



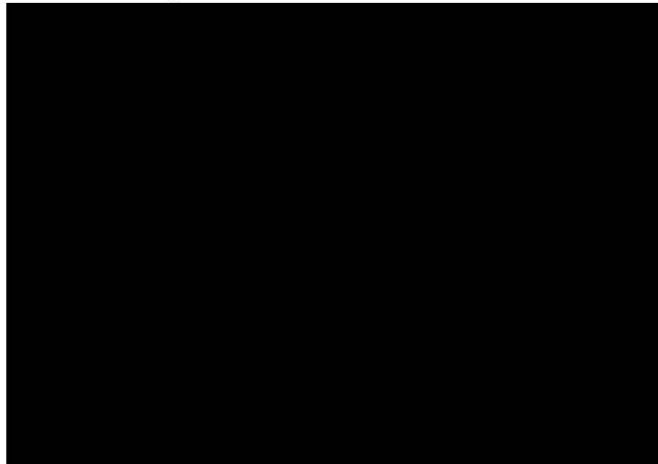
Consulting Services and Access to Auction Software for Multi Band Spectrum Auction

Tender Number: 4310-5/2013-2

Prepared for APEK

30 April 2013

Core Project Team



NERA Economic Consulting
1166 Avenue of the Americas
New York, NY 10036-2708
USA
Tel: 1 212 345 3000 Fax: 1 212 345 4650
www.nera.com

NERA Economic Consulting
15 Stratford Place
London W1C 1BE
United Kingdom
Tel: 44 20 7659 8500 Fax: 44 20 7659 8501
www.nera.com

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1. Introduction

NERA Economic Consulting (NERA) is pleased to submit this proposal in response to the APEK's request for quotation (4301-5/2013-2) for delivery of professional consulting services and access to the software for the implementation of a complex multi-object, multi-round electronic auction for radio frequencies in the 800MHz, 900MHz, 1800MHz, 2100MHz and 2600MHz bands.

We believe that our team is ideally suited to completing this assignment on behalf of the APEK. **We offer more than ten years of experience designing and implementing multiple round auction formats and in-depth knowledge of auctions for similar spectrum bands across the world.**

In addition to our competitive financial offer, we would like to highlight the following aspects of our proposal:

- We have advised clients in many countries around the globe, in preparing, designing, and implementing spectrum auctions, including awards of many different frequency bands. A full description of our relevant experience is provided in section 5 of this proposal.
- We have been involved in nearly every 4G award and this international experience will be invaluable as APEK finalizes auction rules and parameters.
- We have been involved in over 100 auctions in the past decade, including SMRA and CCA auctions, across several industries. We routinely identify and manage risks associated with auction implementation and devise specific procedures to do so.
- Together with our partner company, Optimal Auctions (which provides auction software), we have a track record of implementing high-value auctions using various formats across the spectrum and energy sectors.
- Our auction project team is enthusiastic about this project and has good availability to work with the APEK within the expected timeframes.

Our continuous hands-on involvement in advising regulators and bidders about auctions around the world gives us an up-to-date, uniquely deep, and broad auction experience. Under the NERA banner, our team members have implemented large-scale auctions with transactions valued at several billions of U.S. dollars in settings where our actions were monitored and scrutinized by both regulators and the public.

We confirm that our quotation will be valid for 180 calendar days after the deadline for submission of offers.

1.1. Structure of the Proposal

The remainder of this proposal satisfies the requirements of the request for tender and is structured as follows:

- Section 2 contains details of our proposed consulting services;
- Section 3 introduces our software;
- Section 4 introduces the proposed project team;
- Section 5 presents our relevant experience;
- Section 6 contains references and contact details of previous clients;
- Section 7 contains all relevant forms;
- Annex A contains the curricula vitae of all proposed team members.

1.2. Contact Details

Clarifying questions regarding this proposal may be addressed to:

15 Stratford Place
London W1C 1BE
United Kingdom

NERA Economic Consulting
1166 Avenue of the Americas
New York, NY 10036
USA

4. Our Project Team

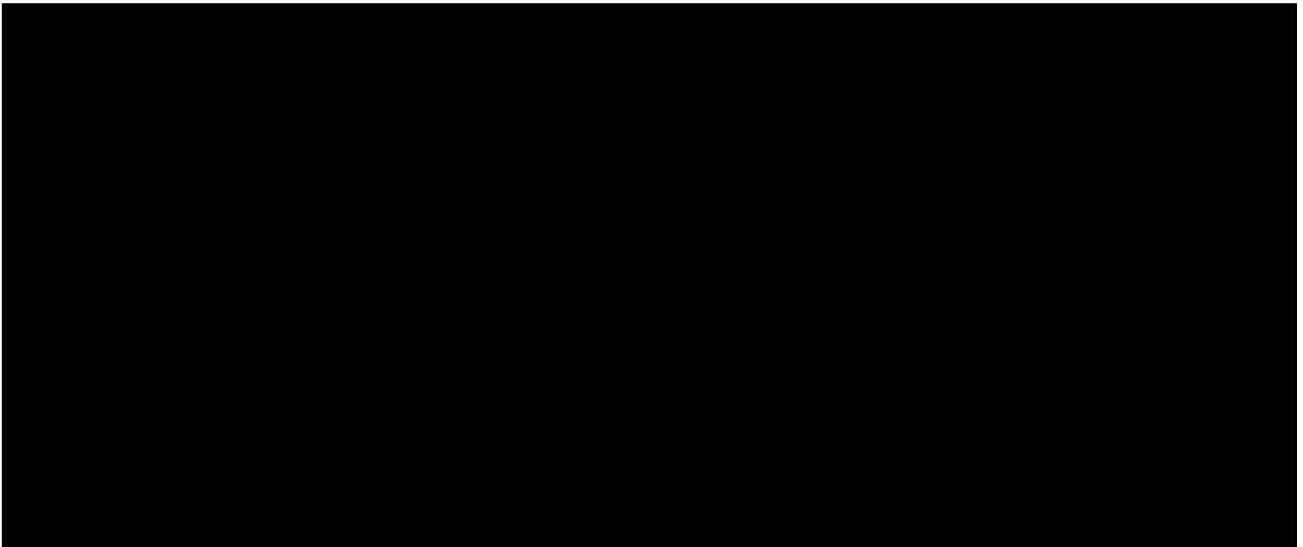
In assembling this team, we have sought to bring together all aspects of experience and skills that would be most crucial to this assignment. NERA is proud to be able to offer APEK a highly qualified and experienced team that combines highly relevant international experience with 4G auctions, in-depth experience in the design and implementation of auctions in general and with the SMRA and CCA formats in particular.

NERA's auction team distinguishes itself in several important ways:

1. We have advised clients in many countries around the globe, in preparing, designing, and implementing spectrum auctions, including awards of many different frequency bands. A full description of our relevant experience is provided in section 5 of this proposal.
2. We have been involved in nearly every 4G award and this international experience will be invaluable as APEK finalizes auction rules and parameters.
3. We have been involved in over 100 auctions in the past decade, including SMRA and CCA auctions, across several industries. We routinely identify and manage risks associated with auction implementation and devise specific procedures to do so.
4. Together with our partner company, Optimal Auctions (which provides auction software), we have a track record of implementing high-value auctions using various formats across the spectrum and energy sectors.

Our continuous hands-on involvement in advising regulators and bidders about auctions around the world gives us an up-to-date, uniquely deep, and broad auction experience. Under the NERA banner, our team members have implemented large-scale auctions with transactions valued at several billions of U.S. dollars in settings where our actions were monitored and scrutinized by both regulators and the public.

