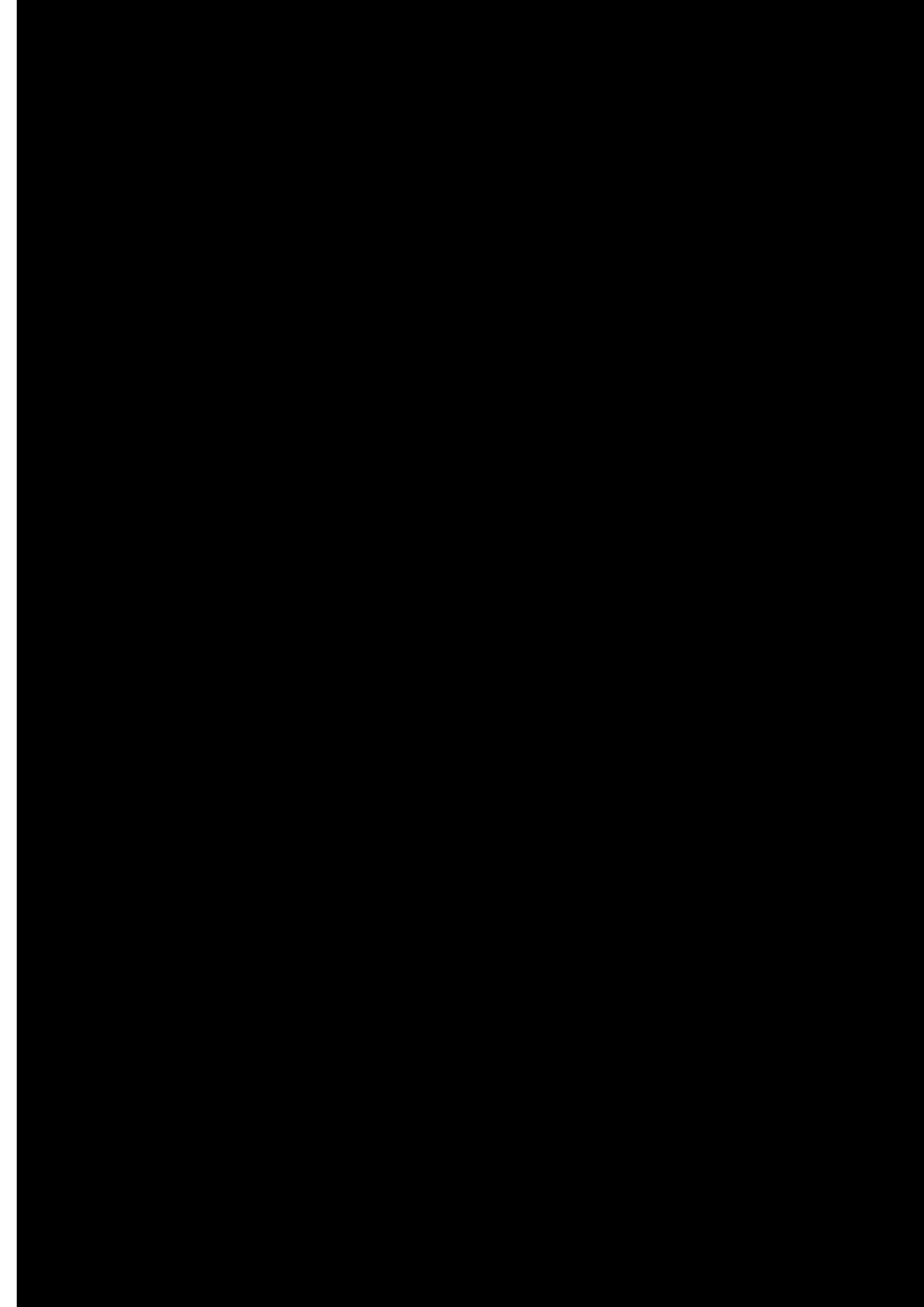


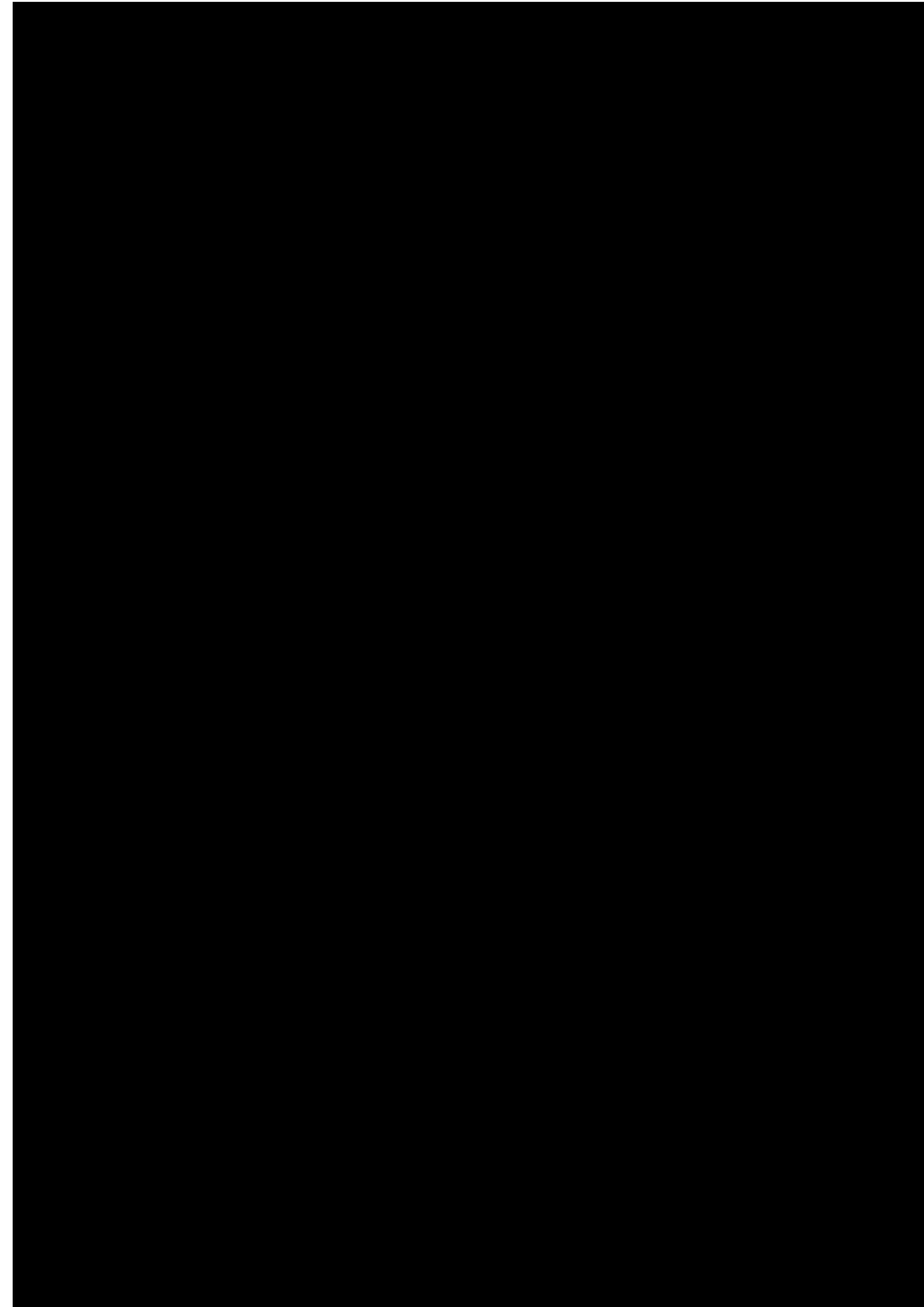


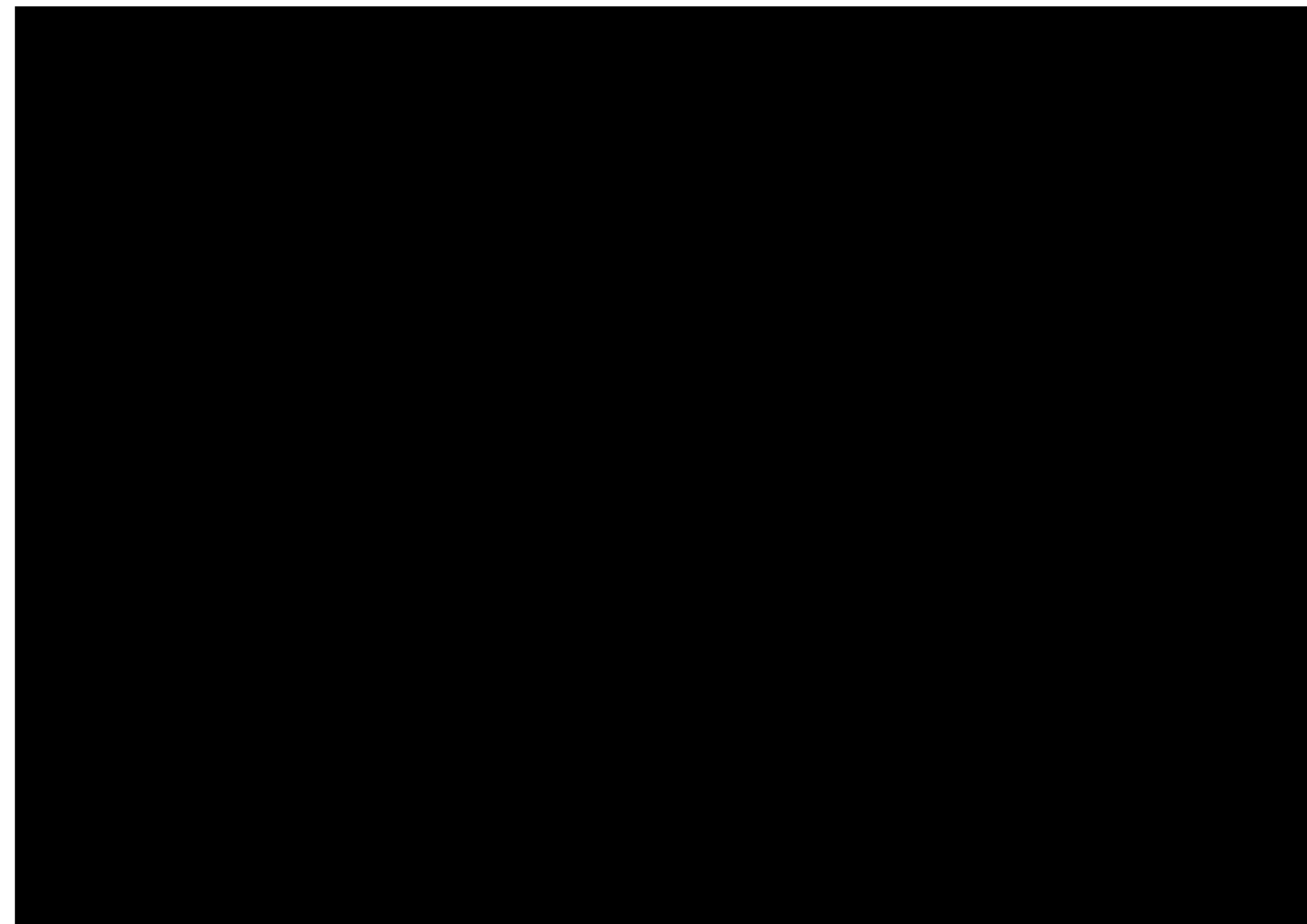


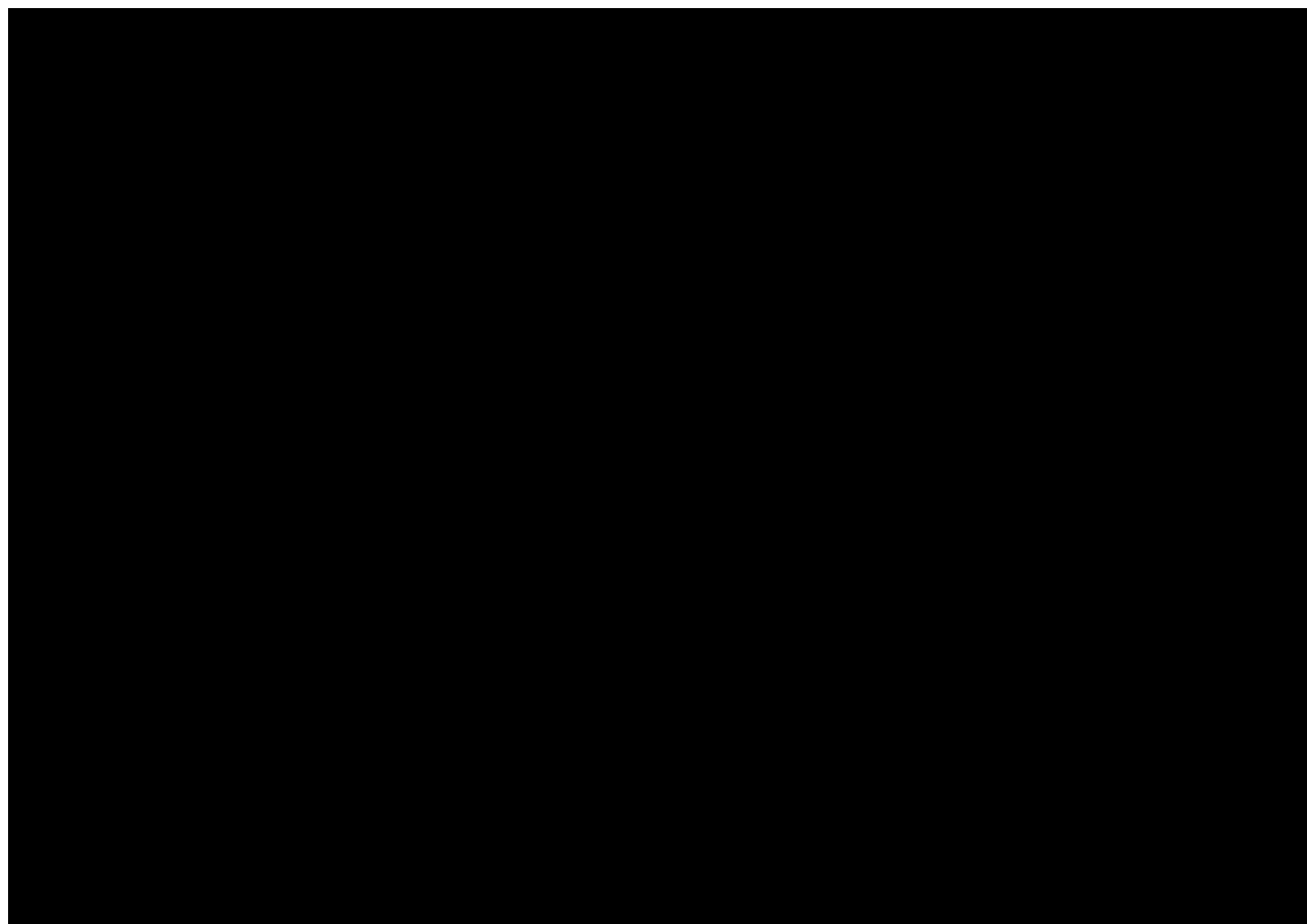


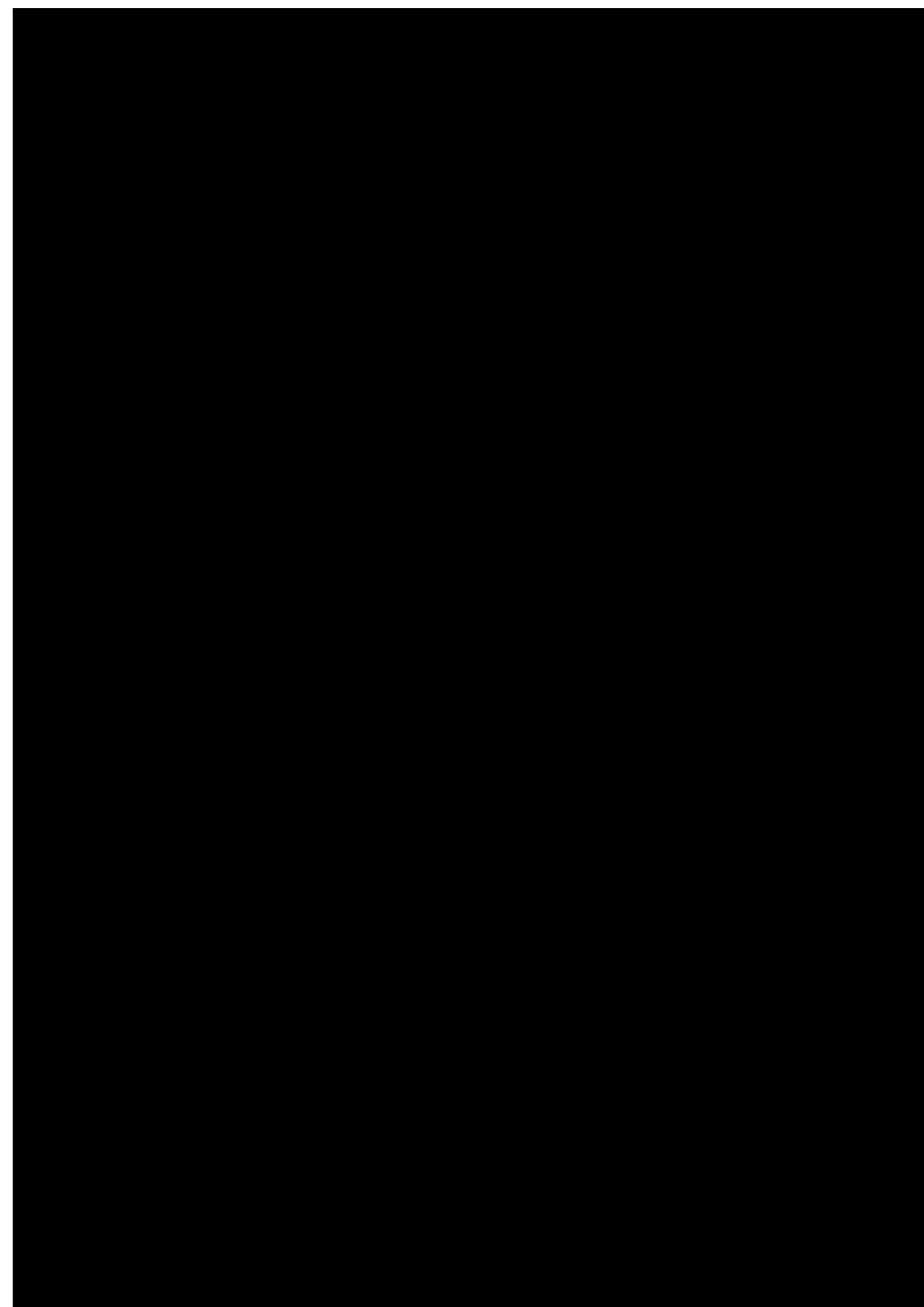


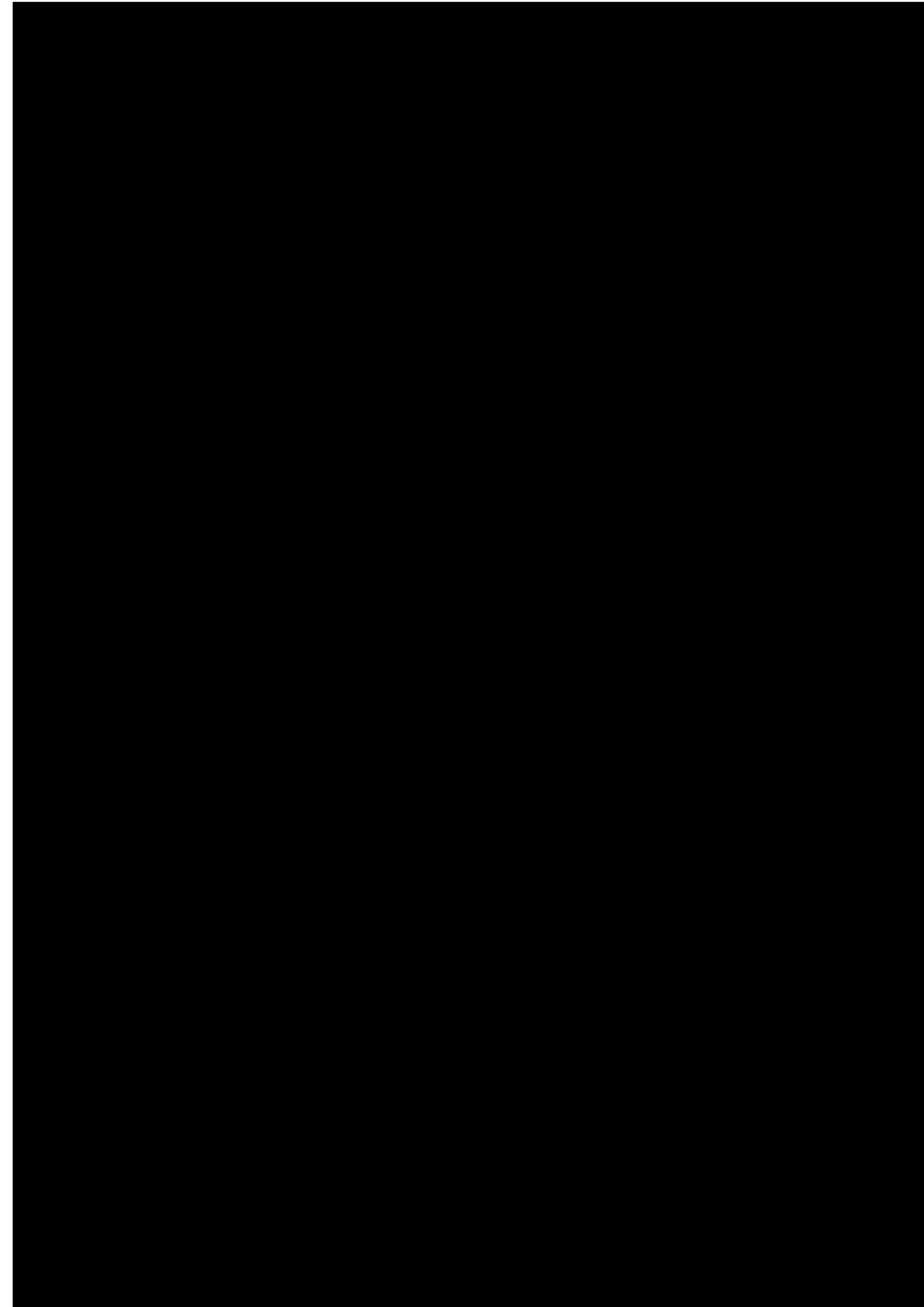