The individuals on the project team were selected to combine all skills and experience desirable for the successful conclusion of this project:



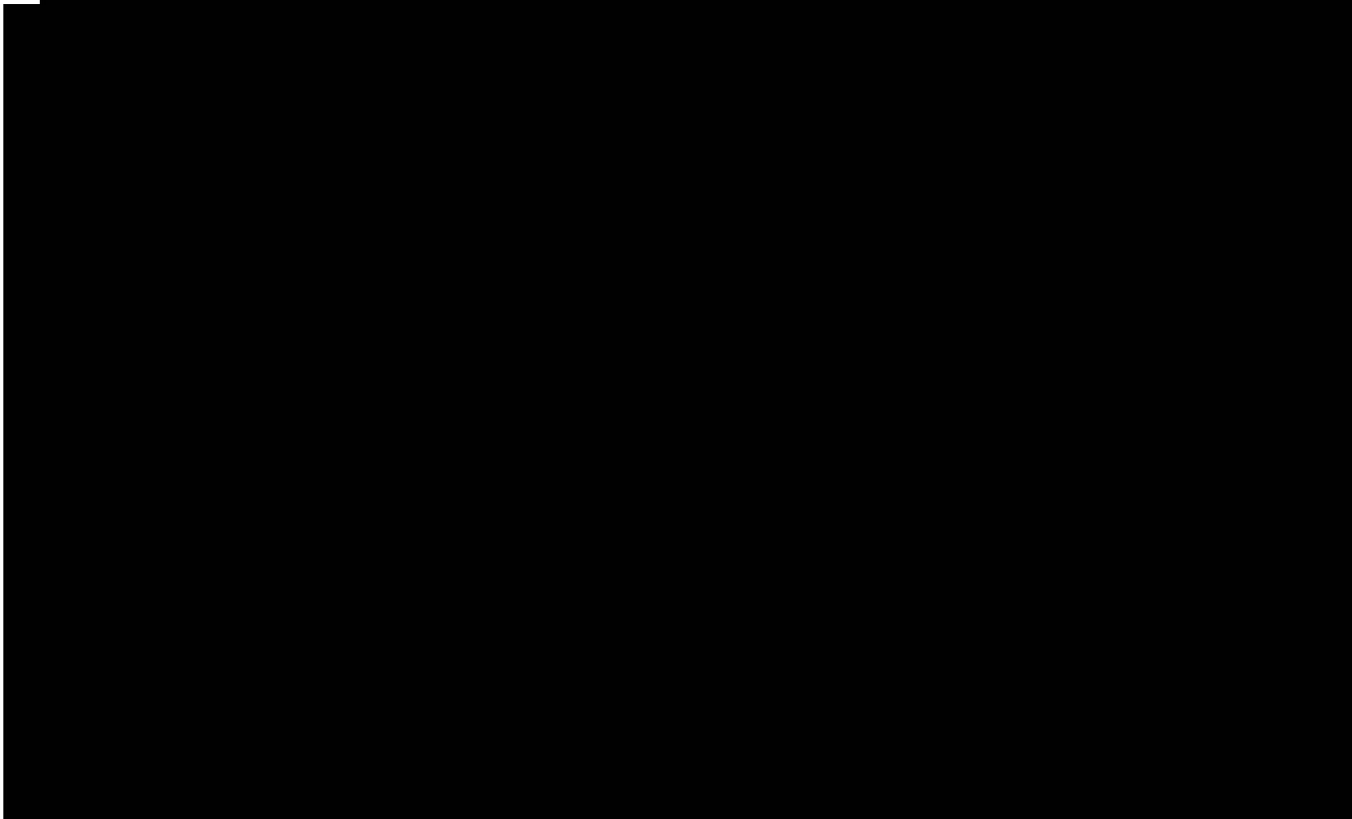
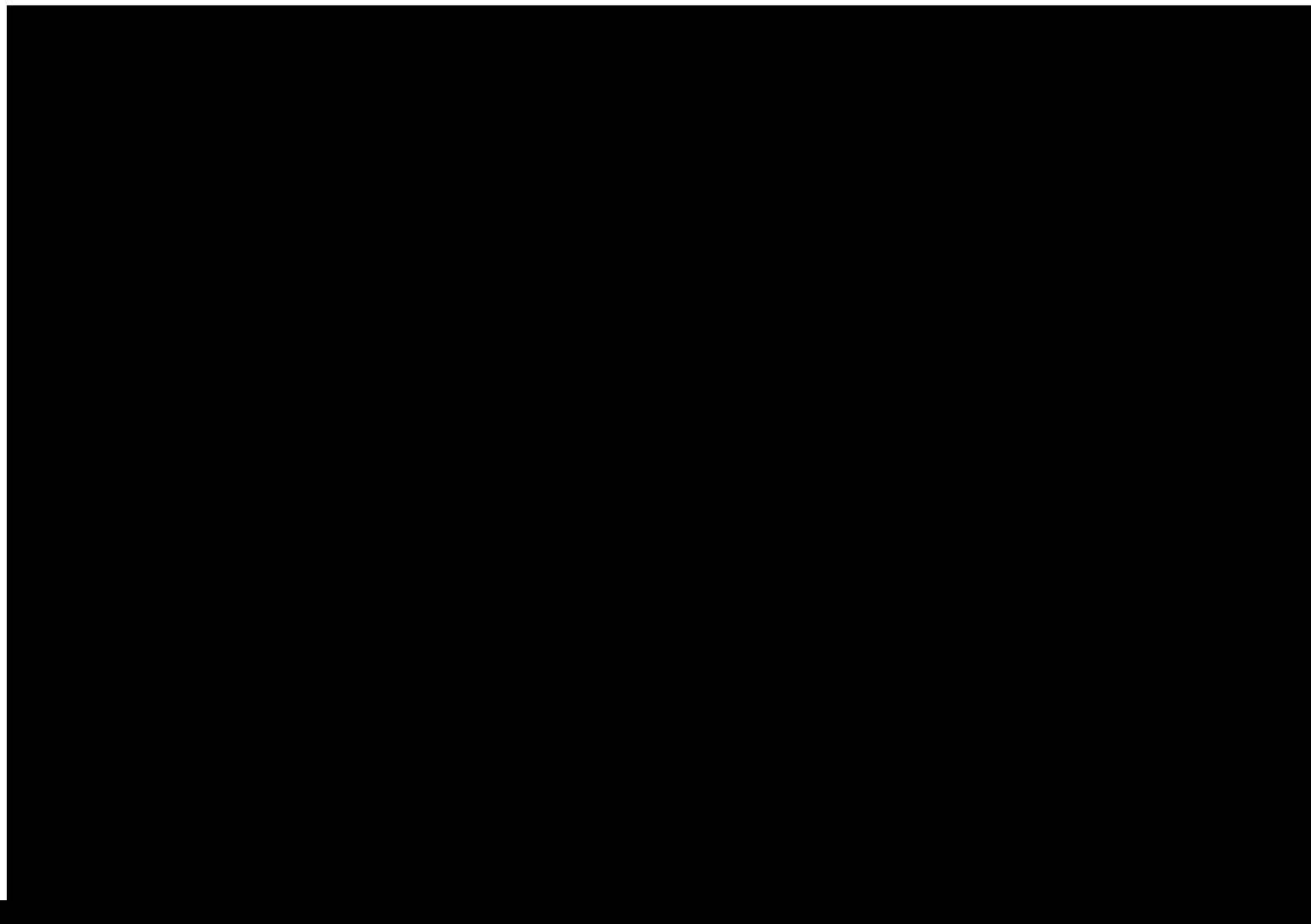
Expertise for these senior team members are described in more detail in the next section. These senior team members will be supported by junior research staff as may be required over the course of the assignment.

4.1. Team Structure



A curriculum vita for each team member is provided in Appendix A. More information about these team members and their roles are provided in the following section.

4.2. Team Members



[REDACTED]





5. Relevant Experience

NERA Economic Consulting (www.nera.com) is a global firm of experts dedicated to applying economic, finance, and quantitative principles to complex business and legal challenges. For half a century, NERA's economists have been creating strategies, studies, reports, expert testimony, and policy recommendations for government authorities and the world's leading law firms and corporations. We bring academic rigor, objectivity, and real world industry experience to bear on issues arising from competition, regulation, public policy, strategy, finance, and litigation.

NERA's clients value our ability to apply and communicate state-of-the-art approaches clearly and convincingly, our commitment to deliver unbiased findings, and our reputation for quality and independence. Our clients rely on the integrity and skills of our unparalleled team of economists and other experts backed by the resources and reliability of one of the world's largest economic consultancies. With its main office in New York City, NERA serves clients from more than 25 offices across North America, Europe, and Asia Pacific.

In the communications sector, our company is a global leader in applying economic expertise to help companies, regulators and industry associations to manage their most critical challenges. We have been a key participant in many important regulatory, legislative, and competition issues facing communications firms around the world. Our economic analyses have played a central role in the successful resolution of industry disputes referred to courts or arbitrations. In spectrum, our experts have advised on the introduction of new market mechanisms in spectrum management, including trading, liberalization, auctions and new pricing techniques.

5.1. Spectrum Policy

Radio spectrum is a key input into many economic activities, including mobile telephony, wireless broadband, television, defence, and public safety. Usable frequencies are a finite public resource, meaning that governments are required to intervene to manage allocation and pricing. In recent years, encouraged by economic advisors including NERA, regulators have increasingly turned to market mechanisms to promote efficient spectrum use. Reforms such as auctions, trading, liberalization, and incentive pricing, have helped to increase downstream competition and accelerate the growth of new wireless services, realizing potentially huge gains for national economies.