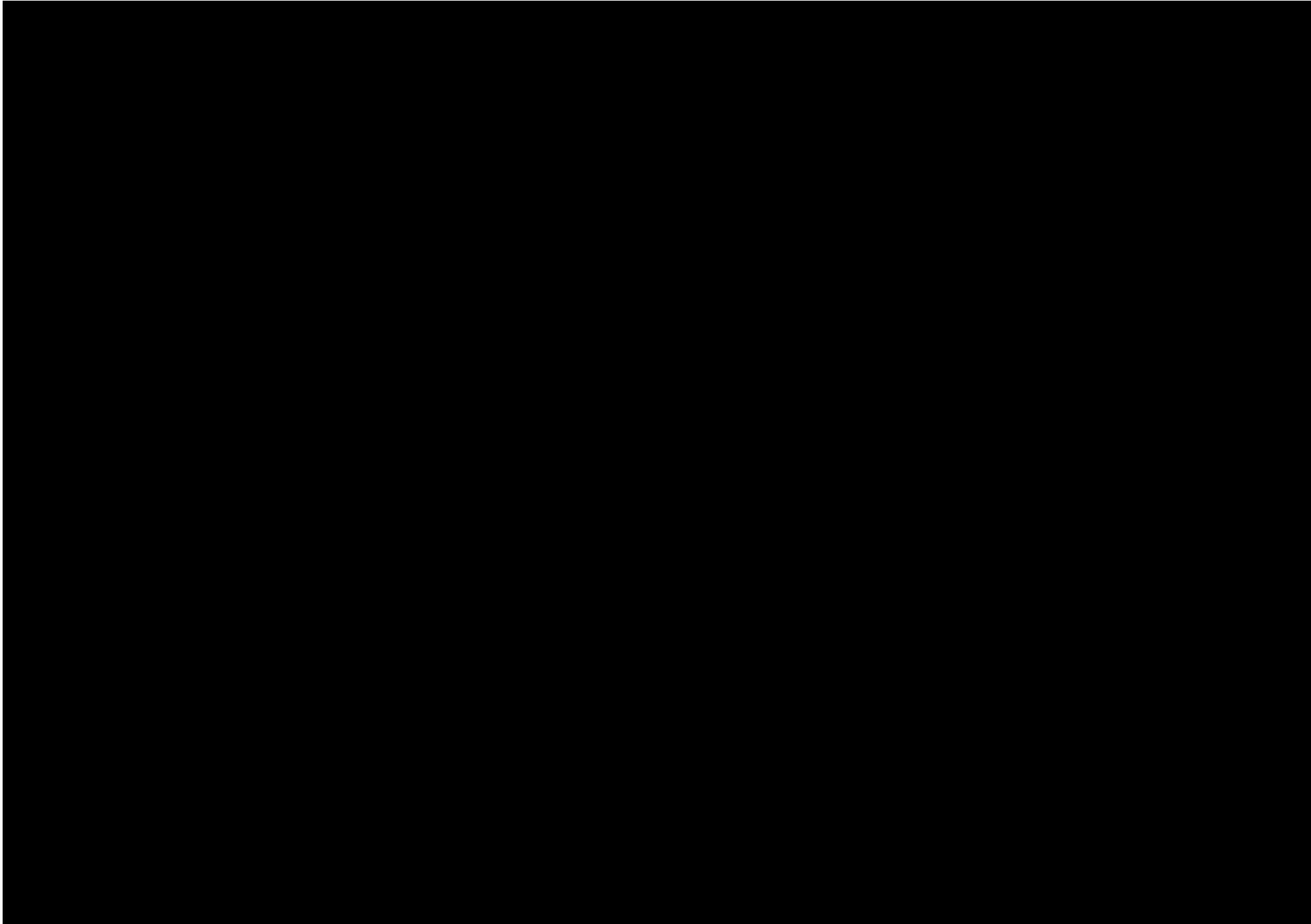


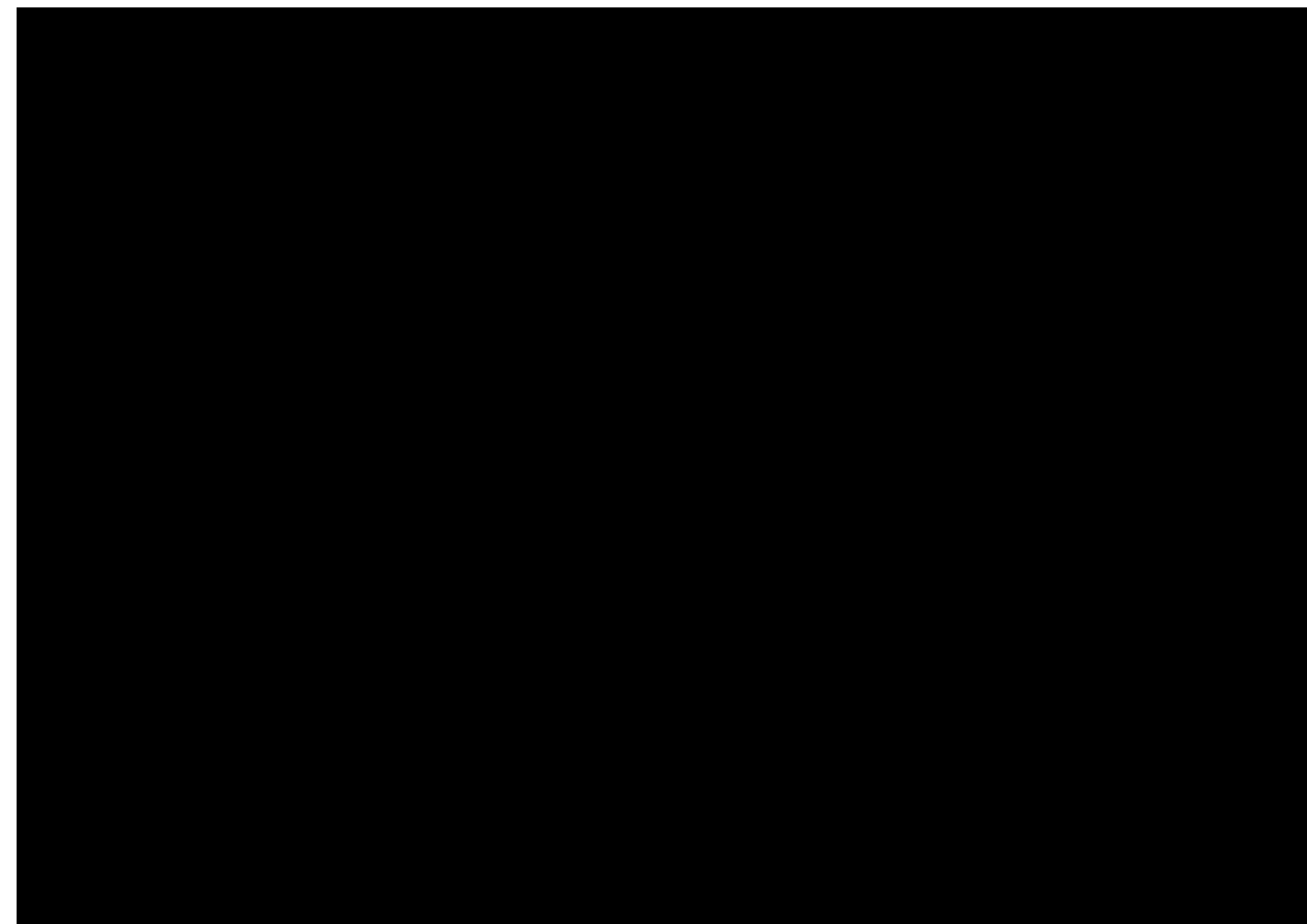


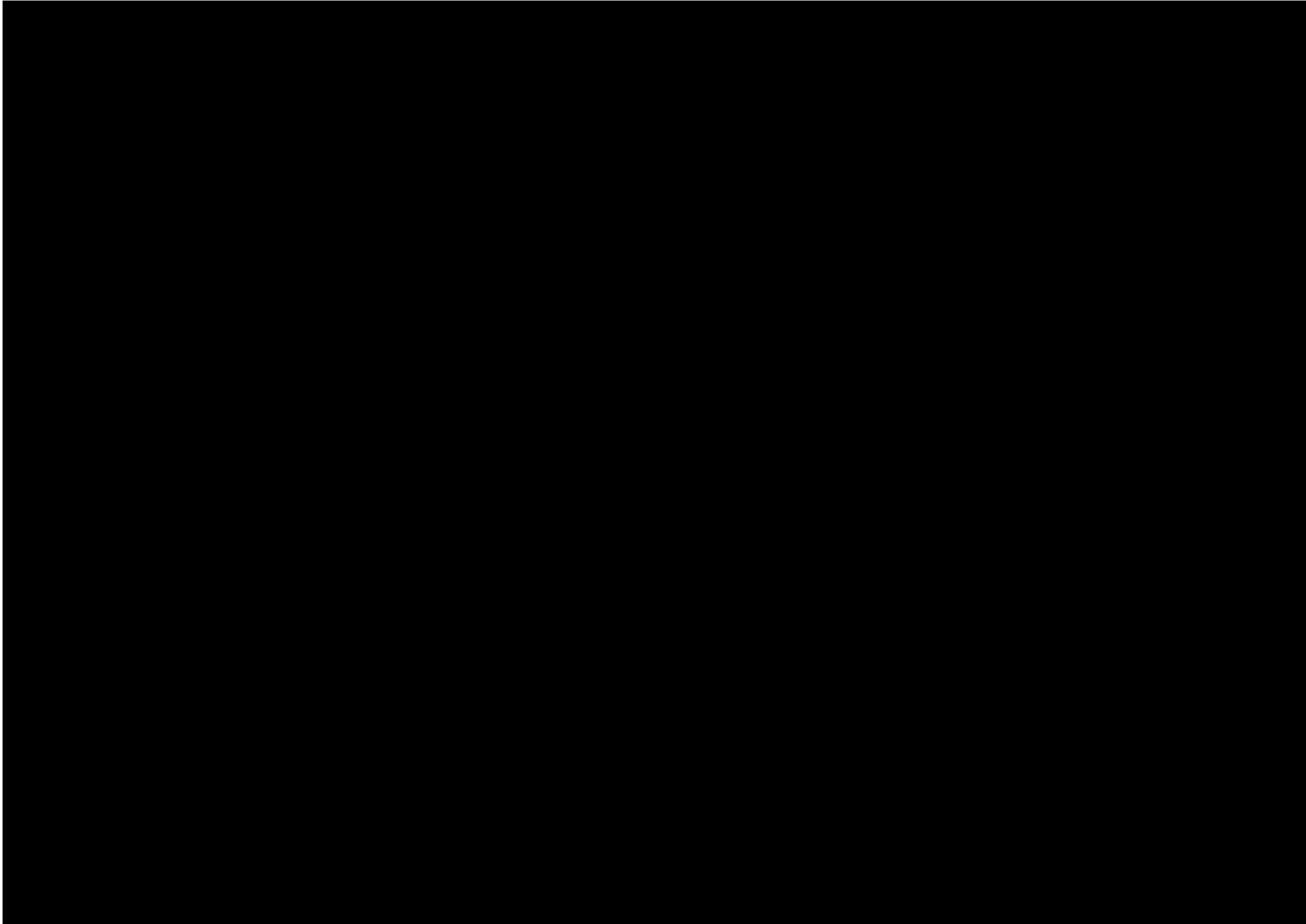


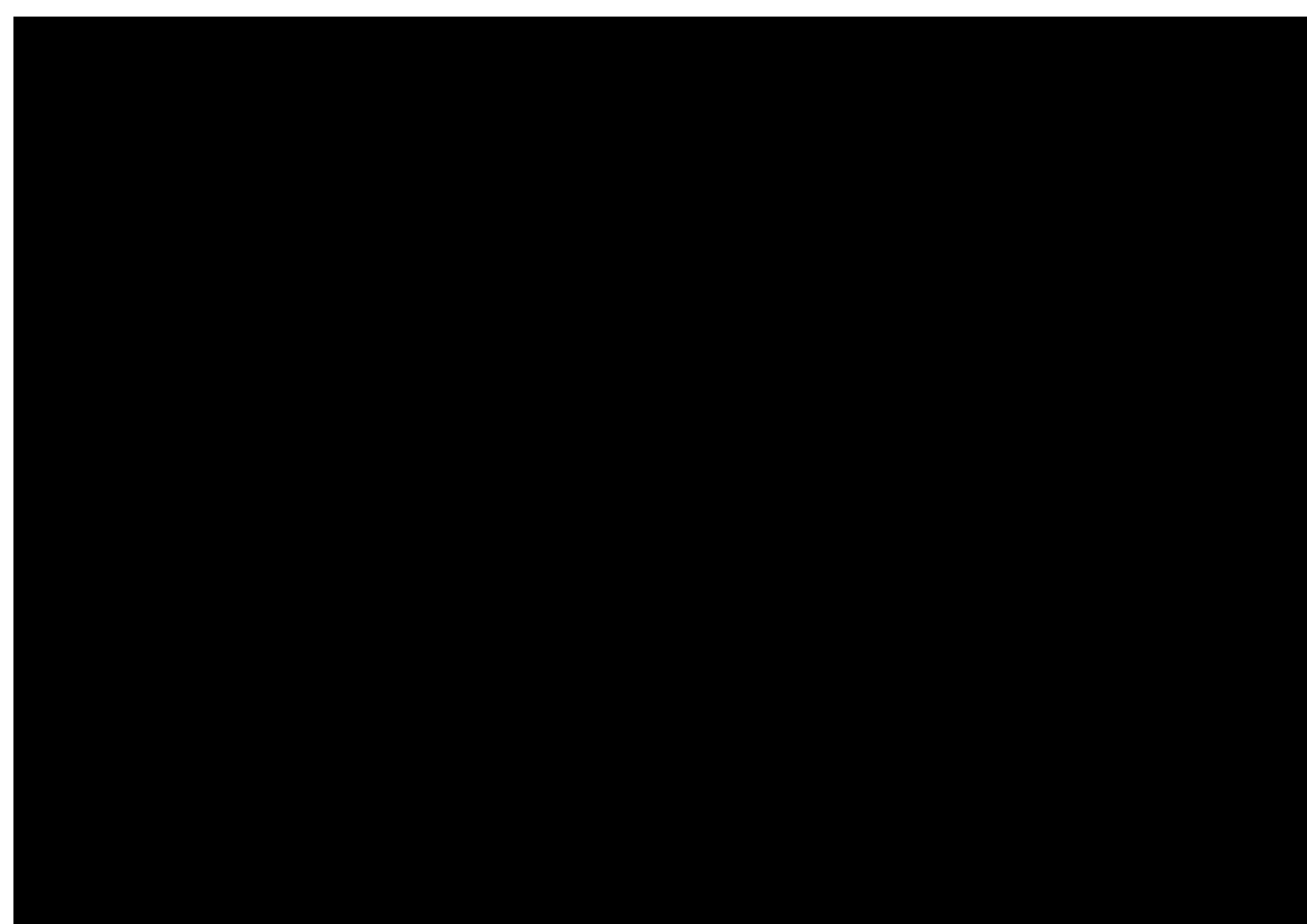


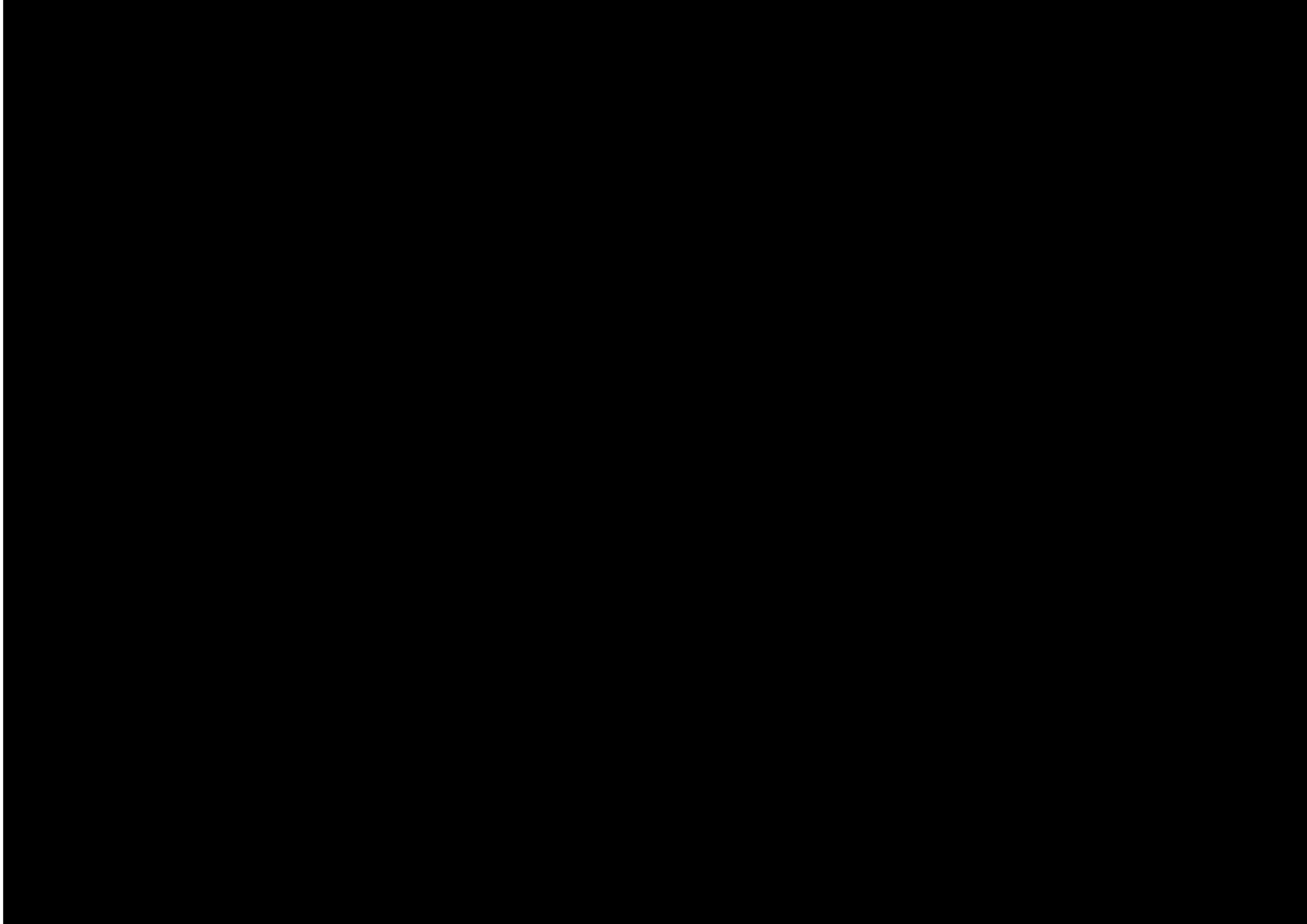
11.20 Appendix H – Proposed Development Causeway Flow Calculations

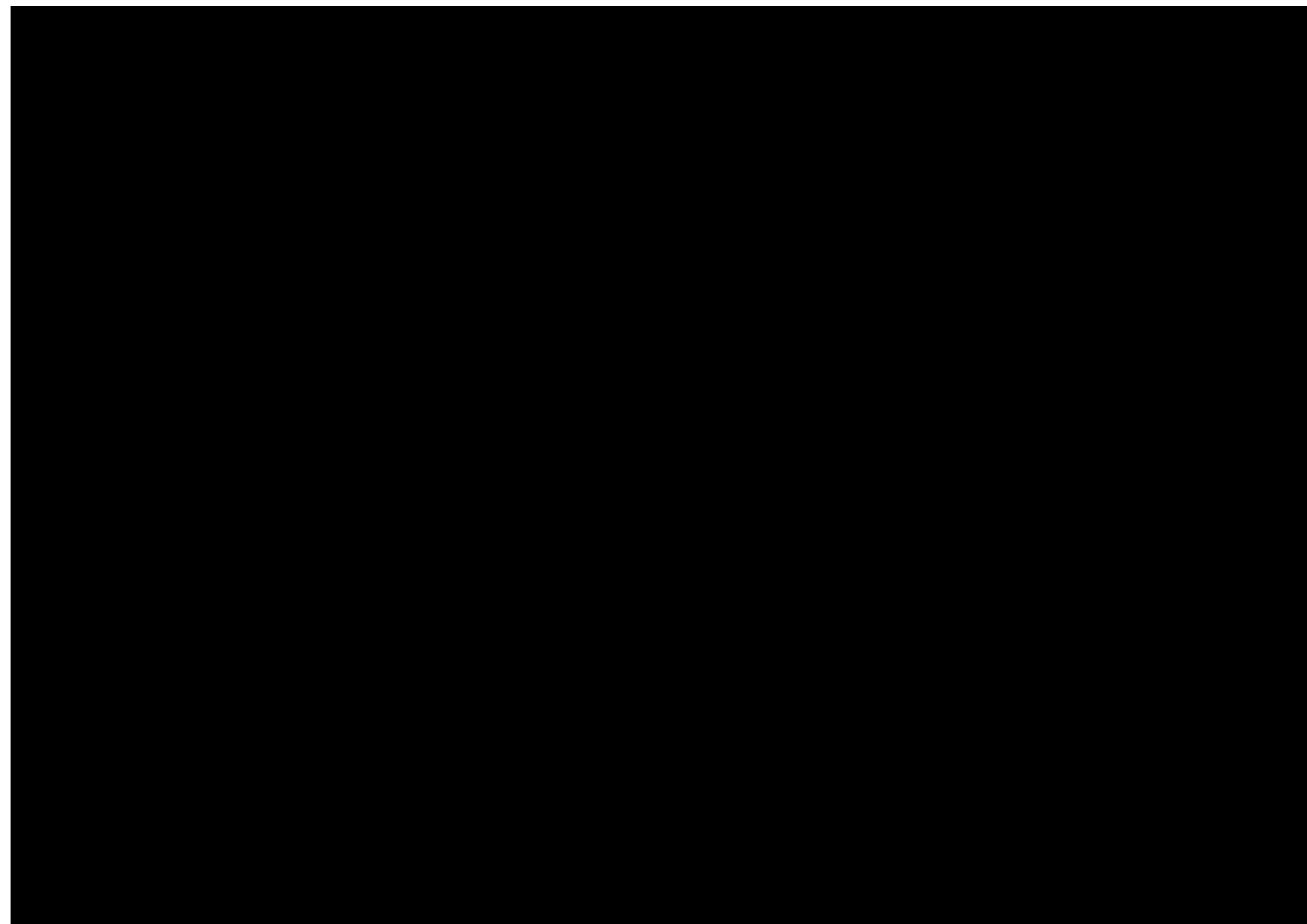


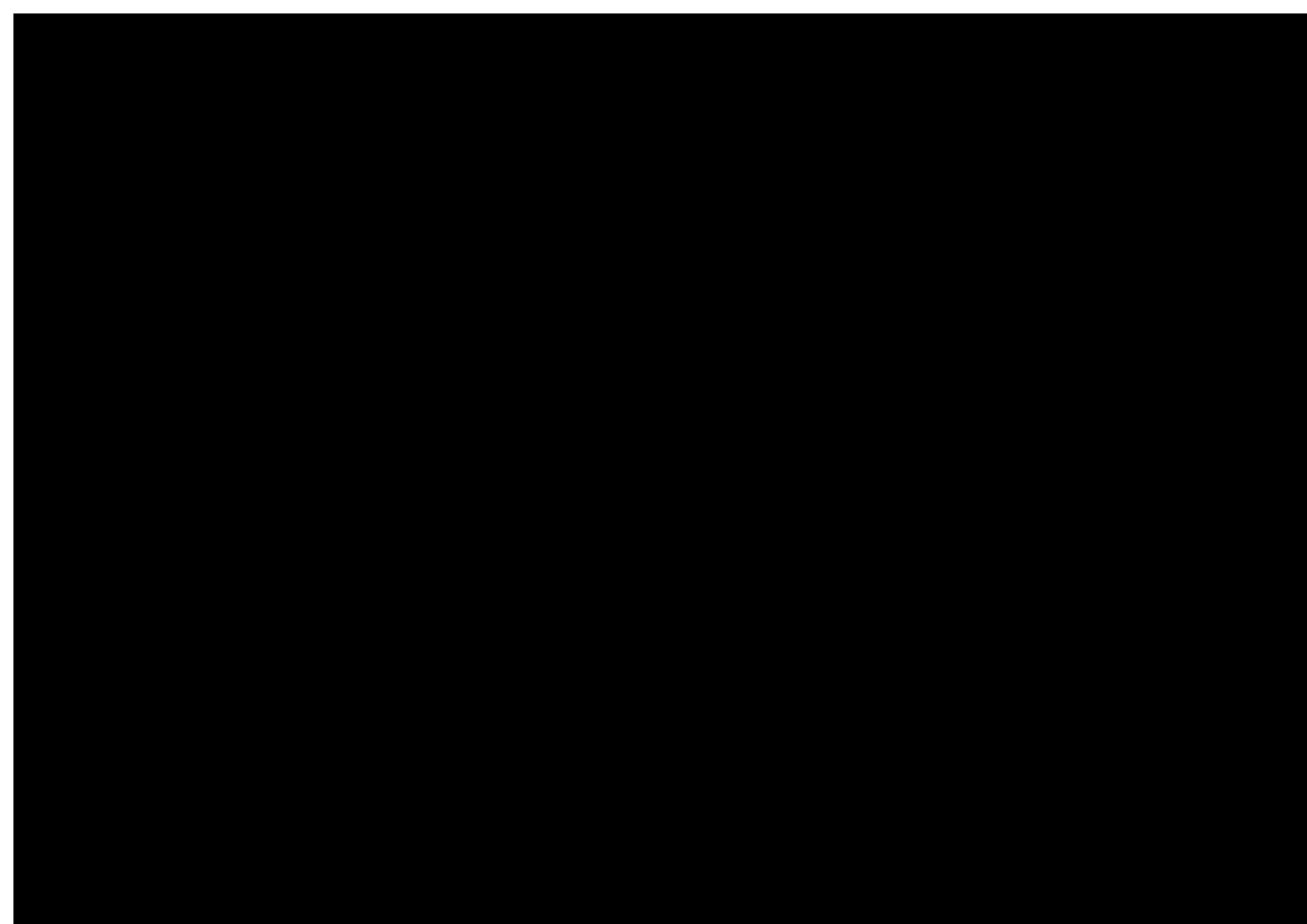


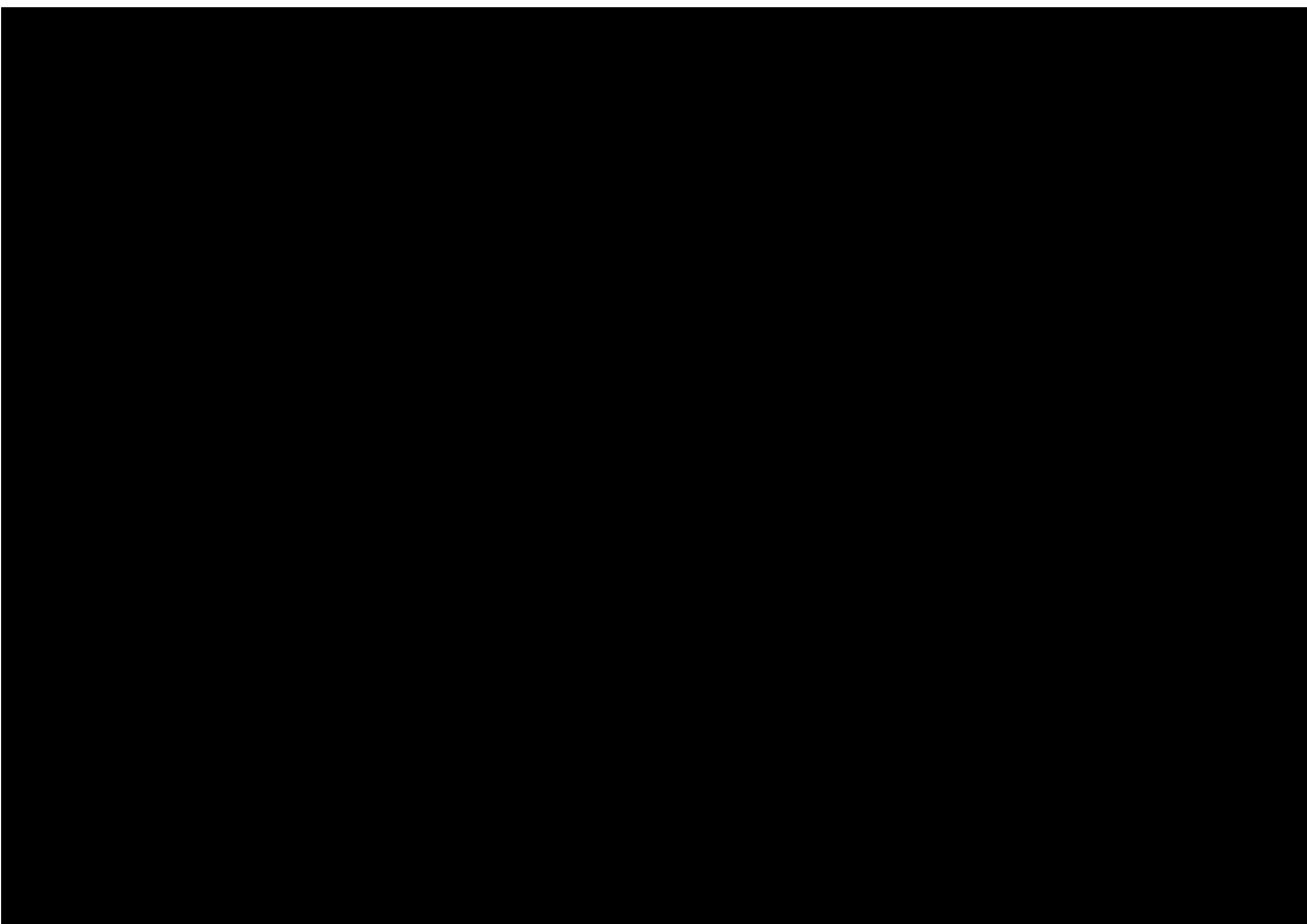


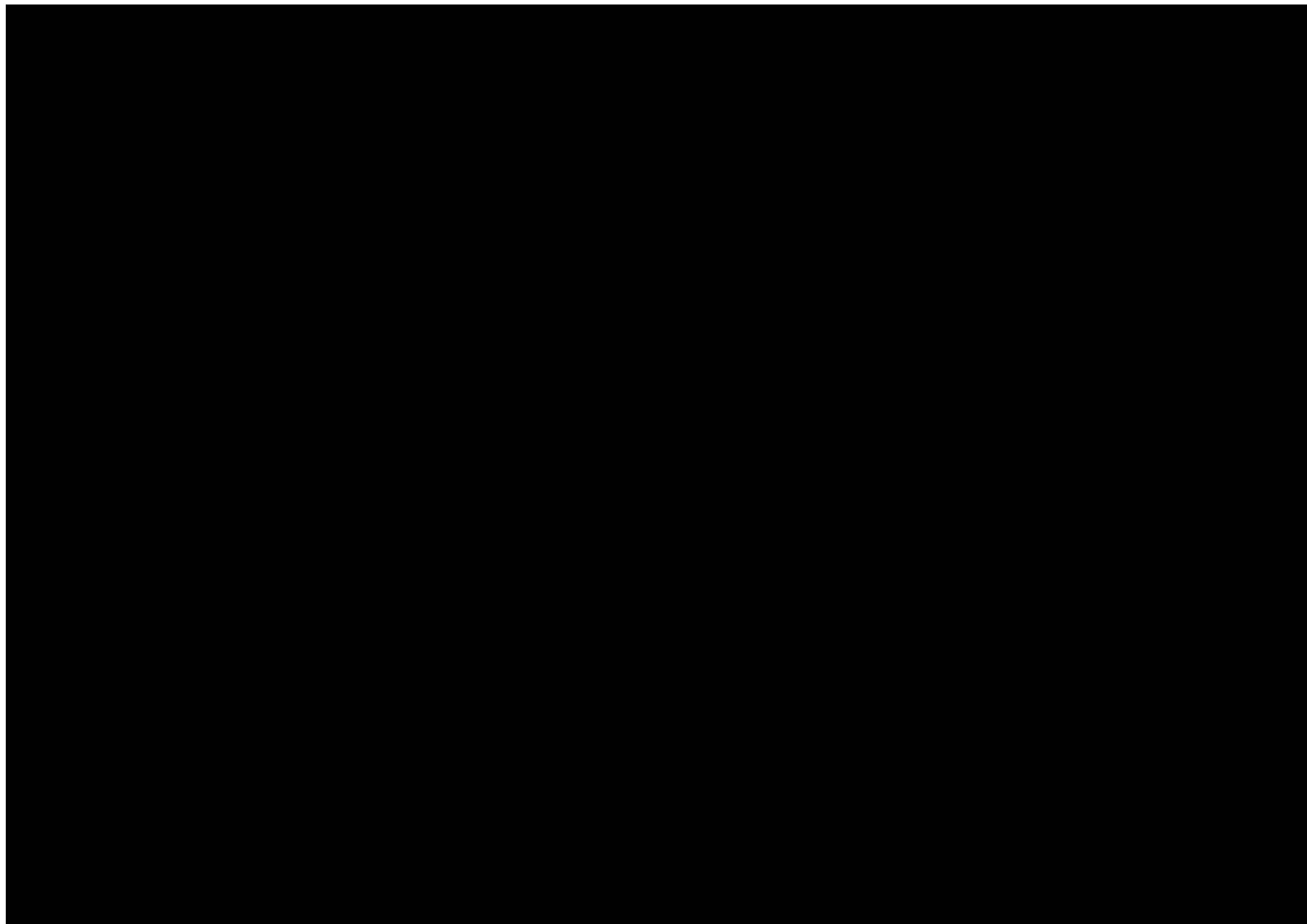


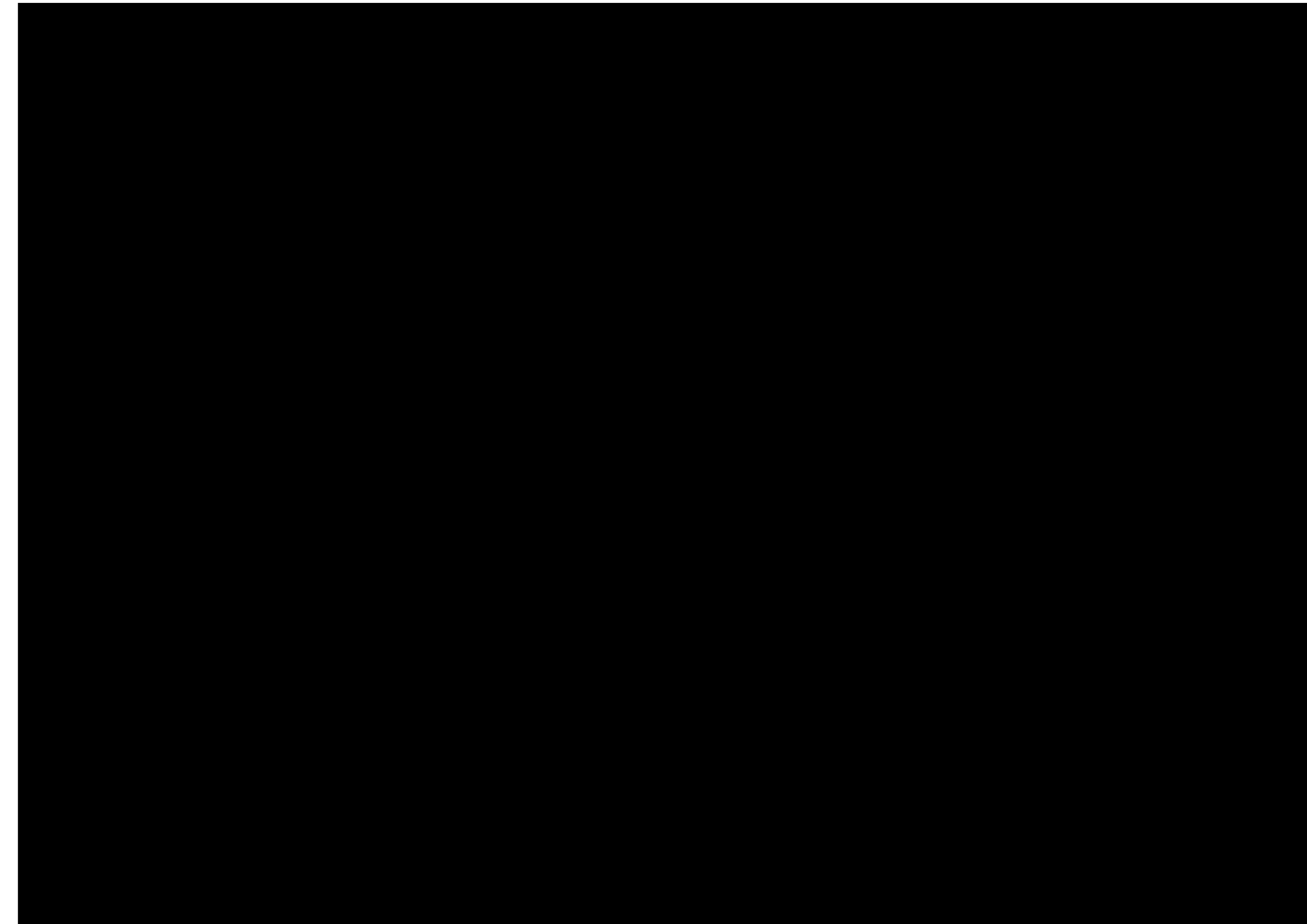


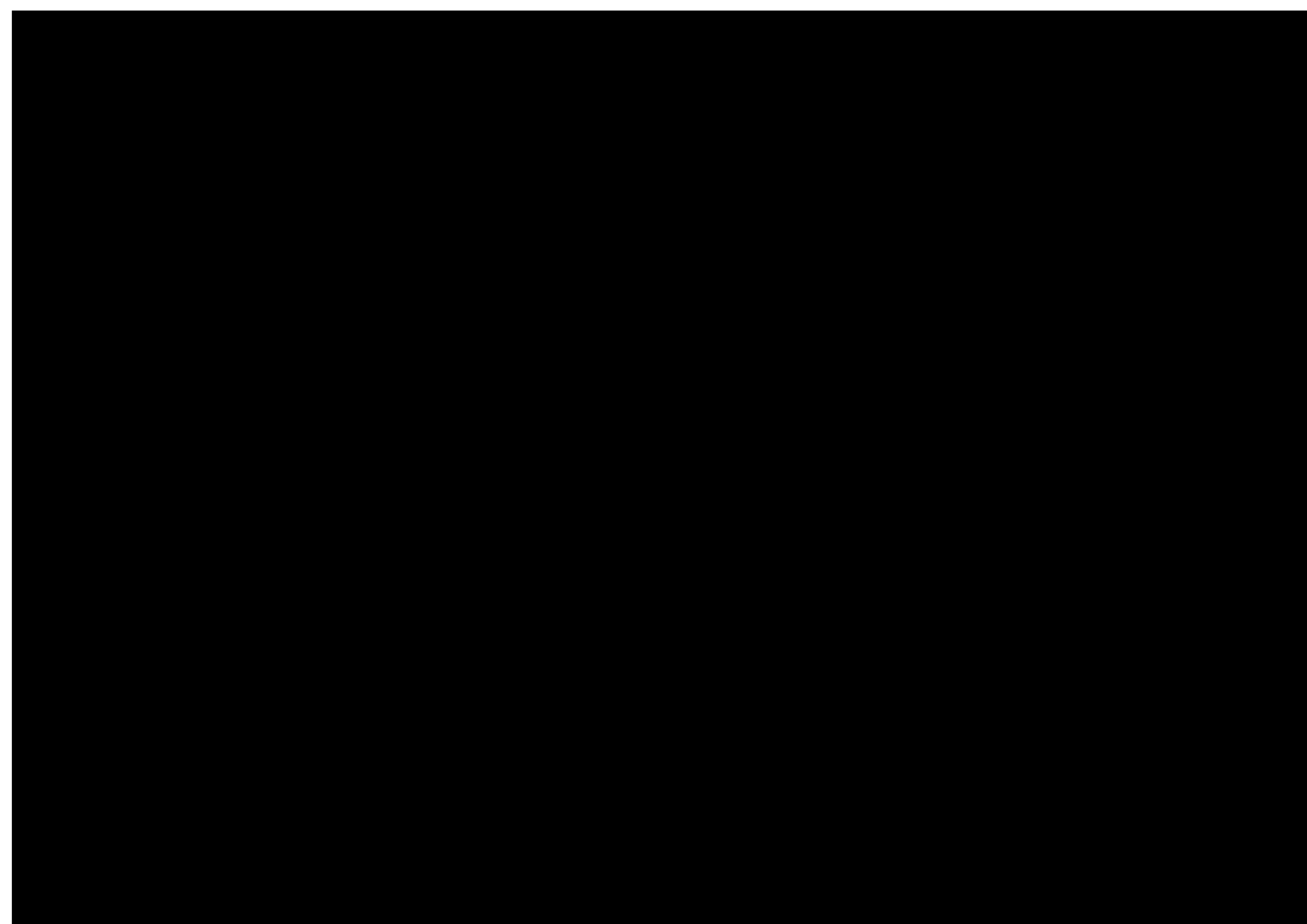