NERA provides expert assistance on all spectrum management issues that require economic input. Our areas of expertise include:

- Spectrum allocation, including digital dividend policy, re-farming of mobile spectrum, and unlicensed spectrum;
- Spectrum licensing, including the choice of award format, packaging of frequency lots, license terms and conditions, and consultations;
- Spectrum auction design and implementation, including provision of software for running secure online auctions;
- Spectrum pricing;

- Spectrum trading and liberalization; and
- Valuation of spectrum, both in relation to individual licenses and the broader contribution of spectrum bands, and uses to society.

Our advice is grounded in a thorough understanding of the services that can be deployed using different frequency bands, including:

- Mainstream consumer services, such as wireless broadband, mobile telephony, radio, and television;
- Other commercial uses, such as satellite, data backhaul, private mobile radio, and program making & special events (PMSE); and
- Public uses, such as the military and public safety.

NERA's spectrum experts have worked for a diverse clientele around the world, including: national regulators, international bodies, industry associations, and commercial operators from the mobile, defence, satellite, television, and other industries. We also partner with technology, engineering, and legal advisors to offer solutions for spectrum management issues requiring inter-disciplinary skills.

5.2. Auction Design and Implementation

NERA is a leading global advisor to government agencies and private-sector companies on the design and implementation of auctions. NERA has a long track record of successful design and implementation of auction processes, both for government agencies and companies in the private sector. Our auction experts use techniques derived from running and observing hundreds of auctions, as well as academic research on auctions and game theory. Our experts are familiar with all types of auction formats, and have often been involved in developing new rules for innovative formats. Importantly for this assignment, we have worked at developing detailed rules and bidding procedures for the Clock Plus format for the past ten (10) years. We understand the variants of the rules that have been used, the implementation risks, and gaming opportunities and we stand ready to advise the IDA on the basis of this extensive experience.

Our auction advisory work spans many industry sectors. NERA pioneered the use of auctions to procure energy for retail customers from existing market resources. We administer solicitations that encourage the development of renewable energy such as solar, wind and other renewable energy resources. In radio spectrum, our consultants work around the world to implement awards of frequency licenses for mobile telephony, wireless broadband, and other communication services. We also advise bidders on bid strategy for high stakes auctions and on responses to government consultations on award processes. We are also experts in adapting auction formats to other products and uses, such as airport slots, financial instruments, procurement and trading platforms, and universal service subsidies.

NERA provides auction advice in three primary areas:

- *Market design.* We create new market processes, such as auctions and trading systems, to replace administrative procedures or negotiation practices, or to address specific regulatory and competition objectives. Our solutions can greatly improve market

efficiency, cutting transaction costs for both buyers and sellers, and encouraging competition by reducing barriers to entry.

- *Auction design and implementation.* We advise on the choice of auction format, the packaging of items being sold or procured, and all aspects of the bidding rules and procedures. Where required, we offer full service solutions, including industry analysis, marketing, organizing consultation processes, administering applications, and running the auction. We also procure best-in-class software to run auctions.
- *Bidder support.* We advise bidders through all phases of the auction process, educating bidders about the nature of the auction, and providing strategic and logistical help in developing and implementing bidding strategy.

We are experienced with every aspect of the auction process, from product design and marketing through to detailed bidding rules and software implementation. Our experts can advise on specific aspects of an award process, or organize the entire process on behalf of a client. We can also provide independent reviews of existing processes run by other parties.

The types of services that we offer include:

- Auction project management, including running the main auction, administering bidder applications and qualifications.
- Industry modelling and benchmarking.
- Product design, including the packaging of available items and associated terms and conditions.
- Advice on auction format, bidding rules, and procedures.
- Marketing, including drafting the information memorandum or auction prospectus.
- Software testing and training.
- Developing consultation processes, running bidder seminars and information sessions.

In spectrum, NERA offers support on auction design and bid strategy in all frequency bands. In particular, our consultants have recently been active in the following bands:

- Digital dividend spectrum, including incentive auctions for possible reallocation of spectrum from television to new uses;
- Bands targeted for next generation wireless broadband services, such as LTE, including the 700 MHz, 800 MHz, 900 MHz, 1800 MHz and 2.5 GHz / 2.6 GHz;
- Other mobile telephony bands, including 2G, 3G, PCS and AWS bands, including advice on procedures for refarming spectrum for next generation technologies; and
- Higher frequency bands, such as 26 GHz and 40 GHz, suitable for point-to-point and point-to-multipoint services.

Our advice is grounded on a thorough understanding of the services that can be deployed using different frequency bands, and the challenge of managing interference both within and across frequencies bands, and at national borders.

5.3. Selected Spectrum Award Experience

NERA has completed many projects related to the award of radio spectrum. Table 3.1 provides a list of some the most relevant projects for this assignment.

Table 5.1
NERA Selected Spectrum Auction Experience

Project (year)	Description
Singapore (2013) Clock auction implementation	Support to the Singapore regulator, IDA, in awarding spectrum at 1800MHz and 2.5GHz by auction. The project covers advice on drafting the auction rules and provision of online bidding software to run the auction.
Finland (2012-13) SMRA auction bidder advice	NERA is advising an incumbent in the Finnish 800MHz auction on bid strategy. Our work includes running mock auctions, developing bid tracking software and advice in the auction
Australia (2012-13) CCA auction bidder advice	NERA and its partner are advising an incumbent bidder on bid strategy in a combinatorial clock auction. Our work includes valuation, spectrum strategy, responding to consultations, bid strategy, governance procedures, auction simulations, and advice in the auction
Canada (2012-13) CCA auction bidder advice	NERA is advising an incumbent bidder on bid strategy in a combinatorial clock auction. Our work includes spectrum strategy, responding to consultations, bid strategy, governance procedures, auction simulations, and advice in the auction
Czech Republic (2012-13) SMRA auction bidder advice	NERA advised an incumbent bidder on bid strategy in a SMRA. Our work included advice on spectrum strategy and governance procedures.
UK (2012-13) CCA auction bidder advice	NERA advised Telefonica UK on bid strategy for their multi-band combinatorial clock auction. Our work included bid strategy, governance procedures, running mock auctions, developing bid tracking software, and advice in the auction
Belgium (2012) Auction design	NERA advised the Belgium Regulator, BIPT, on the design of its 800MHz auction. Our work focused on identifying the auction format, recommending specific rules, and advising on competition issues.
Ireland (2012) CCA	NERA advised Telefonica on bid strategy and spectrum valuation in a combinatorial clock auction. Our work included spectrum valuation, spectrum strategy, responding to consultations, bid strategy, governance procedures, auction simulations, and advice in the auction.
Romania (2012) Clock auction	NERA advised Orange Romania on bid strategy for their multi-band auction, which used a package clock format. Our advice covers the consultation response, EC lobbying, competitor analysis, auction simulations, bid strategy and support during the auction.

Project (year)	Description
Denmark (2012) CCA	NERA advised an incumbent operator on bid strategy in a combinatorial clock auction. Our work included developing bid strategy, modelling all potential competitor scenarios for the auction, and providing on-site support throughout the auction.
Switzerland (2012) CCA	NERA advised Orange on bid strategy in a combinatorial clock auction. Our work included support on responding to consultations, bid strategy, governance procedures, auction simulations, and real-time advice in the auction.
Singapore (2011) Auction Design	NERA undertook a project for the IDA advising on the market value of spectrum in the 2.3GHz and 2.5 GHz bands, the reserve price to be sold in each band, developed proposals for spectrum caps, examined the case for spectrum floors, and recommended an auction format.
Canada – 700 MHz (2011) spectrum caps	For an incumbent operator, NERA provided a paper examining the impact of spectrum caps on revenues from the forthcoming 700 MHz auction. The paper was based on running many 1,000s of test auctions simulating potential competitive conditions in Canada.
Hungary (2011) First price auction	NERA advised an incumbent operator on bid strategy in a first-price sealed bid auction. We also developed a valuation model for the spectrum and integrated this into bid strategy.
South Korea (2011) SMRA	NERA was retained by an incumbent mobile operator in South Korea to value the 900 MHz spectrum lots available in the countries' first spectrum auction. NERA's client successfully acquired the desired spectrum.
Italy (2011) SMRA	NERA was retained by Telecom Italia to advise on bid strategy for an SMRA ranking auction for mobile spectrum bands. Our role involved peer reviewing Telecom Italia's auction preparations and providing on site strategy support throughout the auction.
Spain (2011) SMRA	NERA was retained by Telefonica Spain to advise on bid strategy for an SMRA auction for mobile spectrum bands. Our role included using drafting responses to the consultation on the rules, developing Optimal Auctions software to simulate the auction design and run auction simulations, and providing on-site advice throughout the auction.
Sweden (2010-11) Auction review and implementation	NERA was retained by PTS to review and modify the proposed auction rules for the upcoming 1800 MHz award, as well as provide auction software and manage the auction implementation. The auction format is a variant of the combinatorial clock auction (CCA): clock auction for generic lots, followed by an assignment stage with winner and price determination for specific lots. For this auction, NERA has developed software for winner and price determination.
Sweden (2010) auction design	NERA was retained by PTS to produce a review of different auction formats, with the aim of recommending a suitable auction format for the upcoming 800 MHz award in Sweden. The auction design had to take into account a number of factors specific to Sweden, including technical constraints and coverage obligations on some lots (but not all), which meant that the award consists of six specific (not generic) lots.