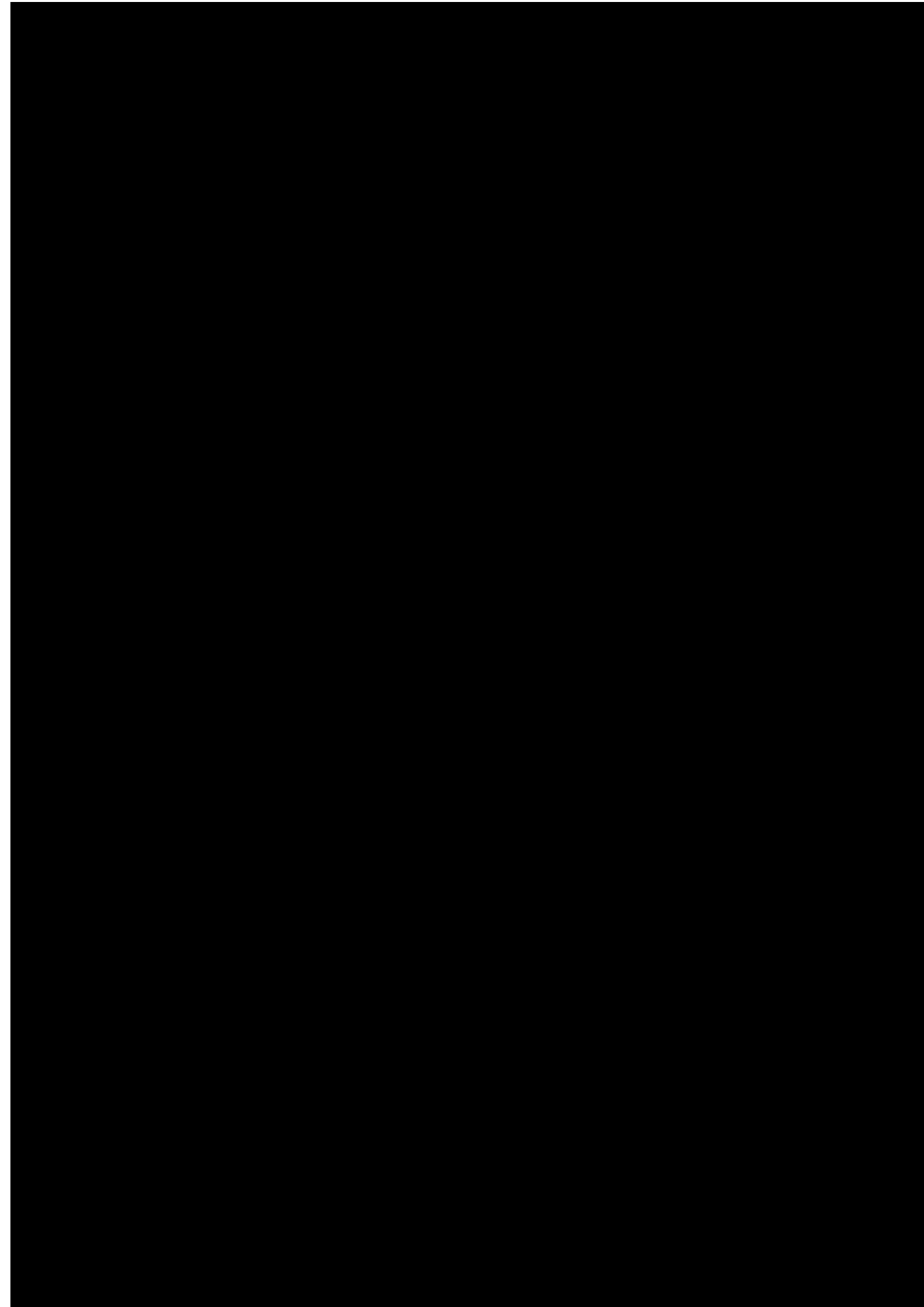


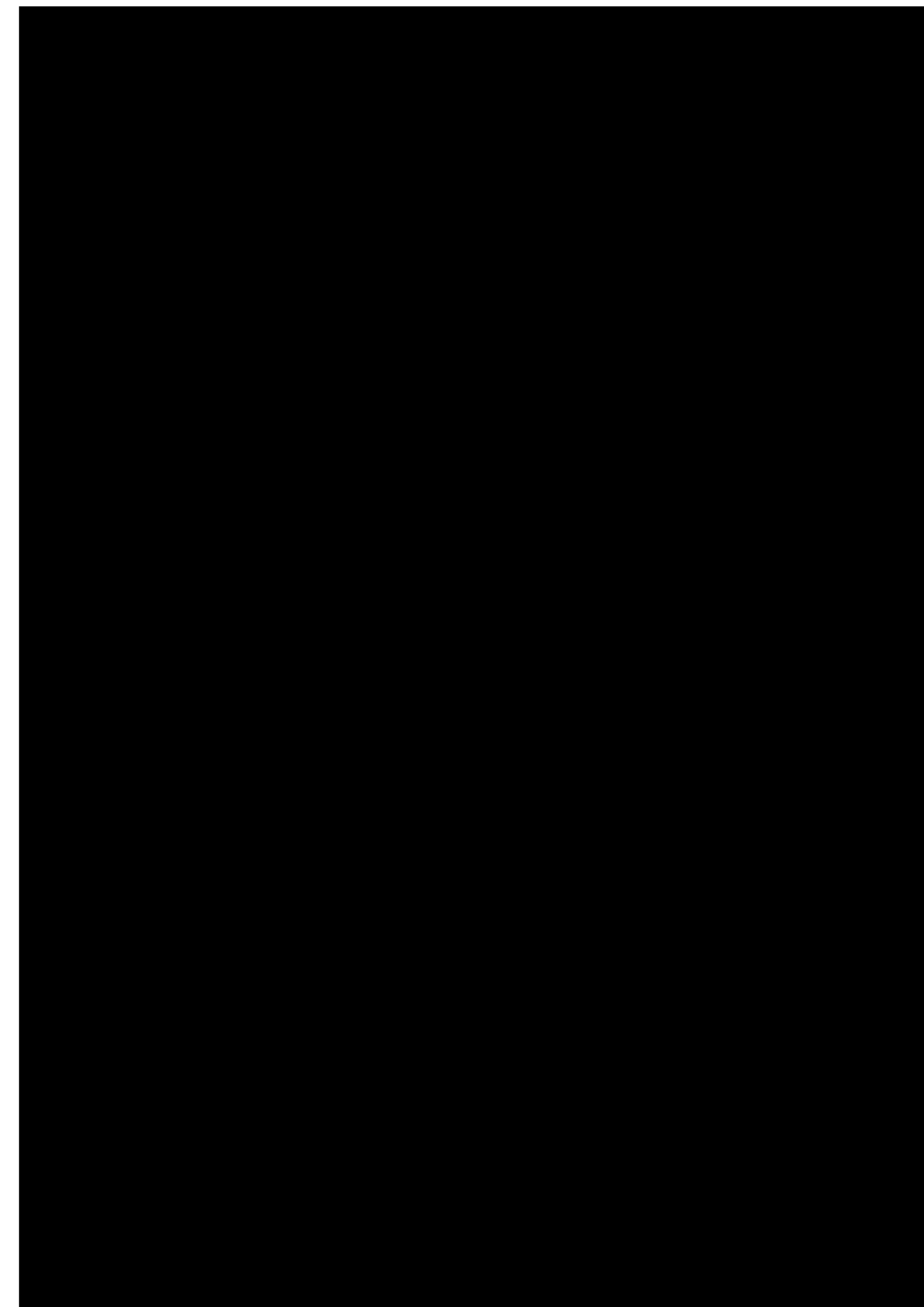


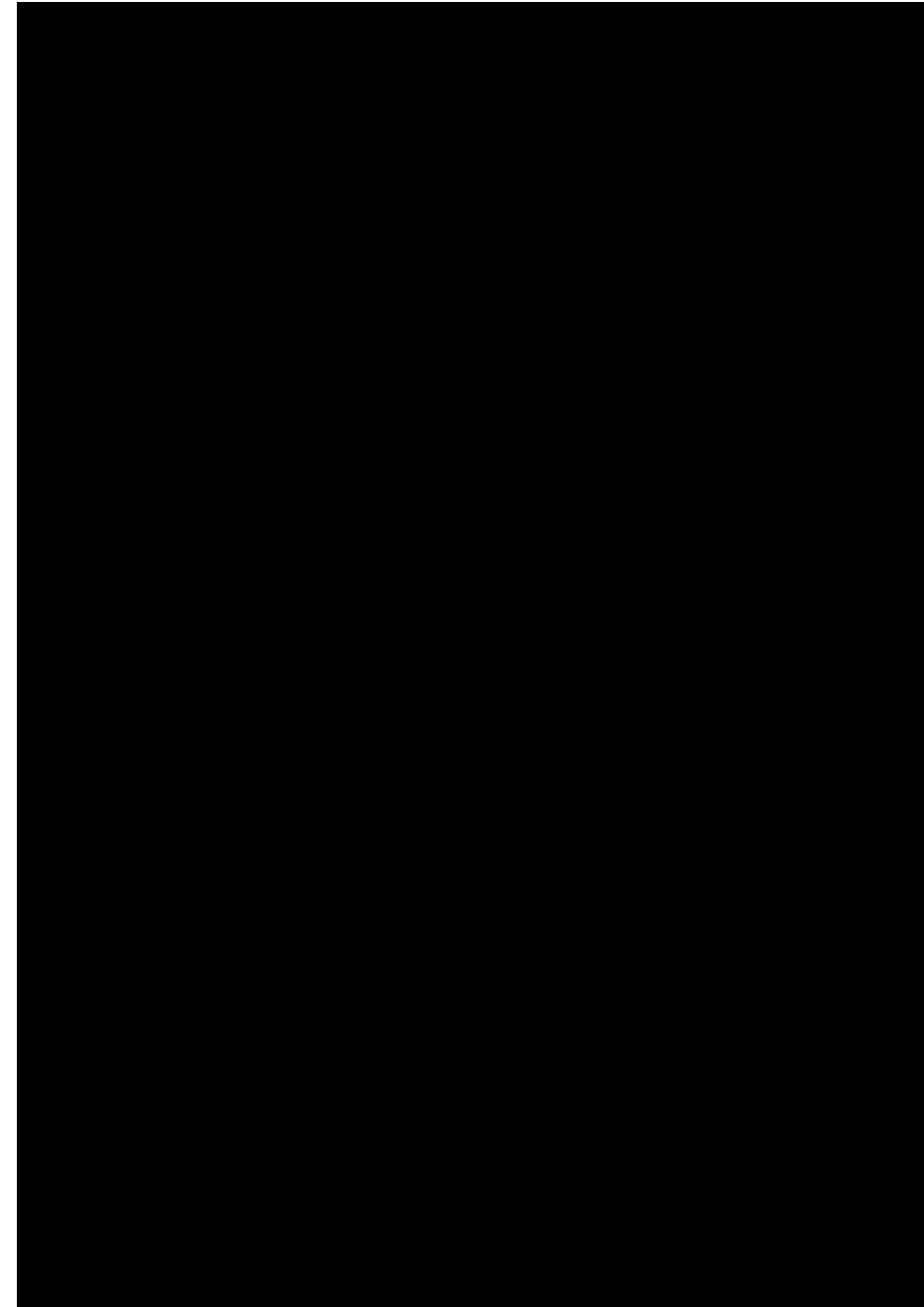


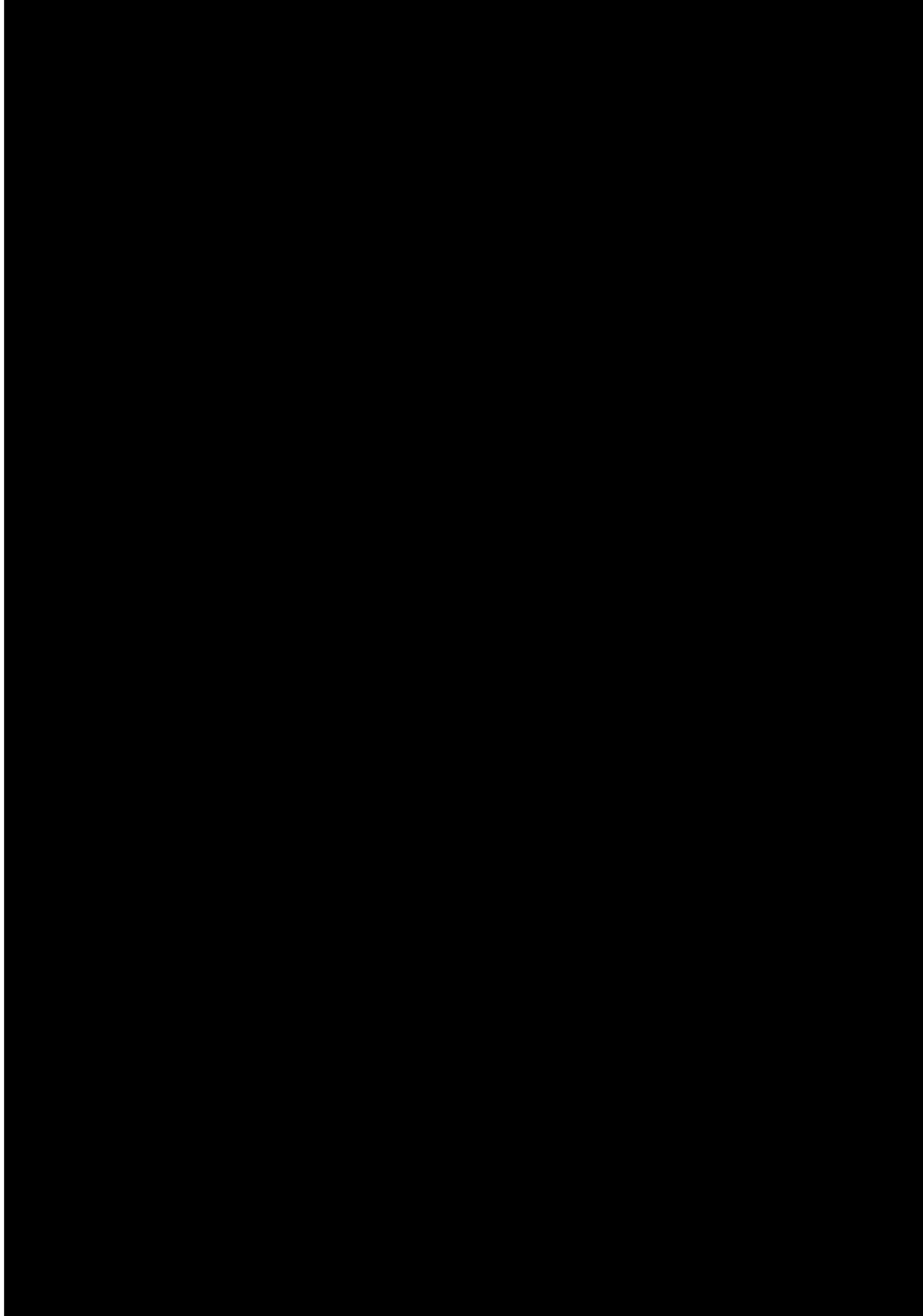


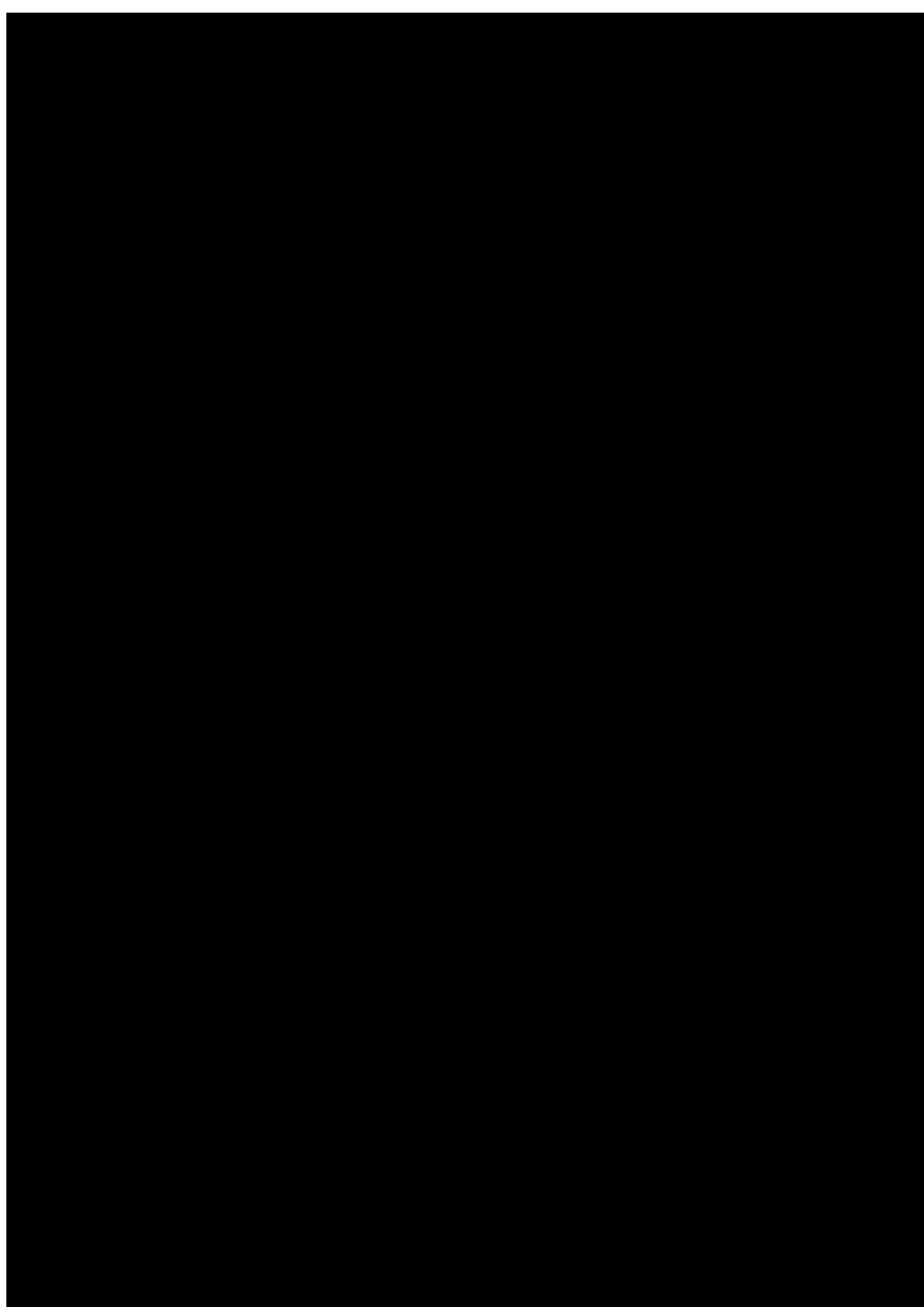


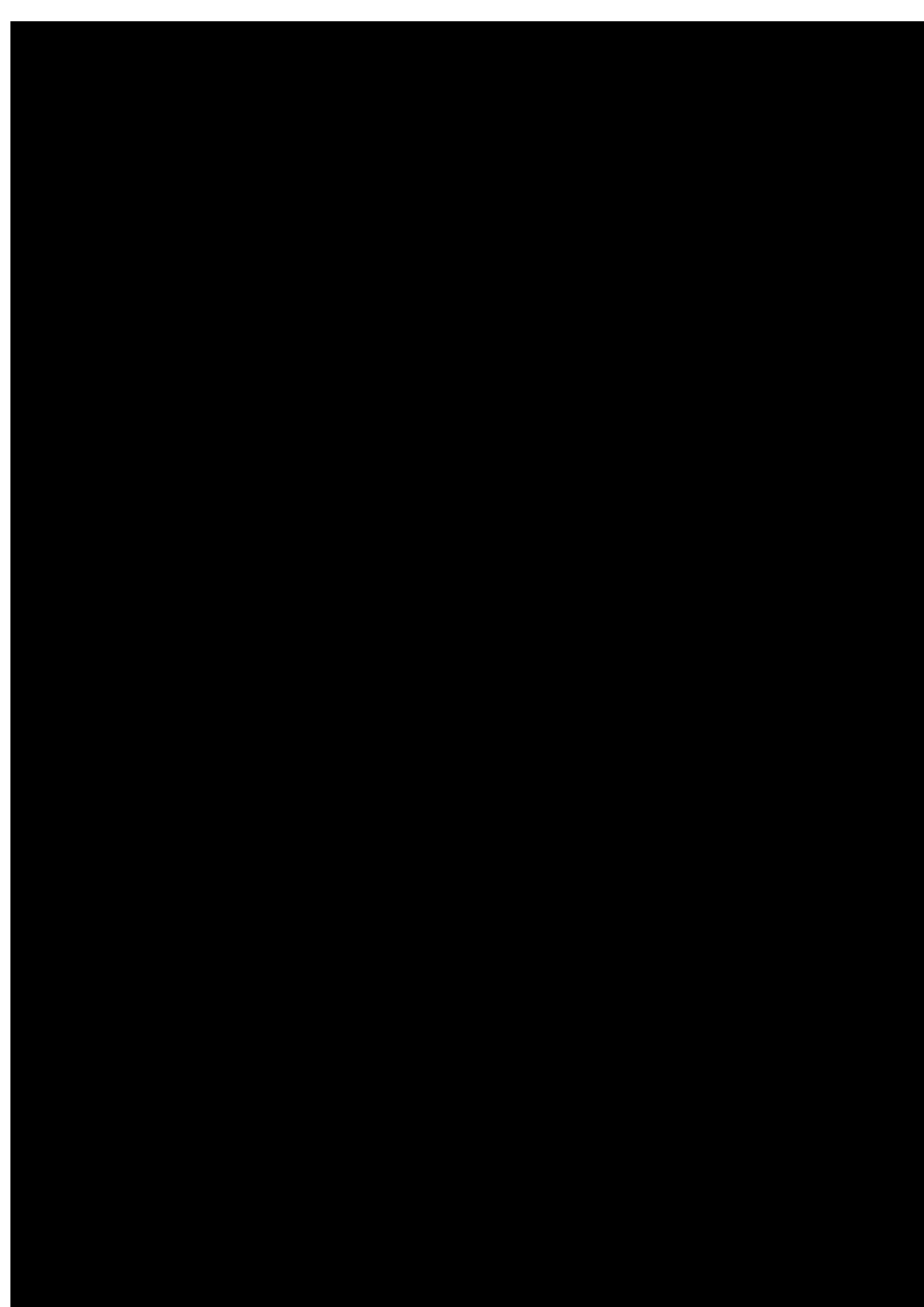




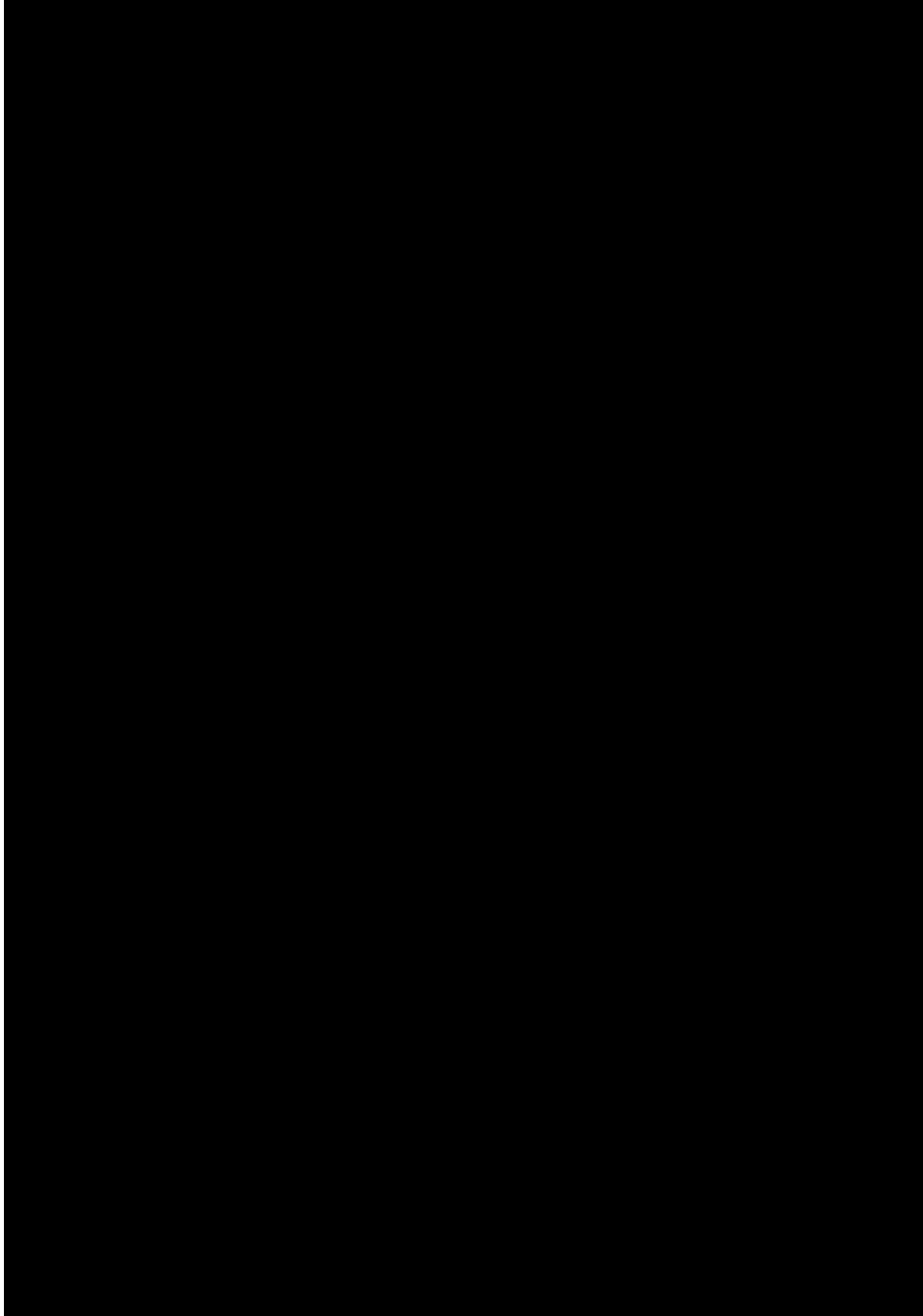


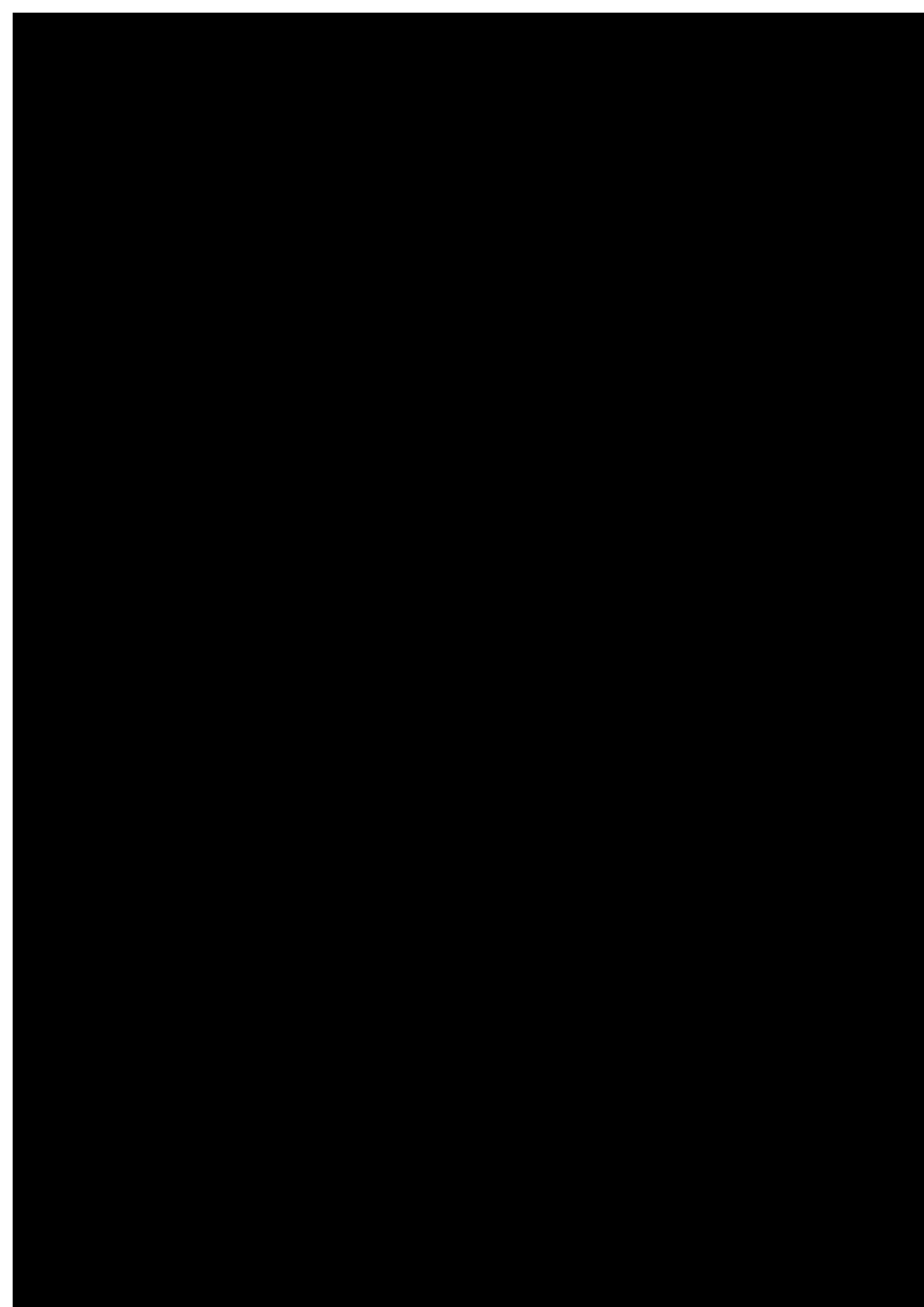


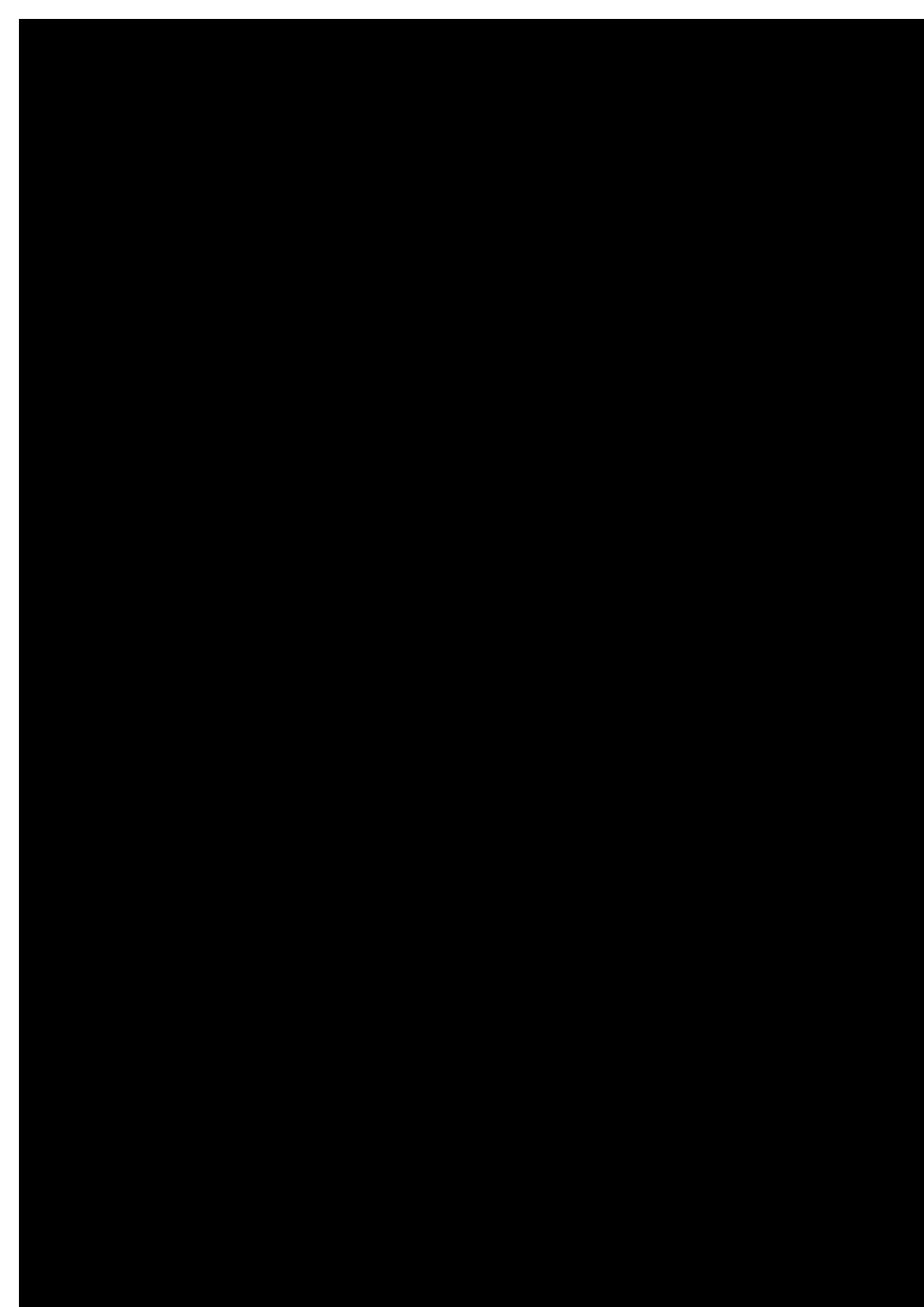


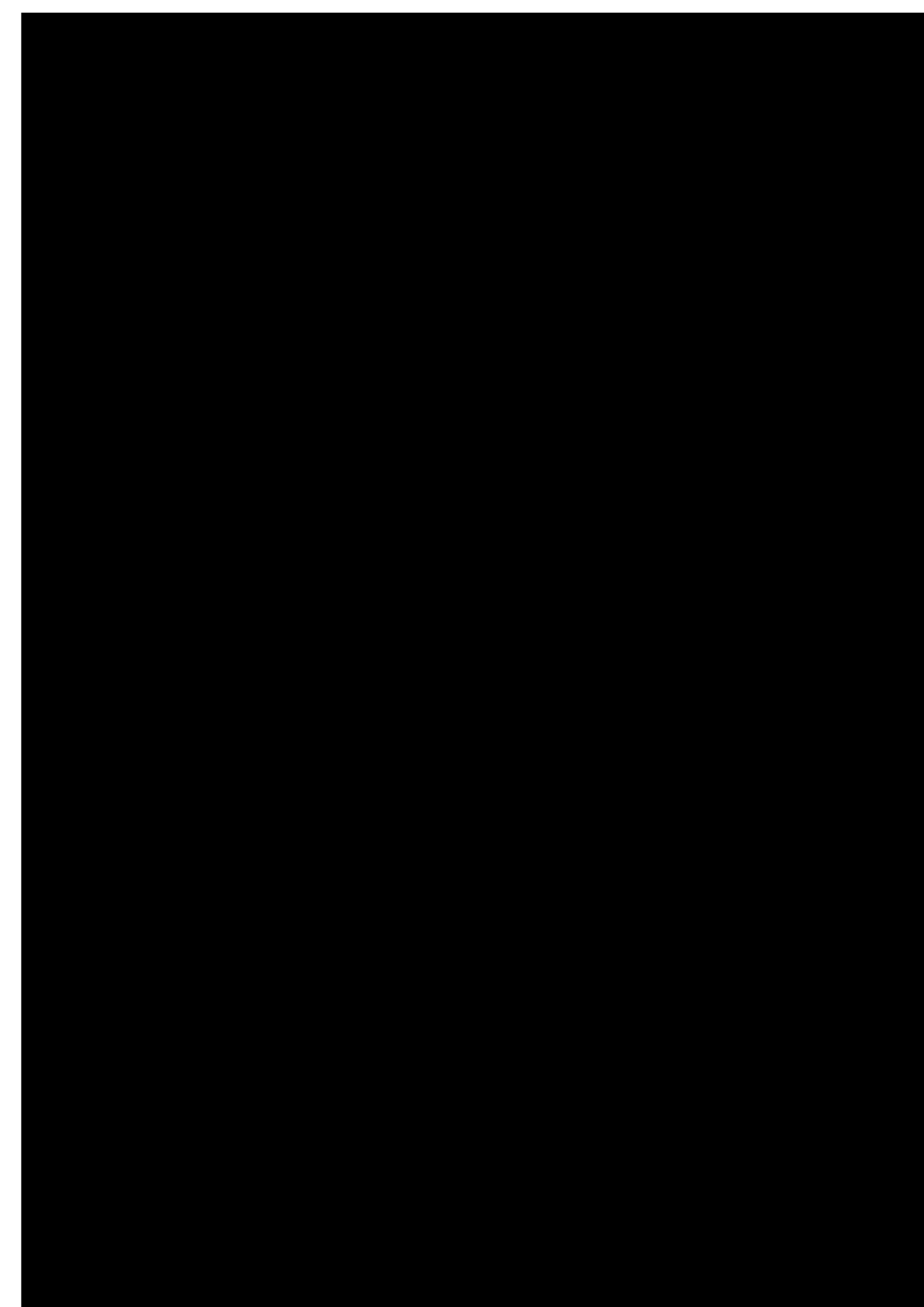


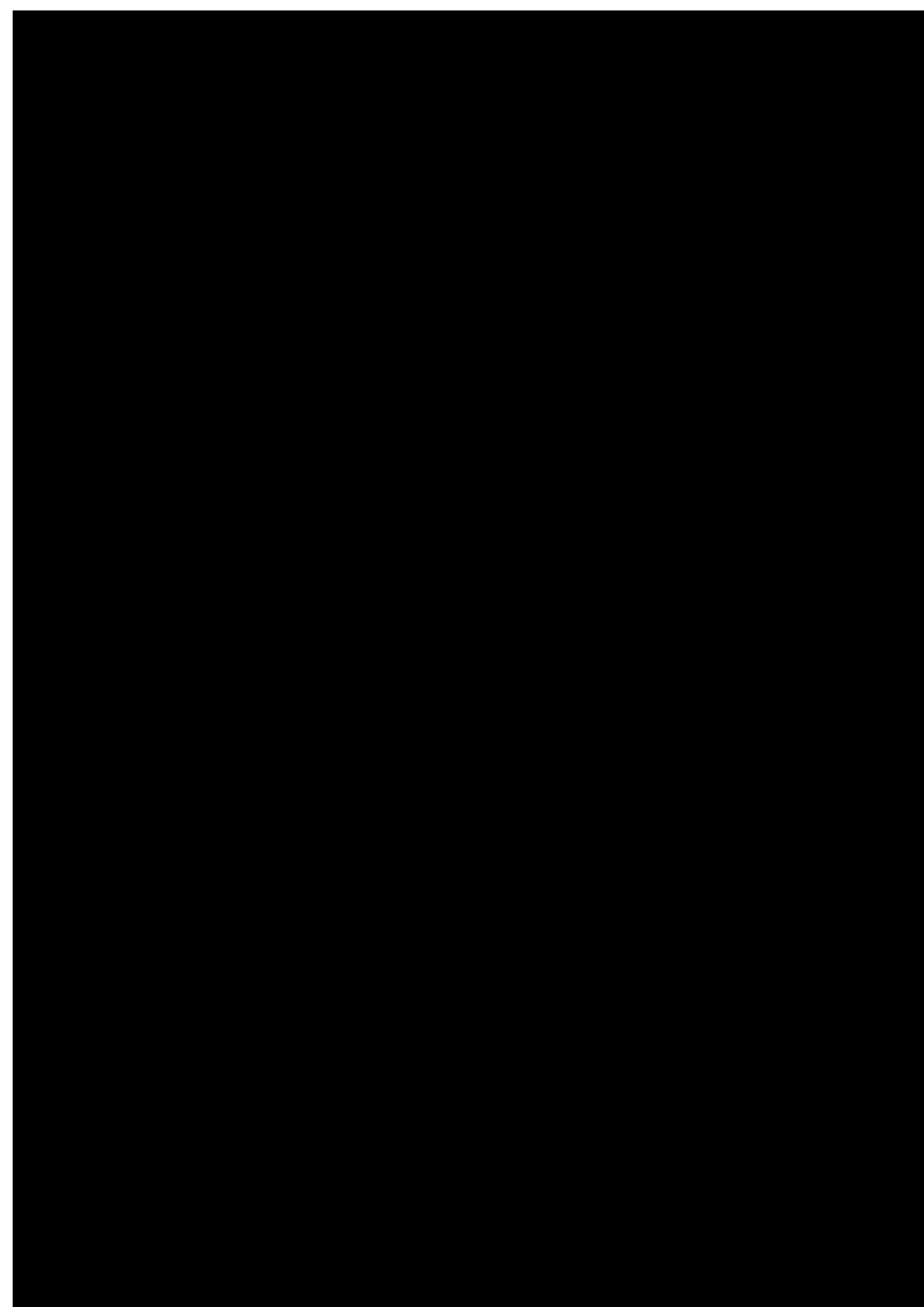