Project (year)	Description
Denmark (2010) auction design & implementation	NERA was retained by the NITA, the then Danish Telecom Regulator, to design and implement the auction of a 900 MHz license. The auction format for a single license was a relatively simple SMRA format, modified to facilitate a speedy auction process. Modifications included proxy bidding and flexible bidding rounds that terminated when a bid was entered. The project involved software development to accommodate the specifics of the auction rules.
Asia Pacific (2010)	NERA was retained by an incumbent mobile operator to advise on bid strategy and draft its bid book for an award of spectrum in the 2.6 GHz band.
Thailand (2009-2010) auction design & implementation	NERA was retained by the National Telecommunications Commission of Thailand (NTC) to implement the 3G auction. NERA's tasks included providing advice on auction parameters and bidding procedures, drafting the Information Memorandum, providing a software solution for the auction, and providing extensive auction training to the public and the qualified bidders.
Denmark (2010) auction design & implementation	NERA was retained by the NITA, the Danish Telecom Regulator, to design and implement the auction of a frequency license in the 410-430 MHz band. The auction was a SMRA format, modified to allow for shorter bidding rounds.
Finland (2009) auction implementation	NERA developed auction software for and assisted FICORA with the implementation of the 2.6GHz auction, the first spectrum auction to be run in Finland. NERA was not responsible for the auction rules.
Canada (2008) auction design review	NERA undertook an evaluation of the auction design used to run the 2008 AWS auction, including a detailed analysis of the linkages between the SMRA format selected and unusual bidding behaviour. The public domain report was submitted to Industry Canada as part of a regulatory submission by Telus Communications.
Sweden (2007) auction design & implementation	NERA was selected for a Framework Contract with the Swedish Telecoms Regulator, PTS, to advise on the design and implementation of spectrum auctions. NERA completed the first project under the framework contract in 2007, which was the design and implementation of an auction of 3.6–3.8 GHz FWA licenses. The auction consisted of nearly 1,200 licenses (4 licenses in each of 300 regions).
UK (2004) auction modelling	NERA was asked by Ofcom to comment on Ofcom's proposed approach to predicting incumbent bids in hypothetical first-price auctions for Channel 3 licenses. NERA advised Ofcom on bidding strategies in first-price auctions.
Canada (2003) auction implementation	NERA was selected to advise Industry Canada on the implementation procedures for the spectrum auction for 24 GHz and 38 GHz frequencies. This was a simultaneous multiple round format featuring many hundreds of regional lots. NERA provided bid tracking software for the auction.
Latvia (2002) auction design & implementation	NERA was selected by the Latvian government, in a consortium with Hansabank, to design and implement the auction of 3G licenses. The assignment also involved the valuation of the licenses on sale and the definition of reserve prices.

Project (year)	Description
Singapore (2001) auction design & implementation	NERA advised on auction design for the Singapore 2G and 3G auctions, including advice on auction rules, auction parameters, and bidding procedures on behalf of the IDA. The auction format was an SMRA format.

5.4. Additional Experience of Auction Design and Implementation

In addition to our role in radio spectrum, NERA has been involved in, commented on, designed and implemented dozens of other auctions, most notably in the energy sector. Much of our work on auctions of electricity for retail customers and of renewable energy use the Clock Plus auction format. Further, the approach to auction implementation, including use of on-line bidding software, varies little across sectors.

Table 5.2
NERA Selected Additional Auction Design/Implementation Experience

Project (year)	Description
New Jersey BGS Electricity Auctions Clock Plus (2012-13), (2011-12), (2010-11), (2009-10), (2008-09), (2007-08), (2006-07), (2005-06), (2004-05), (2003-04), (2002-03), (2001-2002).	NERA has administered the auction for the purchase of electricity for the retail customers of the four New Jersey Electric Distribution Companies in New Jersey since 2001. Over the last eleven years, we have facilitated the purchase of over \$50 billion of electric supply for all default customers of the state of New Jersey. Each of the auctions completed to date has used the Clock Plus format. NERA and the Electric Distribution Companies designed the auction format. NERA drafted the bidding rules, the electronic bidding platform guide and administers the entire process. Optimal Auctions supplies the software.
FirstEnergy Pennsylvania auctions Clock Plus (Mar. 2012), (Jan. 2012), (Oct. 2011), (May 2011), (Mar. 2011), (Jan. 2011), (Oct. 2010), (May 2010), (Mar. 2010), (Jan. 2010),	The head of NERA's auctions practice, Dr Chantale LaCasse, provided testimony regarding the use of auctions for the purchase of electricity for the retail customers of three Electric Distribution Companies in the FirstEnergy family. NERA was approved by the Pennsylvania Public Utility Commission as the Auction Manager to administer the auctions, which used a Clock Plus format. NERA designed the bidding format, drafted the bidding rules, drafted the electronic bidding platform guide and administered the process, submitting a full factual solicitation report to the Pennsylvania Public Utility Commission. Optimal Auctions supplied the software.
AEP Ohio Electricity Auction Clock (2012-present)	NERA is advising the Ohio Power Company (AEP Ohio) on the auction to procure energy for its retail customers. The Ohio Public Utilities Commission has approved the use of a Clock Auction. The first auction is expected in mid-2013.

Project (year)	Description
New Jersey Solar Energy Credit Auction Clock Plus and Clock (Oct. 2012), (Jul. 2012), (May 2012), (Feb. 2012), (Oct. 2011), (Jul. 2011), (Apr. 2011), (Jul. 2010), (Oct. 2010)	<p>NERA designed and administers quarterly auctions by which the four New Jersey Electric Distribution Companies sell the solar renewable energy credits produced by their solar generation projects. A Clock Auction is used (occasionally there are multiple categories and a Clock Plus auction is used).</p> <p>NERA designed drafted the bidding rules, drafted the electronic bidding platform guide and administers the entire process. Optimal Auctions supplies the software.</p>
New Jersey Solar Generation Auction Sealed Bid (Sep. 2011), (Jun. 2011), (Feb. 2011), (Nov. 2010), (Jun. 2010), (Mar. 2010), (Dec. 2009), (Aug. 2009)	<p>NERA advised Jersey Central Power & Light, Atlantic City Electric, and Rockland Electric in their SREC-Based Financing Program for the contracting of solar generation on a long-term basis. NERA used a sealed bid auction to select the winning projects, designed detailed bidding procedures, and manuals for use of a file transfer system for the transmission of bids.</p>
Illinois Power Agency Combinatorial Sealed Bid (May 2007), (May 2008), (May 2009), (May 2010), (Dec. 2010), (May 2011) (Feb. 2012), (May 2012)	<p>Since 2007, NERA has provided advice on the design and administered auctions to purchase electric supply resources and renewable credits for retail customers of the Commonwealth Edison Company (ComEd) on behalf of the Illinois Power Agency. The auction for electric supply uses a sealed bid combinatorial auction format.</p> <p>NERA designed the bidding format, drafted the rules and associated contracts, and administers the entire process, including training bidders on the use of the electronic bid submission platform, developing software for the evaluation of bids, and presenting a factual report on the auction results to the Illinois Commerce Commission.</p>
Illinois Electricity Auction (2006) Clock Plus	<p>NERA provided insight on the integration of auction and product design, provided testimony regarding the bidding framework, developed the auction rules, and administered the process using a Clock Plus format. NERA designed the bidding format, drafted the bidding rules, drafted the electronic bidding platform guide and administered the process, including submitting a full factual solicitation report to the Illinois Commerce Commission. Optimal Auctions supplied the software.</p>
Pennsylvania Electricity Auctions Sealed Bid with Combinatorial Features (over 20 solicitations from 2007 - 2012)	<p>Since 2007, NERA has administered the sealed bid auctions to purchase electricity for the retail customers of PPL Electric Utilities Corporation ("PPL"). The solicitation uses a sealed bid auction format with a combinatorial bidding and evaluation feature, and includes a "set aside" for smaller entrants for some products.</p> <p>NERA has administered over 20 auctions for PPL, and is responsible for the entire process, including training bidders on the use of the electronic bid submission platform, evaluating the bids, and submitting a factual report on the auction results to the Pennsylvania Public Utility Commission.</p>