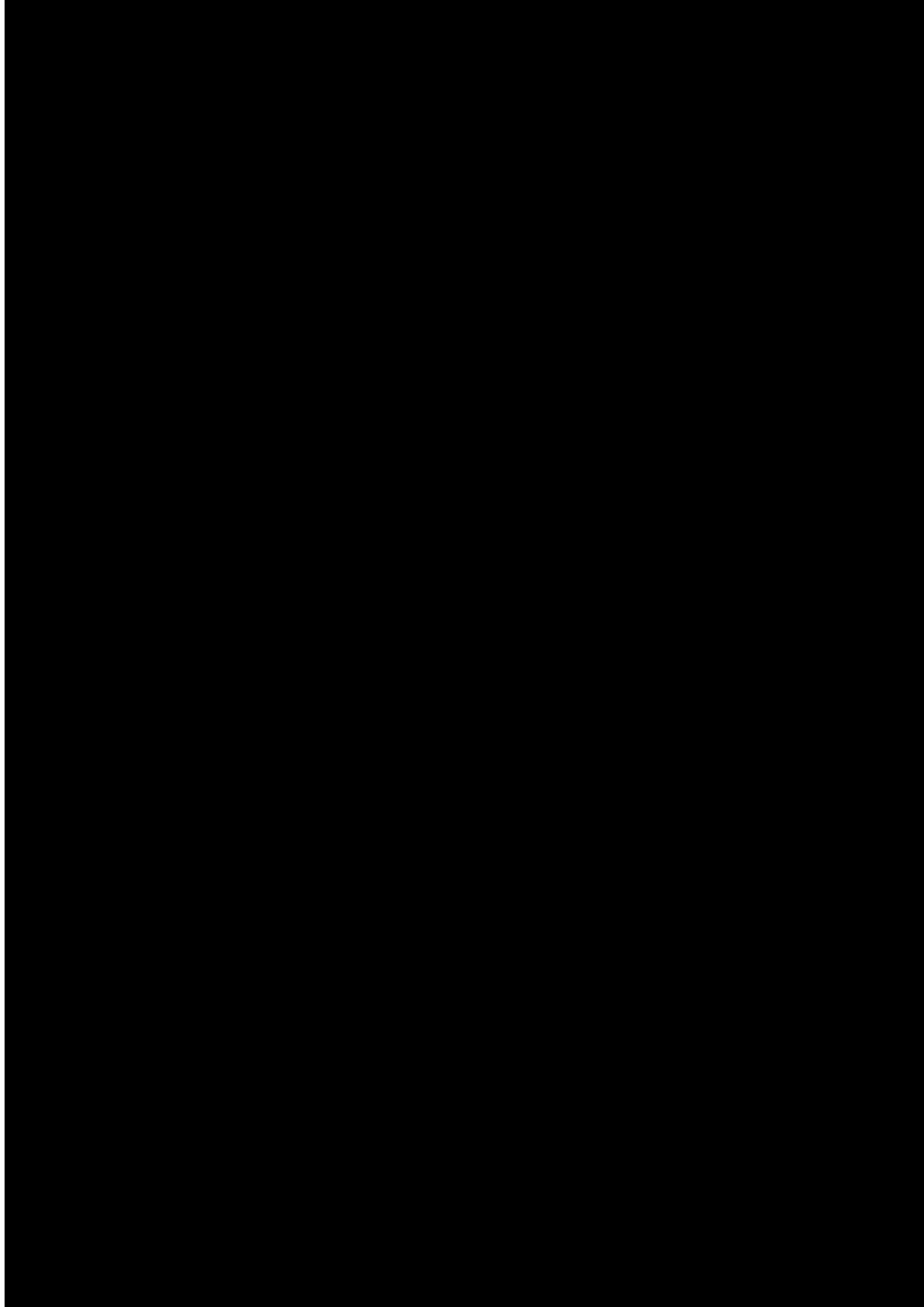




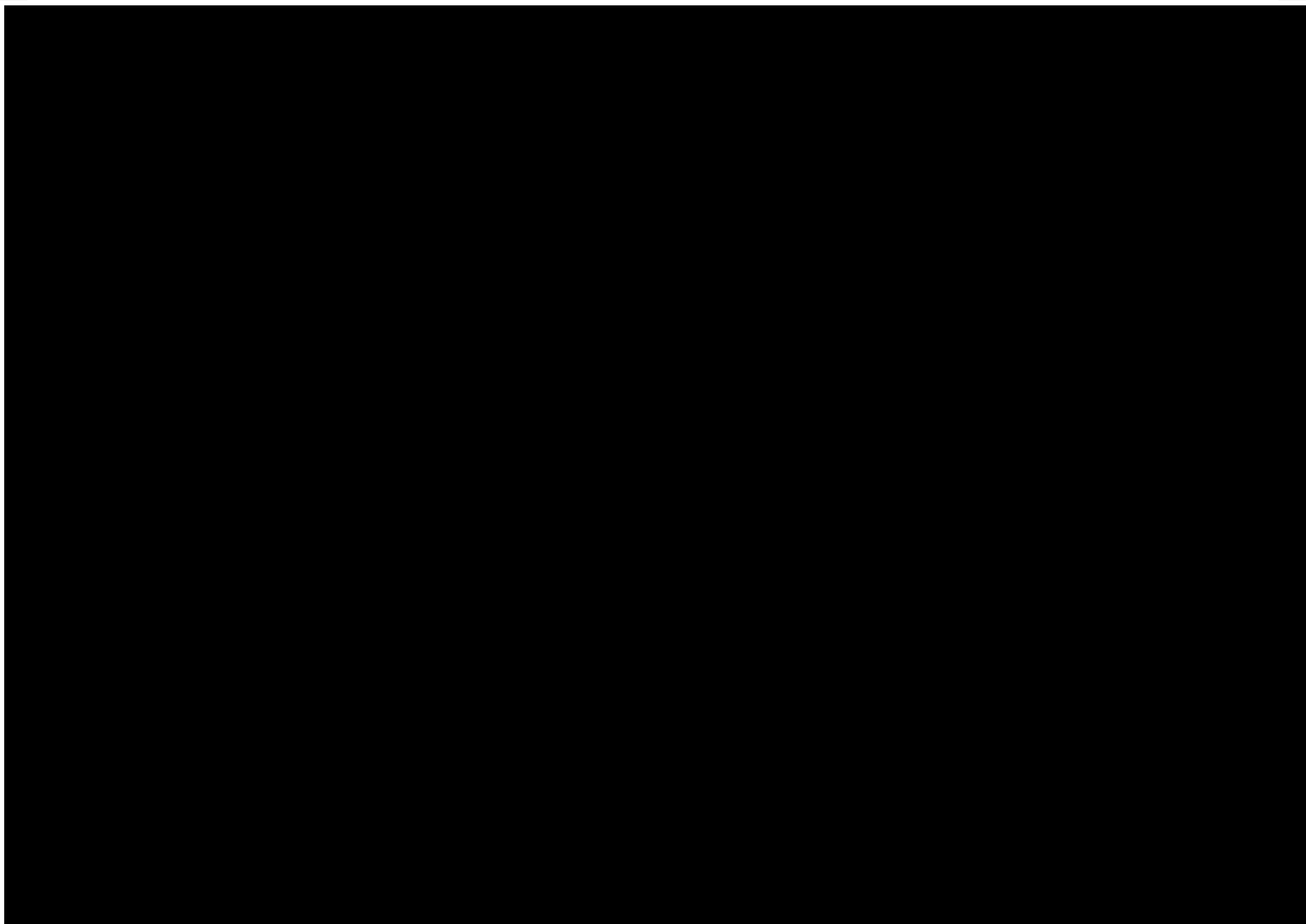


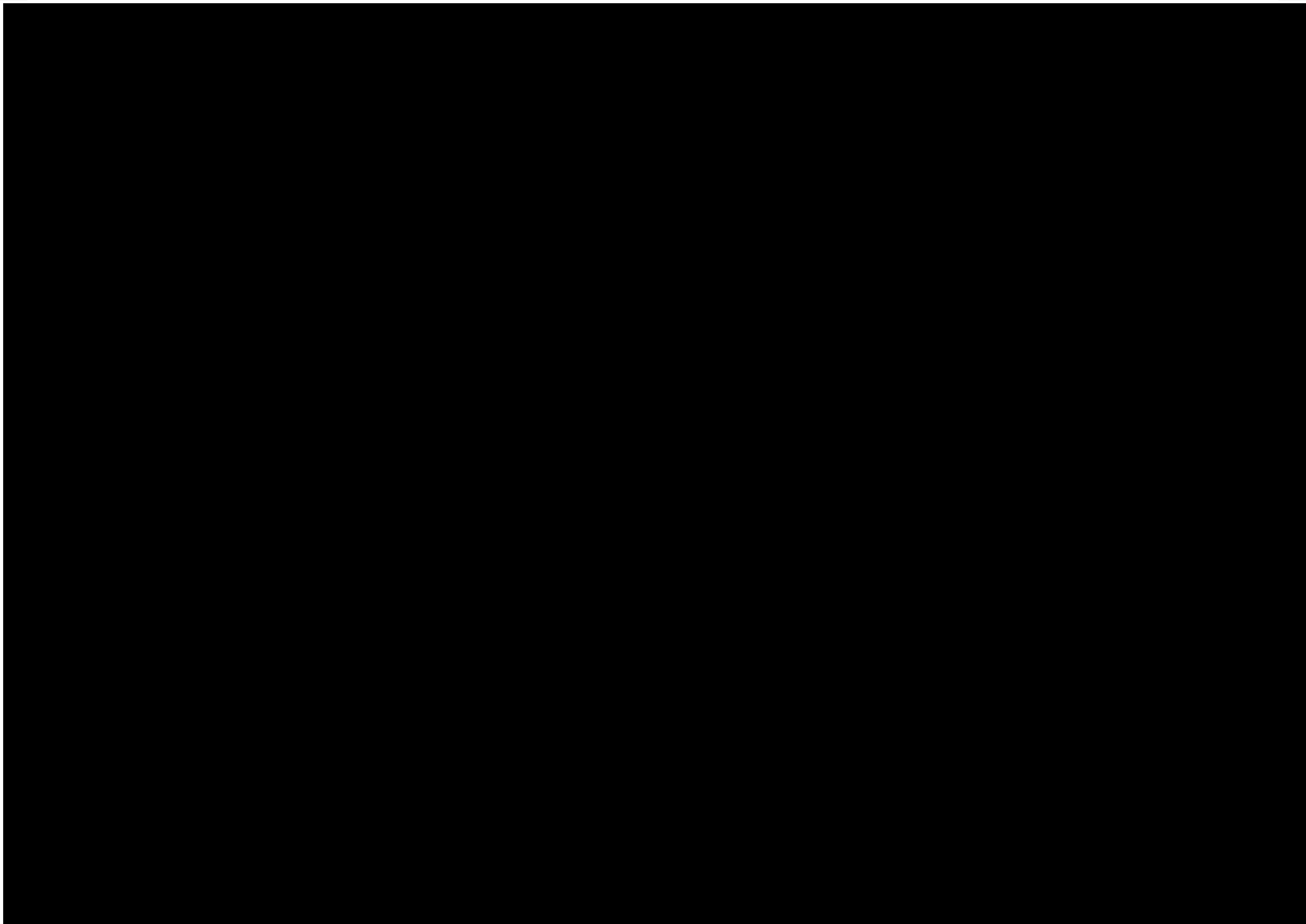




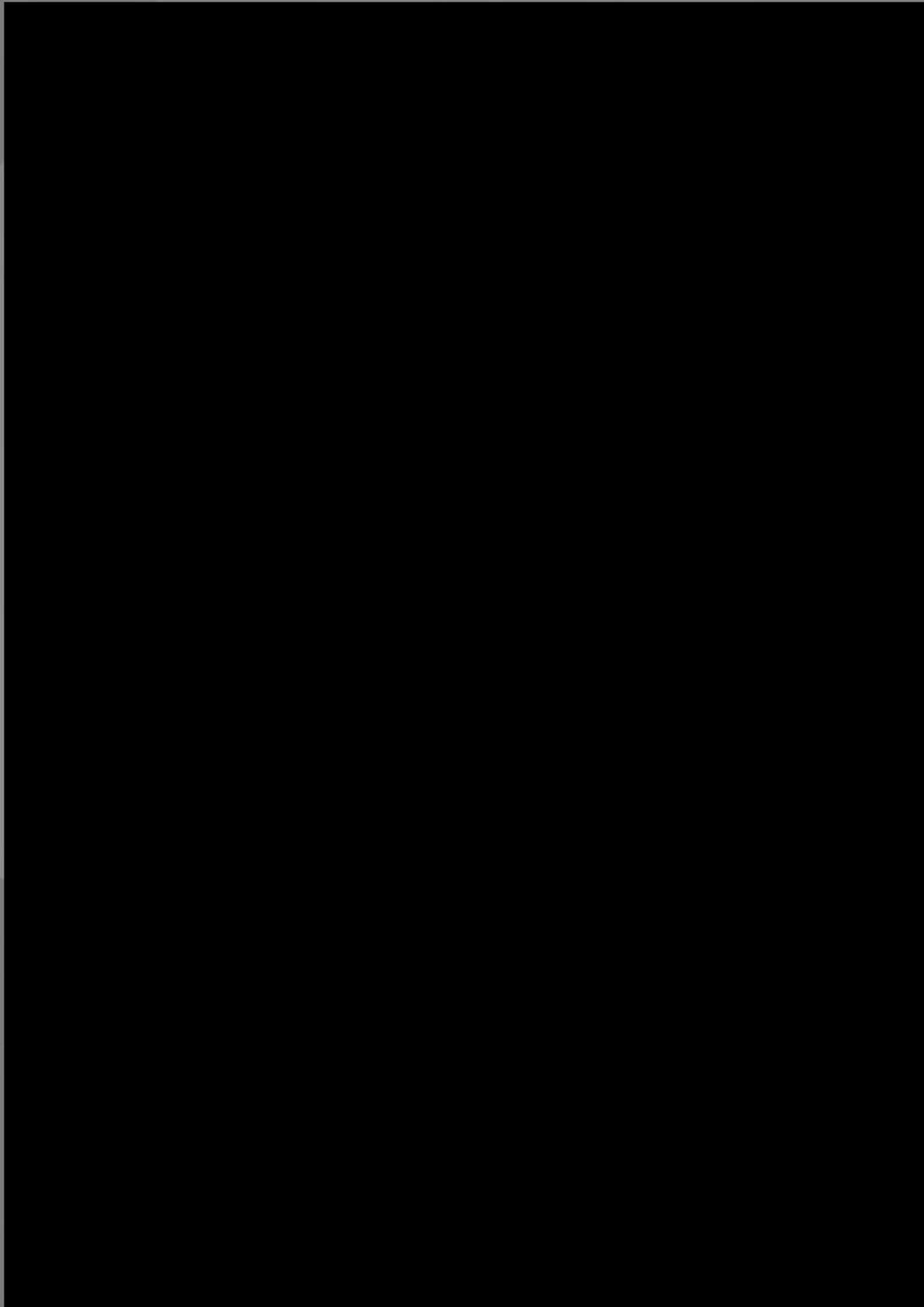


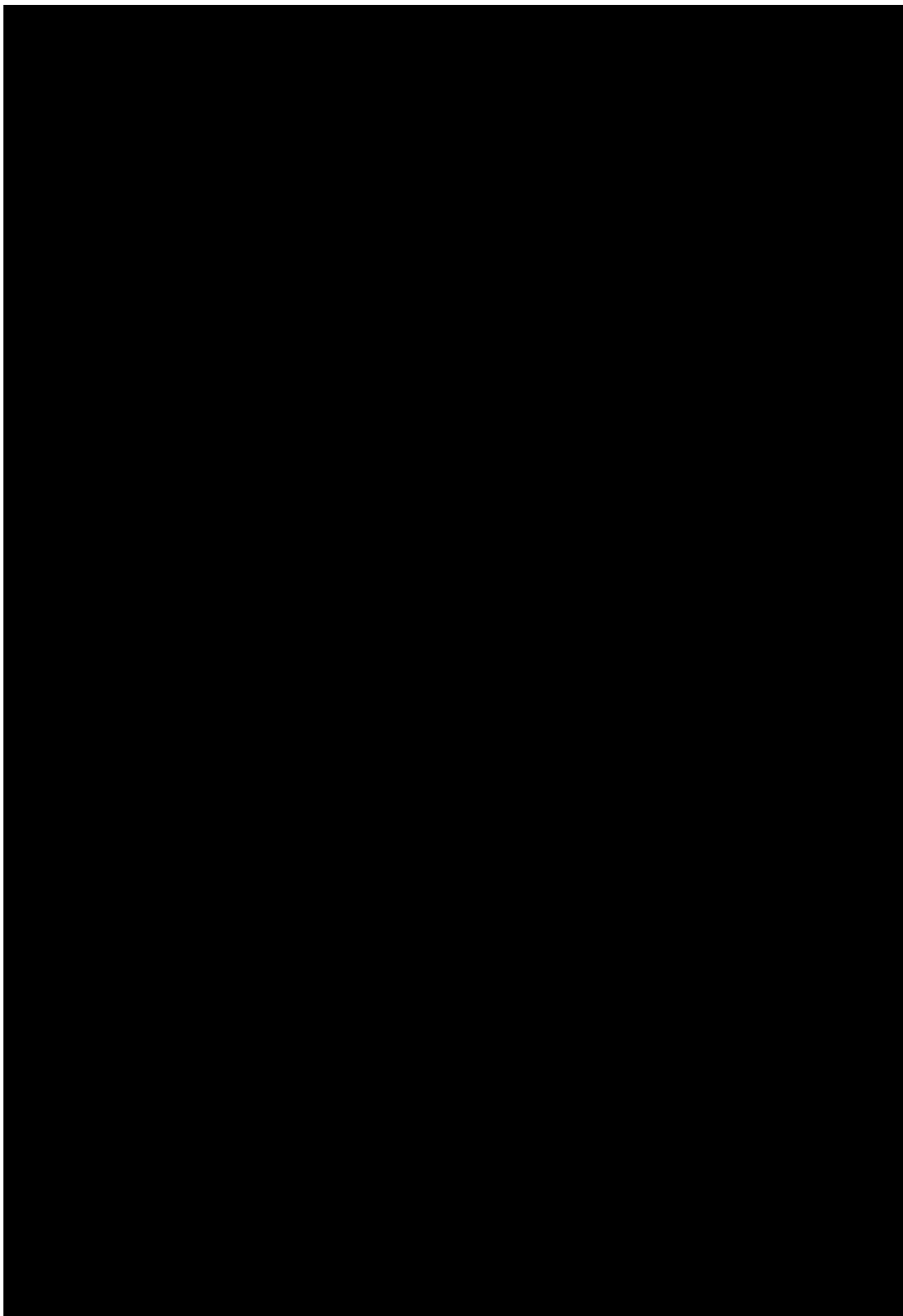