Project (year)	Description
Pennsylvania Electricity Auctions Sealed Bid (over 10 solicitations from 2009 - 2012)	Since 2009, NERA has administered the sealed bid auctions to purchase electricity for the retail customers of the PECO Energy Company ("PECO"). The solicitation features a sealed bid auction format. NERA has administered over 10 auctions for PECO, and is responsible for the entire process, including training bidders on the use of the electronic bid submission platform, evaluating the bids, and submitting a factual report on the auction results to the Pennsylvania Public Utility Commission.
UK Legal Services Clock Plus (2007-09)	NERA provided advice to the UK Legal Services Commission on the use of auctions in its design of a Best Value Tendering system for criminal defence services. NERA presented a novel auction design that features the use of a Clock Plus format.
Spain Energy Auctions Clock Plus (5 auctions in 2007-08)	NERA designed and managed the auctions for the Comisión Nacional de Energía to purchase blocks of energy on behalf of Spain's electricity customers. The auction featured a Clock Plus format. NERA designed the bidding format, drafted the bidding rules, drafted the electronic bidding platform guide and administered the entire process, including training bidders on the use of the electronic bidding platform and providing a full factual report on the auction results. Optimal Auctions supplied the software.
Ohio Electricity Auctions Clock (2 auctions in 2004 and 2005)	NERA designed and managed the auctions for the FirstEnergy Ohio Utilities to purchase electricity for their retail customers using a clock auction format. NERA designed the bidding format and drafted the bidding rules. NERA developed software to receive and evaluate the bids.

5.4.1. Optimal Auctions

Since 1998, Optimal Auctions has provided expert auction solutions based on three core competencies which improve the competitiveness of transactions; applied microeconomics and game theory, best business practices, and expert auction software.

The Optimal Auctions team has a successful track record supporting over \$155 billion of mission critical expert auctions. Optimal Auctions is a leading provider of expert auction software because it is all it does. Optimal Auctions has unmatched experience designing expert auctions. Optimal Auctions collaborates with industry-specific experts in many functional areas including finance, valuation, competition analysis, public policy, market analyses, regulation, and business goal assessment. Optimal Auctions provides our clients with knowledgeable and client-specific solutions.

Optimal Auctions focus on solving a wide range of client challenges in the sale or procurement of many different assets, resources, and property rights or obligations. Increasingly, expert auctions are being used in a multitude of diverse environments. These include online procurement and the substitution of expert auctions for negotiations where the stakes are high, the value of the assets uncertain, and the time-frame compacted. Many governments are using expert auctions to sell spectrum licenses, state-owned assets, or requiring regulated industries to use expert auctions to increase competition.

As the use of expert auctions is adopted by more companies, industries and government agencies, there is a need to ensure that auctions are well designed, well understood by all participants, and intelligently implemented. This will ensure an optimal outcome free from challenge by participants or regulators.

Optimal Auctions provides proven expert auction advice and implementation. Optimal Auctions' professionals have unparalleled economic and business expertise that will ensure a successful transaction outcome.

Table 5.3
Optimal Auctions Selected Auction Experience

Project (year)	Description
Finland auction (2012-13)	Optimal Auctions provided CCA software to NERA for use by a client in the Finland 800MHz auction. The software is being used to run mock auctions to support the development of NERA's client's bid strategy.
UK CCA auction bid advice (2012-13)	Optimal Auctions provided CCA software to NERA for use by Telefonica in the UK 800MHz and 2600MHz auction. The software is being used to run mock auctions to support the development of NERA's client's bid strategy.
Ireland CCA auction bid advice (2011-12)	Optimal Auctions provided CCA software to NERA for use by Telefonica in the Irish multi-band LTE auction. The software is being used to run mock auctions to support the development of NERA's client's bid strategy.
Spain SMR auction bid advice (2011)	Optimal Auctions provided SMRA software to NERA for an auction in continental Europe. The software was used to run mock auctions to support the development of NERA's client's bid strategy.
Sweden 1800 MHz auction (2010 - ongoing)	Optimal Auctions provides the auction software to implement the 1800 MHz auction as a two-stage clock auction: clock auction for generic lots, followed by an assignment stage with winner and price determination for specific lots. For this auction, NERA has developed software for winner and price determination, which links with the interface of Optimal Auctions' clock auction software.
Denmark 410-430 MHz, 900/1800 MHz auctions (2010)	Optimal Auctions provided the auction software to implement the three auctions. The auction format was a modified SMRA format, with the aim of facilitating a speedy auction.
New Jersey BGS auctions (2002 – 2010)	Optimal Auctions software now has been used to implement nine successive auctions using a descending clock auction format starting.
Penelec Electricity Auction (2010)	These quarterly auctions use a new version of the simultaneous descending clock auction format, where bidders participate in multiple descending clock auctions at the same time, with eligibility rules differing tailored to the products available in each auction.

Project (year)	Description
Thailand 3G auction (2009-10)	Optimal Auctions provided the auction software to implement the Thai 3G auction. The software had been finalized and demonstrated to bidders in mock auctions at the point when the award was postponed owing to court action. The format is a simultaneous multiple round auction (SMRA).
Finland FICORA 2.6 GHz auction (2009)	An SMR-type auction that handled 15 spectrum licenses in the 2.6 GHz band with varying eligibility weights and prices. The software was adapted to deal with the unique SMR rules designed for the auction, including high-bidder switching, waivers, and price resetting.
Illinois Electricity Procurement (2006-2007)	Optimal Auctions developed software to implement a clock auction for electricity capacity for Illinois, a Midwestern United States state. This is a simultaneous descending clock auction format for full requirements and other services for several different customer classes and distribution companies.
Sweden PTS 3.6 GHz auction (2007)	Optimal Auctions managed the PTS auction for their 3.6 GHz auction using the 'SMR with switching' format. The software handled 50 bidders bidding on 1,200 products over a seven-day span. The software was adapted to handle many auction-specific eligibility rules and waiver rules.
Texas PUC Power capacity auctions (2002-06)	For the public Utility Commission of Texas, Optimal Auctions provided software for the quarterly capacity auctions from 2002-2006. This simultaneous ascending clock auction rules imposed separate monetary credit limits for bidders with each of four power generating company sellers. The rules require 30 minute bidding rounds for hundreds of products.
Medipent medical receivables auction (2006)	For Medipent, Optimal Auctions implemented an auction for medical receivables. The format was a simultaneous multiple round auction (SMRA) with group load caps, an eligibility points based activity rule and standing high bidders.

6. References

In this section, we provide signed references from current and former clients confirming that NERA has successfully undertaken complex auction projects, both for auctioneers and for bidders.

Specifically, we provide the following 14 auction project references

Auctioneer for Regulator in Complex European Spectrum Auction

- Denmark 900MHz & 1800MHz
- Denmark 410-430MHz
- Sweden 3600MHz
- Sweden 1800MHz
- Belgium 800MHz
- Finland 2600MHz

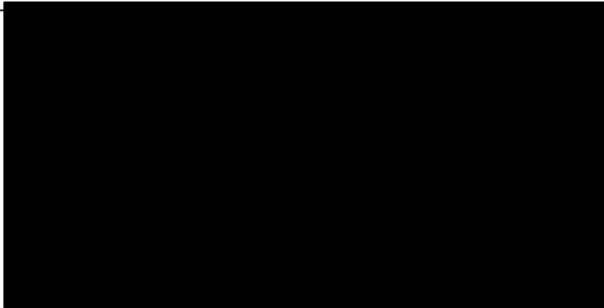

Auctioneer for Regulator in Complex Non-European Spectrum Auction

- Singapore 1800MHz & 2500MHz



Support to Bidders in Complex European Spectrum Auction



- Czech Republic 800MHz, 1800MHz & 2600MHz
- UK 800MHz & 2600MHz
- Denmark 800MHz
- Spain 800MHz, 900MHz & 1800MHz
- Hungary 900MHz
- Ireland 800MHz, 900MHz & 1800MHz
- Romania 800MHz, 900MHz, 1800MHz, 2100MHz & 2600MHz


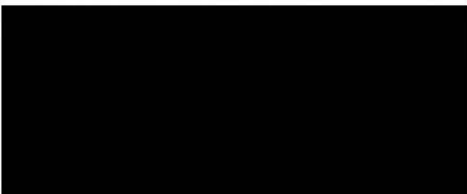
6.1. Auctioneer for Regulator in Complex European Spectrum Auction

Denmark, 900 and 1800 MHz Auction		
Organisation	The National IT and Telecom Agency (NITA), now Danish Business Authority	
Project title	900/1800 MHz Auction	
NERA's role	<p>NERA was the lead contractor for this project. The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Review of proposed auction format • Drafting of detailed auction rules • Software development (with Optimal Auctions as subcontractor) • Auction implementation 	
Auction type	Modified SMRA auction with flexible length of bidding rounds.	
Project budget	<p>The budget for this project was greater than €100,000.</p> <p>NERA contributed more than 50% of the project value. Optimal Auctions contributed the remaining share of the project value.</p>	
Project Duration	Start date:	January 2010
	End date:	December 2010
Contact person	Name: Title: Address: Phone number: Email:	
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks.</p> <p>Signed </p> <p>Date <u>✓ 17 April 2013</u></p>	