11.21 Appendix I – Proposed Development Exceedance Plans

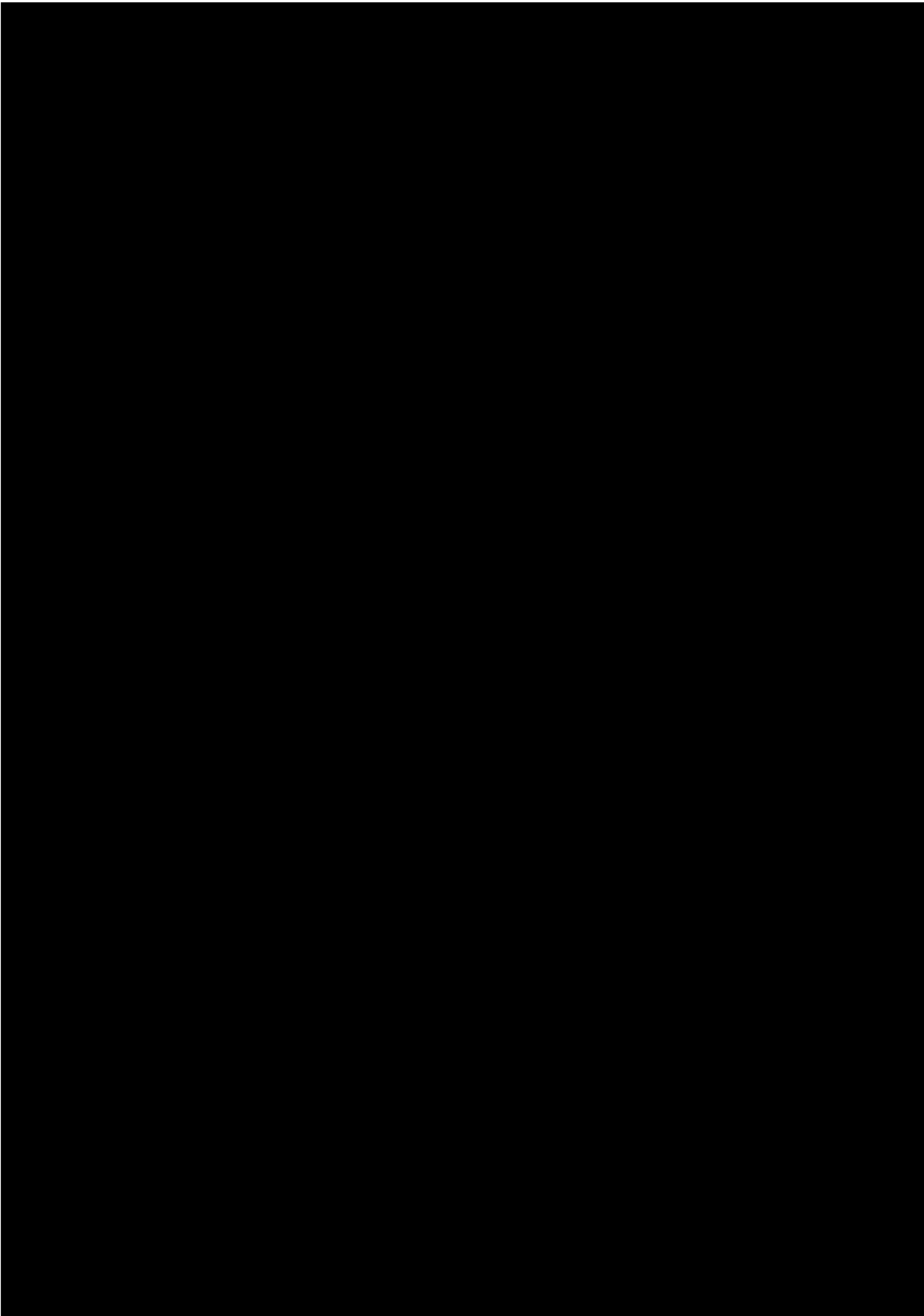


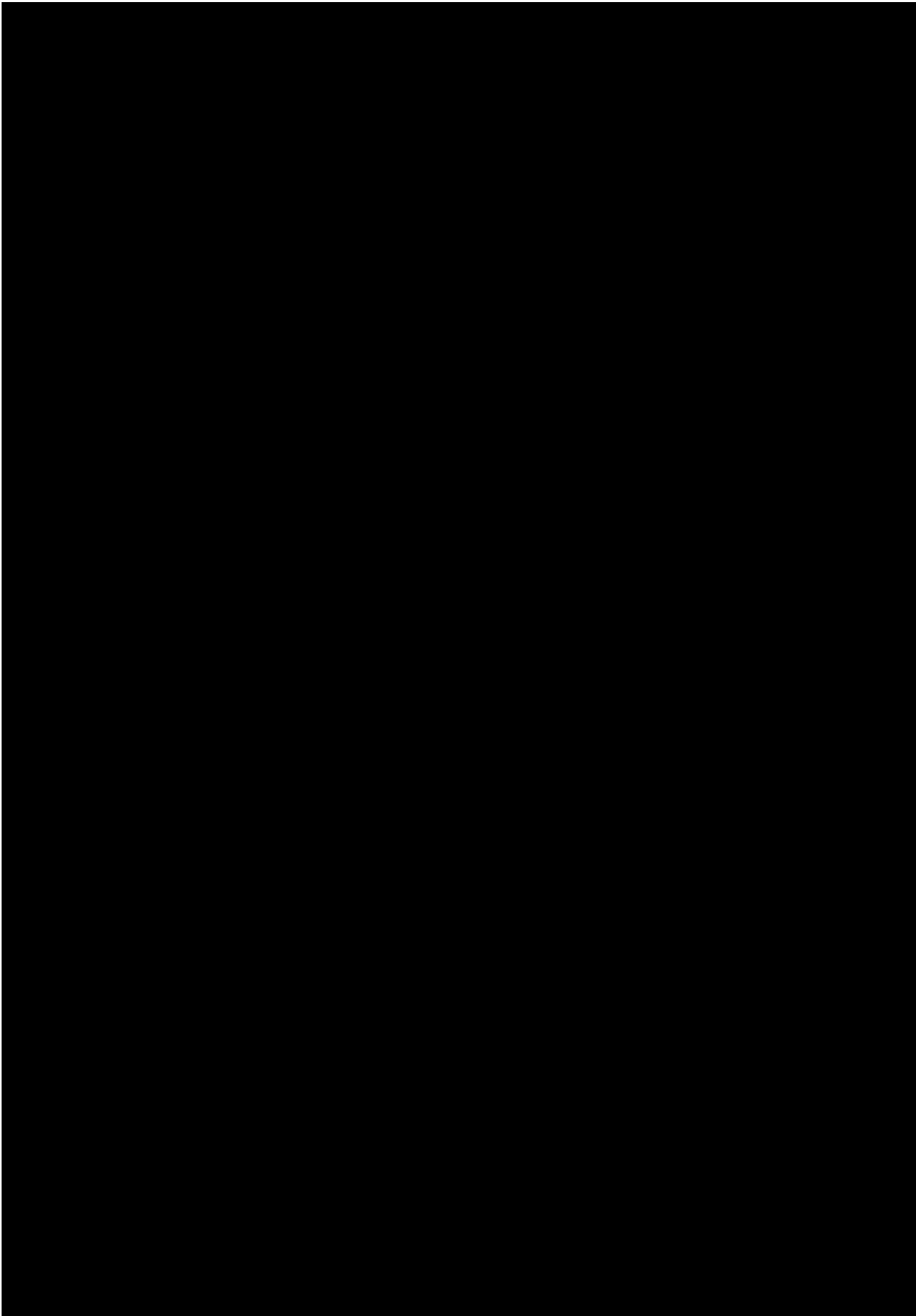


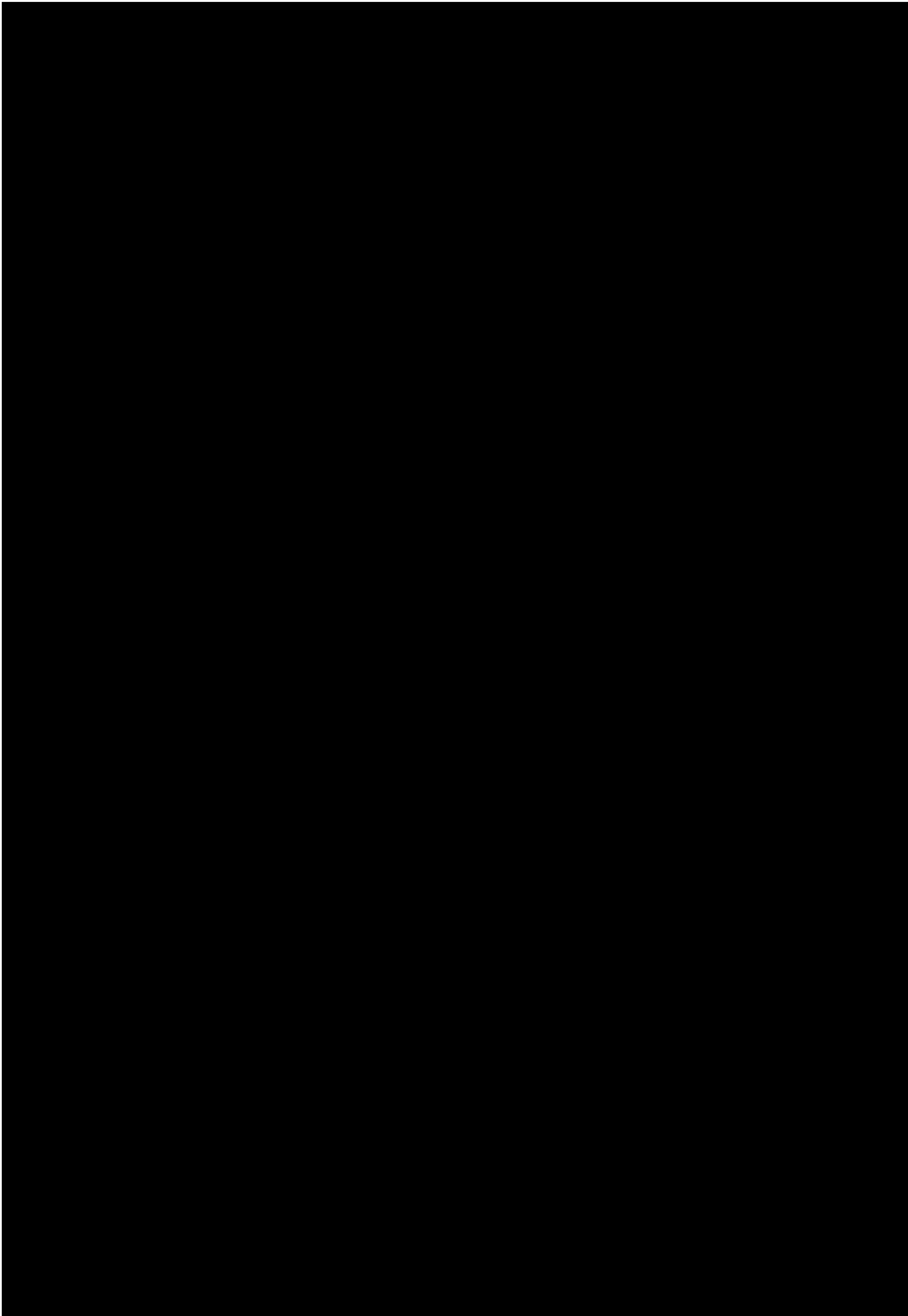
11.22 Appendix J – Thames Water Pumping Station Discussion



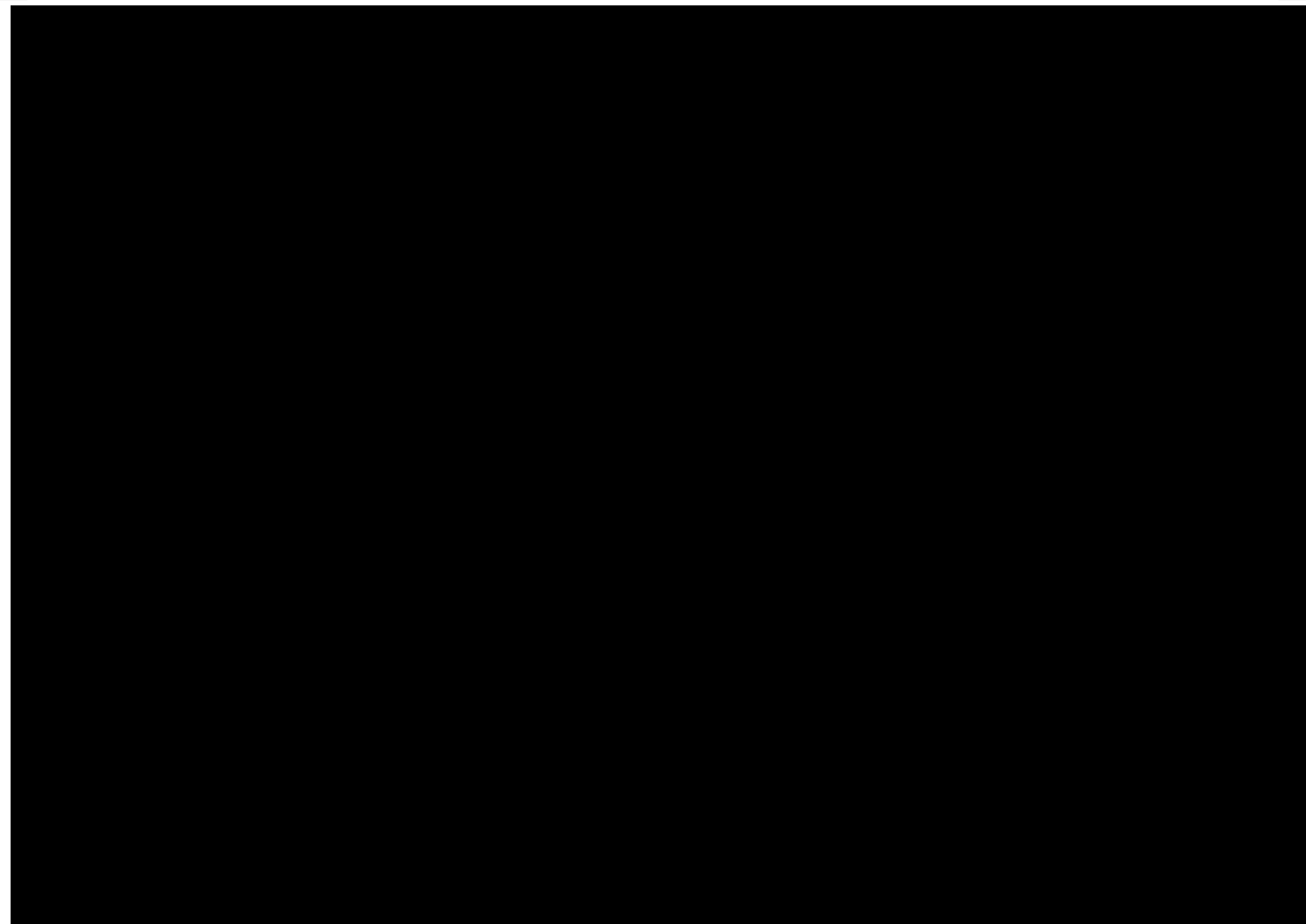








11.23 Appendix K – Option 2 Surface Water Strategy



11.24 Appendix L - Operational and Maintenance Plan

Campsflied House IRC

DRAINAGE OPERATIONS AND MAINTENANCE MANUAL

Curtins Ref: 243925-8127-CUR-XXX-00-RP-C-9202-S2-D0100

Revision: P01

Issue Date: 23 November 2023

Client Name: CTG

Rev	Description	Issued by	Checked	Date
P01	Preliminary Issue	CRR	LG	23.11.2023

This report has been prepared for the sole benefit, use, and information for the client. The liability of Curtins Consulting Limited with respect to the information contained in the report will not extend to any third party.

Author	Signature	Date
 BEng (Hons) Civil Engineer		23/11/2023

Reviewed	Signature	Date
 Meng (Hons) Senior Engineer		3/11/2023

CONTENTS

1	Introduction	5
1.1	<i>Project Overview</i>	5
1.2	<i>Scope of O&M Manual</i>	5
2	Geocellular Units.....	6
2.1	<i>Location and Description</i>	6
2.2	<i>Operation</i>	6
2.3	<i>Inspection and Maintenance Regime</i>	6
3	Permeable Pavements	8
3.1	<i>Location and Description</i>	8
3.2	<i>Operation</i>	8
3.3	<i>Inspection and Maintenance Regime</i>	8
4	Pipes (Including Oversized)	10
4.1	<i>Location and Description</i>	10
4.2	<i>Operation</i>	10
4.3	<i>Inspection and Maintenance Regime</i>	10
5	Pump station	12
5.1	<i>Location and Description</i>	12
5.2	<i>Operation</i>	12
5.3	<i>Inspection and Maintenance Regime</i>	12
6	Slot Drains/Channel Drains.....	13
6.1	<i>Location and Description</i>	13
6.2	<i>Operation</i>	13
6.3	<i>Inspection and Maintenance Regime</i>	13
7	Oil Separator.....	15
7.1	<i>Waste Removal and Servicing</i>	15
7.2	<i>Waste Removal Procedure – Oil & Silt.....</i>	15
7.3	<i>Checking the Coalescer Assembly.....</i>	16
7.4	<i>Removing the coalescer assembly.....</i>	16

7.5 *Cleaning the coalescer assembly/ Media Replacement.* 16

7.6 *Replacing the coalescer assembly.* 17

1 Introduction

1.1 Project Overview

Curtins Consulting Limited has been appointed by Galliford Try to prepare a Drainage Operations and Maintenance (O&M) Manual to supplement the Drainage Strategy report produced by Curtins. Document reference: 243925-8127-CUR-XXX-00-RP-C-9201-S2-D0100.

Particular reference is paid to the inspection, aftercare and maintenance of SuDS drainage features as part of this manual in order to demonstrate to the LLFA or adopting authority the effectiveness and longevity of the SuDS features designed within the scheme as opposed to the standard Building Regulations local and domestic drainage and/or the main discharge drainage connections to 'Sewers for Adoption' standards.

This report is based on current best practice guidance as described in the SuDS Manual, CIRIA, C753.

Proposals contained or forming part of this report represent the design intent and may be subject to alteration or adjustment in completing the detailed design for this project. Where such adjustments are undertaken as part of the detailed design and are deemed a material derivation from the intent contained in this document, prior approval shall be obtained from the relevant authority in advance of commencing such works.

1.2 Scope of O&M Manual

This manual is intended to give an overview of the operation and maintenance for SuDS features included with the drainage strategy and in relation to typical details only. Where proprietary products are specified the manufacturer's instructions and recommendations should be followed in priority to this document unless specifically noted otherwise due to project constraints.

The recommended operations and frequencies are typical only and should be more frequent initially to ensure that there are no unforeseen issues with the operation and then adjusted to suit the site requirements.

2 Geocellular Units

2.1 Location and Description

Geocellular Units are located in landscaped areas/access roads of the Phase 2 site, as shown on drainage drawing 243925-8127-CUR-ZZZ-00-DR-C-9220-S4-D0100.

Geocellular units are proprietary products and therefore manufacturer's specific recommendations should also be taken in to consideration above what has been prepared in this document. Additionally, different manufacturers may have different connection types and arrangements which will need to be taken into consideration.

2.2 Operation

The geocellular units are intended to attenuate the discharge from the site up to and including the 1 in 100 year plus 40% climate change event.

Access for maintenance has been provided through inspection chambers.

2.3 Inspection and Maintenance Regime

Regular inspection and maintenance is important for the effective operation of geocellular units as designed. As the feature is buried a regular inspection regime is very important to ensure the correct functionality of the surface water drainage network. Maintenance responsibility for the geocellular units and their surrounding areas should be placed with Galliford Try as noted in section 1.1.

Sediment / material removal should be undertaken in consultation with the environmental regulator to confirm appropriate protocols; especially where run-off is taken from potentially contaminated areas such as carparks / service yards.

Maintenance Schedule	Required Action	Frequency
Monitoring (to be undertaken more regularly within the first year of operation and adjusted as required)	Inspect inlets, outlets and overflows for blockages, and clear if required. If faults persist jetting and CCTV survey may be required.	Monthly and after large storms.
	Check penstocks and other mechanical devices (if present).	Half yearly.
	Inspect ventilation cowl (if present)	Monthly and after large storms.
Regular maintenance\inspection	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then six monthly
	Debris removal from catchment surface (where may cause risks to performance)	Monthly
	Where rainfall infiltrates into blocks from above, check surface of filter for blockage by silt, algae or other matter. Remove and replace surface infiltration medium as necessary.	Monthly (and after large storms)
	Remove sediment from pre-treatment structures	Annually (or as required after heavy rainfall events)
Remedial actions	Repair/rehabilitation of inlets, outlet, overflows and vents.	As required.

3 Permeable Pavements

3.1 Location and Description

The permeable pavement is located within the proposed MUGA as shown on drainage drawing 243925-8127-CUR-ZZZ-00-DR-C-9200-S4-D0100.

The permeable pavement has been designed in accordance with CIRIA C753.

Permeable pavements contain proprietary products and as such, the manufacturer's recommendations should be followed where used.

3.2 Operation

Permeable pavements are an efficient mean of managing surface water runoff close to its source – intercepting runoff, reducing the volume and frequency of runoff, and providing a treatment medium.

The surface has been designed to be porous or to contain gaps where rain can flow through the upper construction layers in to the voided stone which makes up the sub-base.

3.3 Inspection and Maintenance Regime

Regular inspection and maintenance is important for the effective operation of the pervious pavement. Maintenance responsibility for the pavement and its surrounding area should be placed with Galliford Try as noted in section 1.1.

Sediment/material removal should be undertaken in consultation with the environmental regulator to confirm appropriate protocols, as run-off is taken from potentially contaminated areas such as car parks/service yards.

Maintenance Schedule	Required Action	Frequency
Monitoring (to be undertaken more regularly within the first year of operation and adjusted as required)	Initial inspection.	Monthly for three months after installation.
	Inspect for evidence of poor operation and/or weed growth. If required, take remedial action.	3-monthly, 48 hours after large storms in first six months.
	Inspect silt accumulation rates and establish appropriate brushing frequencies.	Annually.
	Monitor inspection chambers.	Annually.
Regular maintenance/inspection	Brushing and vacuuming.	Three times/year at end of winter, mid-summer, after autumn leaf fall, or as required based on site-specific observations of clogging or manufacturers' recommendations.
Occasional maintenance	Removal of weed or management using glyphosate applied directly into the weeds by an applicator rather than spraying.	As required – one per year on less frequently used pavements.
	Stabilise and mow contributing and adjacent areas.	As required.
Remedial Actions	Remediate any landscaping which, through vegetation maintenance or soil slip, has been raised to within 50 mm of the level of the paving.	As required.
	Remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users, and replace lost jointing materials.	As required.
	Rehabilitation of surface and upper substructure by remedial sweeping.	Every 10 to 15 years or as required (if infiltration performance is reduced due to significant clogging).

4 Pipes (Including Oversized)

4.1 Location and Description

Pipes are the main conveyance across the site with the network as shown on drainage drawing 243925-8127-CUR-ZZZ-00-DR-C-9220-S4-D0100 & 243925-8127-CUR-ZZZ-00-DR-C-9200-S4-D0100.

Pipes are proprietary products and the materials can vary across the site and as such where used the manufacturer's recommendations should be followed. Regardless of the product used, the pipes will be fully compliant with the Curtins' drainage specification.

4.2 Operation

They are intended to be dry except for during rainfall events. These have been designed to be self-cleansing for smaller diameter pipes, and for larger diameters the risk is reduced due to the overall pipe size.

Access for maintenance is provided through access chambers, manholes, rodding plates and rodding eyes.

4.3 Inspection and Maintenance Regime

Regular inspection and maintenance is important to identify areas which may have been obstructed/clogged and may not be draining correctly thus exposing the development to a greater level of flood risk. Maintenance responsibility for the pipes should be placed with Galliford Try.

Sediment/material removal should be undertaken in consultation with the environmental regulator to confirm appropriate protocols, as run-off is taken from potentially contaminated areas such as car parks/service yards.

Maintenance Schedule	Required Action	Frequency
Monitoring (to be undertaken more regularly within the first year of operation and adjusted as required)	Initial inspection should be provided as post construction CCTV survey.	N/A
	Inspect for evidence of poor operation via water level in chambers. If required, take remedial action.	3-monthly, 48 hours after large storms.
Occasional maintenance	Check and remove large vegetation growth near pipe runs.	6 monthly
Remedial actions	Rod through poorly performing runs as initial remediation.	As required.
	If continued poor performance jet and CCTV survey poorly performing runs.	As required.
	Seek advice as to remediation techniques suitable for the type of performance issue and location.	As required If above does not improve performance.

5 Pump station

5.2 Operation

The foul pumping station is designed to pump foul water from the healthcare and kitchen buildings into the wider existing foul drainage network.

Access for maintenance has been provided through inspection chambers.

5.3 Inspection and Maintenance Regime

Regular inspection and maintenance is important for the effective operation of pumping station units as designed. As the feature is buried a regularly inspection regime is very important to ensure the correct functionality of the surface water drainage network. Maintenance responsibility for the pumping station and their surrounding areas should be placed with Galliford Try as noted in section 1.1.

Sediment/material removal should be undertaken in consultation with the environmental regulator to confirm appropriate protocols; especially where run-off is taken from potentially contaminated areas such as car parks/service yards.

6 Slot Drains/Channel Drains

6.1 Location and Description

Slot drains and channel drains are used throughout the site.

Slot drains and channel drains are proprietary products and the materials can vary across the site and as such where used the manufacture's recommendations should be followed. Regardless of the product used the pipes will be fully compliant with the Curtins drainage specification.

6.2 Operation

Slot drains and channel drains have been designed so that they are self-cleansing where possible to reduce the regularity of maintenance on these items. Rodding and access points have been provided at the start of all runs, changes in sizes of channel and half-way points.

Access for maintenance is provided through the units themselves.

6.3 Inspection and Maintenance Regime

Regular inspection and maintenance is important to identify areas which may have been obstructed/clogged and may not be drainage correctly thus exposing the development to a greater level of flood risk. Maintenance responsibility for the slot drains/gulleys should be placed with Galliford Try.

Maintenance Schedule	Required Action	Frequency
Monitoring (to be undertaken more regularly within the first year of operation and adjusted as required)	Initial inspection should be provided as post construction CCTV survey.	N/A
	Inspect for evidence of poor operation via water level in gulleys/sump units. If required take remedial action.	3-monthly, 48 hours after large storms.
Occasional maintenance	Check and remove large vegetation growth near slot drain/channel drain catchment areas.	6 monthly
Remedial actions	Rod through poorly performing runs as initial remediation.	As required.
	If continued poor performance jet and CCTV survey poorly performing runs.	As required.
	Seek advice as to remediation techniques suitable for the type of performance issue and location.	As required If above does not improve performance.

7 Oil Separator

7.1 Waste Removal and Servicing

- Separated light liquid must be removed from separator when the oil capacity has been reached.
- An oil level alarm system is available for purchase which gives warning when the separated light liquid/water interface level reaches 90% of the maximum recommended oil storage volume.
- Separators should be inspected at least every six months or more frequently if experience dictates. A log should be maintained detailing the depth of oil found, any oil volume removed and any silt removal or cleaning carried out.
- Frequently, the construction programme itself generates large and perhaps unusual quantities of silt and grit. We do recommend that following the initial installation, an inspection of the separator contents be made to check that building rubble has not entered the unit. Further inspections at 3 and 6 months should be made so as to be able to assess the volumes of silt and oil accumulated. The inspection and emptying programme can then be defined following the first 6 months site experience. We recommend leaving a maximum interval between inspections of 6 months.
- Alarm probes should be removed and cleaned with water whenever waste material is removed from the separator. Please note the alarm may alert until the liquid level is replaced.
- Separator waste is a “special waste” under the terms of The Waste Management Code of Practice. The Code imposes a duty of care on the waste producer to ensure that the Cleansing contractor is registered with the Environment Agency and that the final disposal of the waste is to a licensed facility.

7.2 Waste Removal Procedure – Oil & Silt

- Oil can only be effectively removed when there is no flow entering the unit. Isolate the unit and prevent flow from entering. Always remove the oil before attempting to remove the coalescer. If this is not done, when the coalescer is withdrawn the oil can coat the media surface and when replaced the oil may be forced through the media, contaminating the effluent.
- Remove the access cover and lower the desludging hose in to the separation chamber. Draw off the surface oil.
- If removing the silt, lower the desludge hose to the base of the tank and empty the contents of the chamber. Ensure that you access and clean both compartments.
- Remove the alarm probe, if fitted, clean with water and replace.
- Consider the period of time that the coalescer has been installed and consider removing and inspecting (cleaning or replacing) the coalescer media. If removed, ensure that it is correctly replaced and secured into position. Replace the access covers. It is best to lower the water level to aid re-fitting.
- Re-fill the separator with clean water up to the outlet level.
- If an alarm is fitted, it will display an alarm condition until the separator is re-filled. Check alarm operation when unit full.

7.3 Checking the Coalescer Assembly

- Coalescers, where fitted, may be cleaned periodically to maintain efficiency. Coalescers should be checked following a major incident and media replaced if necessary.
- Identify the type and size of separator (shown on labels inside the access neck).
- Assemblies weighing less than 25 Kg may be removed by hand. Heavier assemblies should be lifted by mechanical means. Any lifting device employed must be capable of lifting:
 1. In excess of the maximum assembly weight.
 2. The assembly completely out of the access shaft.
 3. Giving a smooth and controlled lift.
 4. Swinging the assembly to one side clear of the access shaft.

Unit	Dry Weight (Kg)	Wet Weight (Kg)	Silted Weight (Kg)	Replacement Media Part No.
NSBP003	5.7 kg	≈50 kg	≈60 kg	402715

- Ensure that the area around the access shaft is clear and that there is space to place the assembly once removed. If space is not available it will be necessary to support the assembly over the access shaft. e.g. by scaffold poles and platform.
- Only remove the access cover when necessary to remove the assembly. Do not leave the access shaft uncovered and unattended.

7.4 Removing the coalescer assembly.

- Undo any fixings which secure the coalescer to the access shaft (if fitted).
- Lift the assembly with a smooth and steady motion. Coalescers will become lighter as water drains from the exposed media. Allow the water to drain completely. Assemblies blocked with fine silt may be very heavy.
- Fully extract the assembly and set it down adjacent to the access shaft.

7.5 Cleaning the coalescer assembly/ Media Replacement.

- Hose down the assembly using clean water at normal pressure. If the media is heavily contaminated with oil and silt, it may not be possible to clean it effectively by hosing. Do not allow untreated cleaning water to pass out of the unit. Continue hosing until the water runs clear.
- To replace the media, undo the banding. Slide media of the core tube and slide new media on. Ensure all the apertures on the core tube are covered by the media. Re-secure or replace banding. Consider replacing media and banding every two years.

7.6 Replacing the coalescer assembly.

- Position it over the access shaft.
- Lower the assembly steadily into the access shaft ensuring that the end locates within the sump at the bottom of the tank. Re-secure the fixings (if fitted).
- Replace the access cover.