Denmark, 410-430 MHz Auction	
Organisation	The National IT and Telecom Agency (NITA), now Danish Business Authority
Project title	410-430 MHz Auction
NERA's role	<p>NERA was the lead contractor for this project. The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Review of proposed auction format • Drafting of detailed auction rules • Software development (with Optimal Auctions as subcontractor) • Auction implementation
Auction type	Modified SMRA auction with flexible length of bidding rounds.
Project budget	<p>The budget for this project was greater than €75,000.</p> <p>NERA contributed more than 50% of the project value. Optimal Auctions contributed the remaining share of the project value.</p>
Project Duration	<p>Start date: January 2010</p> <p>End date: December 2010</p>
Contact person	<p>Name:</p> <p>Title:</p> <p>Address:</p> <p>Phone number:</p> <p>Email:</p>
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks.</p> <p>Signed</p> <p>Date 17 April 2013</p>

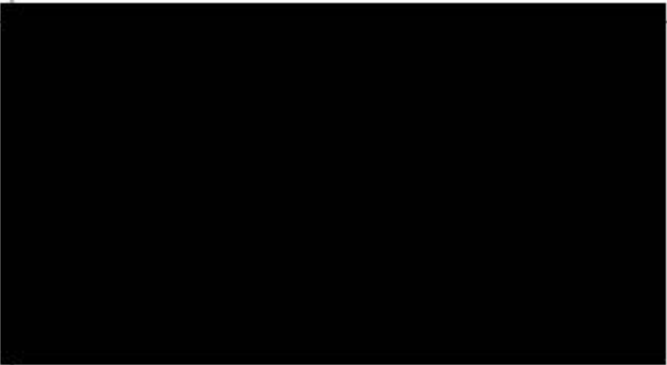

Sweden, 3.6 GHz Auction		
Organisation	The Swedish National Post and Telecommunications Agency (PTS)	
Project title	3.6 GHz Auction	
NERA's role	<p>NERA was the lead contractor for this project. The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Review of proposed auction format • Drafting of detailed auction rules • Software development (with Optimal Auctions as subcontractor) • Auction implementation 	
Auction type	SMRA auction with flexible switching rule. The auction included more than 50 bidders and 1,200 products.	
Project budget	<p>The budget for this project was greater than €200,000.</p> <p>NERA contributed more than 50% of the project value. Optimal Auctions contributed the remaining share of the project value.</p>	
Project Duration	Start date:	January 2007
	End date:	December 2007
Contact person	Name: Title: Address: Phone number: Email:	
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks to the high standards that we expect. I am pleased to recommend their services as experts on spectrum auctions.</p> <p>Signed </p> <p>Date <u>APRIL 12, 2013</u></p>	

Sweden, 1800 MHz Auction		
Organisation	The Swedish National Post and Telecommunications Agency (PTS)	
Project title	1800 MHz Auction	
NERA's role	<p>NERA was the lead contractor for this project. The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Review of proposed auction format • Drafting of detailed auction rules • Software development (with Optimal Auctions as subcontractor) • Auction implementation 	
Auction type	Clock auction for generic lots, followed by Vickrey auction for assignment of specific frequencies.	
Project budget	<p>The budget for this project was greater than €200,000.</p> <p>NERA contributed more than 50% of the project value. Optimal Auctions contributed the remaining share of the project value.</p>	
Project Duration	Start date: End date:	January 2010 November 2011
Contact person	Name: Title: Address: Phone number: Email:	
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks to the high standards that we expect. I am pleased to recommend their services as experts on spectrum auctions.</p> <p>Signed </p> <p>Date <u>APRIL 12, 2013</u></p>	


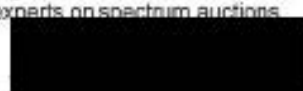
Belgium, 800 MHz Auction		
Organisation	BIPT (Belgium regulator for Post and Telecommunications)	
Project title	Belgium 800 MHz Spectrum Auction	
NERA's role	<p>NERA worked as a subcontractor to Aetha Consulting, advising the BIPT on its preparations for the award of 800 MHz spectrum. While Aetha focused on the valuation of the spectrum and associated licence conditions, NERA focused on the auction design. In particular, NERA advised on:</p> <ul style="list-style-type: none"> • The packaging of spectrum into lots to be included in the auction • The choice of auction format for the award • Guidance on key rules and auction implementation 	
Auction type	Simultaneous multi-round auction	
Project budget	<p>The total value of this contract is Confidential.</p> <p>NERA contributed more than 30% of the project value.</p>	
Project Duration	Start date:	May 2012
	End date:	November 2012
Contact person	Name: Title: Address: Phone number: Email:	
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks to the high standards that we expect. I am pleased to recommend their services as experts on spectrum auctions.</p> <p></p> <p>Signed _____</p> <p>Date 10 april 2013</p>	

Finland, 2.6 GHz Auction	
Organisation	The Finnish Communications Regulatory Authority (FICORA)
Project title	2.6 GHz Auction
NERA's role	<p>NERA was the lead contractor for this project. The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Review of proposed auction format • Software development (with Optimal Auctions as subcontractor) • Auction implementation
Auction type	SMRA auction with flexible switching rule. The auction included FDD lots as well as TDD lots.
Project budget	<p>The budget for this project was greater than €100,000.</p> <p>NERA contributed more than 50% of the project value. Optimal Auctions contributed the remaining share of the project value.</p>
Project Duration	<p>Start date: January 2009</p> <p>End date: December 2009</p>
Contact person	<p>Name:</p> <p>Title:</p> <p>Address:</p> <p>Phone number:</p> <p>Email:</p>
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks to the high standards that we expect. I am pleased to recommend their services as experts on spectrum auctions.</p> <p>Signed _____</p> <p>Date <u>10/4/2013</u></p>

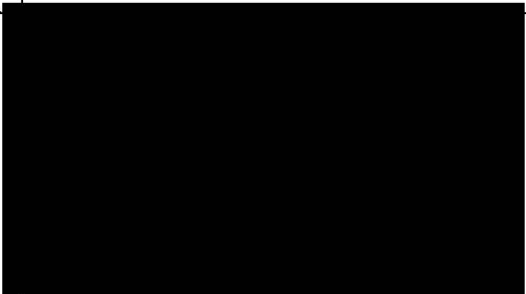
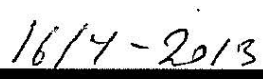

6.2. Auctioneer for Regulator in Complex Non-European Spectrum Auction

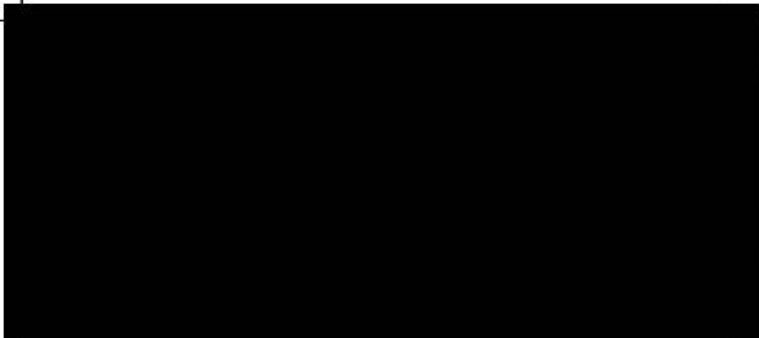

Singapore, Auction of 1800 MHz and 2.5 GHz Spectrum for 4G Systems and Services		
Organisation	Info-communications Development Authority of Singapore (IDA)	
Project title	Singapore Multi-Band Spectrum Auction	
NERA's role	<p>NERA is the lead contractor for this project. The NERA team previously undertook an analysis of allocation and assignment operations for the available spectrum, including advising on valuation. The NERA team has subsequently been contracted to undertake the following tasks:</p> <ul style="list-style-type: none"> • Advising IDA on the detailed rules for clock plus format • Providing expert comment on the official draft of the auction rules • Auction implementation, including software development (with Optimal Auctions as subcontractor) as required 	
Auction type	Multi-round clock plus auction.	
Project budget	<p>The total order price for this project is confidential.</p> <p>NERA will contribute more than 90% of the project value. Optimal Auctions will contribute the remaining share of the project value.</p>	
Project Duration	Start date:	March 2013
	End date:	Project still underway
Contact person	Name:	
	Title:	
	Address:	
	Phone number:	
	Email:	
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting is undertaking this assignment on behalf of my organisation. To date, NERA's team has carried out its tasks with a level of competency and professionalism that has met our expectations.</p>	
	Signed	
	Date	16 / 4 / 2013



6.3. Bid Support and Software for Mobile Operator in Spectrum Auction



Czech Republic – Auction of 800, 1800, 2600 MHz		
Organisation	Telefonica O2, Czech Republic	
Project title	Czech Spectrum Auction	
NERA's role	<p>NERA was the sole contractor for this work (responsible for 100% of the value of services provided). The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Advising Telefonica on developing bid strategy, analysing competitor behaviour and participating in calls with senior management • On-site support, including development of analysis software 	
Auction type	Simultaneous Multiple Round Auction (SMRA)	
Project budget	The budget for the project is confidential.	
Project Duration	Start date:	November, 2012
	End date:	February, 2013
Contact person	Name:	
	Title:	
	Address:	
	Phone number:	
	Email:	
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks to the high standards that we expect. I am pleased to recommend their services as experts on spectrum auctions.</p> <p>Signed </p> <p>Date <u>April 4th 2013</u></p>	

UK Auction of 800, 2600 MHz	
Organisation	Telefonica UK
Project title	UK 800MHz Auction Strategy
NERA's role	<p>NERA was the lead contractor for this project. The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Supporting Telefonica UK in developing bid strategy, including developing scenarios for competitor bidding • Running mock auctions using a proprietary auction system • Providing auction software, including bid tracking and analysis tools, and software for determining CCA winners and prices • On-site strategy support throughout the auction
Auction type	Combinatorial Clock Auction (CCA)
Project budget	<p>The budget for the project is confidential.</p> <p>NERA's contributed more than 90% of the project value.</p>
Project Duration	<p>Start date: July, 2012</p> <p>End date: February, 2012</p>
Contact person	<p>Name:</p> <p>Title:</p> <p>Address:</p> <p>Phone number:</p> <p>Email:</p>
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks to the high standards that we expect. I am pleased to recommend their services as experts on spectrum auctions.</p> <p>Signed _____</p> <p>Date <u>16.4.2013</u></p>

Denmark - 800 MHz Auction		
Organisation	TDC	
Project title	Bid Strategy Support for Danish 800 MHz Auction	
NERA's role	<p>NERA was the sole contractor for this project (responsible for 100% of the value of services provided). The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Support TDC in developing bid strategy, including developing scenarios for competitor bidding • Provide specialised auction software for bid tracking and forecasting outcomes of combinatorial bidding • On-site strategy support throughout the auction 	
Auction type	Combinatorial Clock Auction (CCA)	
Project budget	The budget for this project is confidential.	
Project Duration	Start date:	March, 2012
	End date:	September, 2012
Contact person	Name: Title: Address: Phone number: Email:	
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks to the high standards that we expect. I am pleased to recommend their services as experts on spectrum auctions.</p> <p>Signed </p> <p>Date </p>	



Spain Auction of 800, 900, and 2600 MHz		
Organisation	Telefonica Spain	
Project title	Spanish Spectrum Auction	
NERA's role	<p>NERA was the lead contractor for this project. The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Supporting Telefonica Spain in developing bid strategy, including developing scenarios for competitor bidding • Running mock auctions using a proprietary auction system • Providing auction software, including bid tracking and analysis tools • On-site strategy support throughout the auction 	
Auction type	Simultaneous Multiple Round Auction (SMRA)	
Project budget	<p>The budget for the project was above 300.000 euros.</p> <p>NERA's contributed more than 80% of the project value.</p>	
Project Duration	Start date:	March, 2011
	End date:	October, 2011
Contact person	Name: Title: Address: Phone number: Email:	
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks to the high standards that we expect. I am pleased to recommend their services as experts on spectrum auctions.</p> <p>Signed </p> <p>Date <u>April 11th 2013</u></p>	

Hungary Auction of 900 MHz		
Organisation	Telenor Hungary	
Project title	Hungary 900MHz Auction	
NERA's role	<p>NERA was the lead contractor for this project, supported by Aetha Consulting. The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Developing valuation model for available spectrum • Supporting Telenor Hungary in developing bid strategy, and modelling potential competitor behaviour • Modelling of optimal bid levels for Telenor Hungary 	
Auction type	First-Price Sealed Bid	
Project budget	<p>The budget for the project is confidential.</p> <p>NERA's contributed more than 50% of the project value.</p>	
Project Duration	Start date:	July, 2011
	End date:	January, 2012
Contact person	Name: Title: Address: Phone number: Email:	
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks to the high standards that we expect. I am pleased to recommend their services as experts on spectrum auctions.</p> <p>Signed </p> <p>Date <u>April 9, 2013</u></p>	

Ireland Auction of 800, 900, and 1800 MHz		
Organisation	Telefonica Ireland	
Project title	Irish Spectrum Auction	
NERA's role	<p>NERA was the lead contractor for this project. The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Developing and supporting Telefonica Ireland's response to the consultation • Creating a valuation framework for Telefonica Ireland • Developing bid strategy, including scenarios for competitor bidding • Running mock auctions using a proprietary auction system • Providing auction software, including bid tracking and analysis tools • On-site strategy support throughout the auction 	
Auction type	Combinatorial Clock Auction (CCA)	
Project budget	<p>The budget for the project is confidential.</p> <p>NERA's contributed more than 90% of the project value.</p>	
Project Duration	Start date: End date:	<p>September, 2011</p> <p>January, 2013</p>
Contact person	Name: Title: Address: Phone number: Email:	
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks to the high standards that we expect. I am pleased to recommend their services as experts on spectrum auctions.</p> <p>Signed </p> <p>Date 11/4/2013</p>	

Romania Auction of 800, 900, 1800, 2600 MHz		
Organisation	Orange Romania	
Project title	Romania Spectrum Auction	
NERA's role	<p>NERA was the lead contractor for this project. The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Developing and supporting Orange Romania's response to the consultation • Supporting Orange Romania's lobbying to the European Commission for a more effective auction format • Supporting Orange Romania in developing bid strategy, including developing scenarios for competitor bidding • Running mock auctions • Providing auction software, including bid tracking and analysis tools • On-site strategy support throughout the auction 	
Auction type	Package Clock Format	
Project budget	<p>The budget for the project is confidential.</p> <p>NERA contributed more than 50% of the project value.</p>	
Project Duration	Start date:	April, 2012
	End date:	October, 2012
Contact person	Name: Title: Address: Phone number: Email:	[REDACTED]
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks to the high standards that we expect. I am pleased to recommend their services as experts on spectrum auctions.</p> <p>Signed [REDACTED]</p> <p>Date 12.04.2013</p>	



Switzerland Auction of 800, 900, 1800, 2100, 2600 MHz		
Organisation	Orange Switzerland	
Project title	Swiss Spectrum Auction	
NERA's role	<p>NERA was the subcontractor for this project. The NERA team undertook the following tasks:</p> <ul style="list-style-type: none"> • Developing and supporting Orange Switzerland's response to documents released by the regulator • Supporting Orange Switzerland in developing bid strategy, including developing scenarios for competitor bidding • Running mock auctions • Providing auction software, including bid tracking and analysis tools • On-site strategy support throughout the auction 	
Auction type	Combinatorial Clock Auction (CCA)	
Project budget	<p>The budget for the project is confidential.</p> <p>NERA's contributed more than 30% of the project value.</p>	
Project Duration	Start date:	December, 2010
	End date:	February, 2012
Contact person	Name: Title: Address: Phone number: Email:	
Statement and signature by contact person	<p>It is my pleasure to confirm that NERA Economic Consulting undertook this assignment on behalf of my organisation. NERA's team completed all the required tasks to the high standards that we expect. I am pleased to recommend their services as experts on spectrum auctions.</p> <p>Signed </p> <p>Date <u>16 April 2013</u></p>	

7. Forms

In this section, we provide the following forms:

- Filled-in and signed Form 1: Offer
- Filled-in and signed Form 2: Invoice
- Contract Sample and list of exceptions and suggestions for modifications
- NERA Economic Consulting: signed declaration of evidence in accordance with Point 12 of Chapter II of this instructions and Form 4: declaration of suitability.
- Optimal Auctions: signed declaration of evidence in accordance with Point 12 of Chapter II of this instruction, including obligations as a subcontractor, and Form 4: declaration of suitability.

Please note that, as a US company, a signature of an authorised representative is considered binding and a stamp is not required. The authorised representative in this case is Richard Marsden, Vice President, NERA.

TENDERER

National Economic Research Associates, Inc.

OFFER

1. Subject of the Public Contract: SELECTION OF TENDERER TO DELIVER PROFESSIONAL CONSULTING SERVICES AND ACCESS TO THE SOFTWARE FOR THE IMPLEMENTATION OF COMPLEX MULTIOBJECT MULTIROUND ELECTRONIC AUCTION FOR AWARDDING RADIO FREQUENCIES IN THE 800 MHz, 900 MHz, 1800 MHz, 2100MHz AND 2600 MHz FREQUENCY BANDS
2.1 Offer price in EUR without VAT: _____
2.2 Offer price in EUR including VAT: _____
3. Offer validity until
4. Tenderer's Data
4.1 Company name: National Economic Research Associates, Inc.
4.2 Legal representative: _____
4.3 VAT ID: US Tax ID: 95-2879539
4.4 Registration Number: 95-2879539
4.5 International bank account Number: ABA/Routing: 021000089 Acct #: 30758277
4.6 Address: 1166 Avenue of the Americas 29th Floor New York, NY 10036
4.7 Telephone Number: _____
4.8 Fax Number: _____
4.9 Contact person: _____
4.10 E-mail: _____
4.11 Person responsible for signing the Contract: _____

Date: 30 April 2013

Stamp and signature

TENDERER

National Economic Research Associates, Inc.

PRO FORMA INVOICE

SUBJECT OF THE PUBLIC CONTRACT: SELECTION OF TENDERER TO DELIVER PROFESSIONAL CONSULTING SERVICES AND ACCESS TO THE SOFTWARE FOR THE IMPLEMENTATION OF COMPLEX ELECTRONIC MULTIOBJECT MULTIROUND AUCTION FOR AWARDDING RADIO FREQUENCIES IN THE 800 MHZ, 900 MHZ, 1800 MHZ, 2100MHZ AND 2600 MHZ FREQUENCY BANDS

No.	Description of supply/service	Unit	Quantity	Price per Unit without VAT:	VAT (%)	Price without VAT:
1.	Pre-Auction Consultancy Services (Chapter 2.2.1), Auction rules (Chapter 2.2.2) and Auction Software (Chapter 2.2.3), assuming	Pre-Auction Consultancy Services, Auction Software and License	1	€145 000	0%	€145 000
	a) 2 auction workshops (see Section 10 of Chapter 2.2.1 of the Technical Description)	Workshop	1			
	b) 2 mock auctions for Contracting Authority's staff and 2 mock auctions for each prospective bidder separately (see Section 11 of Chapter 2.2.1 of the Technical Description)	Mock auction	1			
	c) Price of software license for the complex multi-round auction format CCA (possible discount for SMRA).	Piece	1			
2.	Post Auction Consulting services (Final auction report,	Post Auction Consulting services	1			



APEK

	auction results analysis, documentation and archive of auction procedure).					
3.	Consulting services of Senior Consultant	Day	30			
4.	Consulting services of Junior Consultant	Day	30			
				<i>Total price without VAT :</i>		
				<i>The amount of VAT:</i>		
				<i>Total price in EUR including VAT:</i>		

Date: 30 April 2013

Stamp and signature

OBLIGATIONS OF THE CONTRACTING AUTHORITY AND THE PROVIDER

Article 5

The Contracting authority undertakes to:

- make available to the Provider all necessary information, data and documents available to the Contracting authority and related to the provision of the Service under this Contract,
- cooperate with the Provider's authorised representative,
- submit its requests to the Provider in due time to enable the normal implementation of Contractual services,
- ensure the human, informational and financing resources required for the implementation of services,
- give the Provider all the support necessary for the provision of services according to the requirements of this Contract,
- inform the Provider of any and all changes and new conditions that could affect the provision of the Contractual services,
- review the Provider's report and the specifications of tasks completed according to the technical requirements of the Tender documentation after each completed phase,
- pay for services within the agreed deadlines.

services or requires solutions contrary to professional rules, the Provider shall notify the Contracting authority of this fact and propose a more suitable solution; however, if the Contracting authority insists on its request, the Provider shall be obligated to fulfil its task according to the Contracting authority's request.

(2) The Provider's unsubstantiated refusal to perform a requested task or a deviation from the requested method of implementation shall be deemed a breach of obligations assumed under this Contract, due to which the Contracting authority may terminate this Contract, provided that the Contracting authority has previously notified the Provider of the infringements in writing.

Article 8

The Contracting authority's requests and specifications shall be subject to change, amendment and supplementation by mutual arrangement during the term of the Contract, in which case the Provider shall not in any way be entitled to a reimbursement of any costs that modified requests may cause.

COMPETENT AUTHORITIES

Article 9

(1) The administrator of the Contract for the Contracting Authority shall be [REDACTED]

(2) The administrator of the Contract for the Provider _____, who shall also be responsible for the provision of services under this Contract.

CONTRACT VALUE

Article 10

(1) The Provider shall charge the following prices for the services defined in Article 1 of this Contract:

1. Sum total of all counselling services prior to the implementation of the auction, the preparation of detailed auction rules and the provision of software for the conduct of the auction: EUR _____
 2. Sum total of all counselling services following the auction (auction analysis, final auction report, documentation and archiving of the auction procedure):
EUR _____
 3. Price of a counselling day of a Senior Advisor: EUR _____ 4. Price of a counselling day of a Junior Advisor: EUR _____
- based on the Provider's Offer no. _____.

(2) The Parties agree that this price shall include all of the Provider's costs. The price referred to in the previous paragraph shall include all duties, taxes and costs. The stated prices are DDP (Incoterms 2010).

(3) The price shall be fixed for the entire duration of this Contract.





PROVIDER:

Date:

CLIENT

Date:

APEK

Franco Dolenc
Director

Annexes:

- Offer, dated, including a preliminary cost estimate,
- Tender documentation No. dated

NERA will be pleased to sign the contract proposed by the APEK, subject to the following.

The following are exceptions and suggestions for modifications to the Draft Contract provided by Post and Electronic Communication Agency of the Republic of Slovenia (the "Contracting authority") in connection with the Request for Proposals Tender Documentation, relating to the selection of a tenderer to deliver professional consulting services and access to the software for the implementation of complex multi-object multi-round electronic auction for awarding radio frequencies in the 800 mhz, 900 mhz, 1800 mhz, 2100mhz and 2600 mhz frequency bands. National Economic Research Associates, Inc. ("We" or the "Provider") is willing to discuss and consider alternatives that are mutually acceptable to the Provider and the Contracting authority.

CLAUSE NO.	PROVISION	SUGGESTED CLARIFICATION
Article 5	Obligations of the Contracting Authority and the Provider	We suggest clarifying that the Provider will use all information supplied by the Contracting authority without independently verifying the same and that the Provider assumes no responsibility for the accuracy or completeness of such information.
Article 13	Terms of Payment	We suggest clarifying that Provider may suspend the provision of services in the event of non-payment by Contracting authority.
Article 14: (2)	Provider's Guarantees and Warranty Obligations	We suggest deleting this language and clarifying that in the event Provider fails to provide a specific service under this Contract, the Contracting authority provide fifteen (15) days prior written notice with an opportunity to cure within such fifteen (15) day period.
Article 16	Business Secret	<p>We suggest clarifying that Provider be permitted to retain copies of Confidential Information in accordance with its legal, disaster recovery and records retention requirements, but subject to its confidentiality obligations.</p> <p>We suggest clarifying that obligations of confidentiality hereunder will not apply to information (i) that is publicly available (not as a result of a breach by a party); (ii) already known to a party; (iii) disclosed by a third party with a right to disclose; (iv) independently developed by a party without reference to the other party's confidential information; or (v) required by law or court order.</p>
Article 17 & Article 21	Contractual Penalty & Final Provisions	<p>We suggest deleting Article 17: (1) in its entirety.</p> <p>We suggest that Contracting authority provide thirty (30) days prior written notice of termination for convenience. We suggest that Contracting authority provide fifteen (15) days prior written notice with an opportunity to cure within such fifteen (15) day period in the event Contracting authority wishes to terminate the agreement for cause.</p> <p>We suggest clarifying that, in the event of termination for any reason, Provider be entitled to payment for all services properly performed and all expenses properly incurred, in each case through the effective date of termination.</p>

Additional Terms

We suggest including provisions substantially similar to the following:

"Limitation on Liability. Neither the Provider nor the Contracting authority will be liable for any indirect, special, punitive, consequential or incidental damages, including loss of profits. Except for any claim for personal injury or death arising out of the negligence or willful misconduct of the Provider, the Provider's liability (whether based on any action or claim in contract, tort, or otherwise) to the Contracting authority arising out of or relating to services provided by Provider will not exceed the total professional fees paid to Provider for such services.

"Indemnification. The scope of work and fees hereunder do not contemplate the Provider being involved in any legal proceedings or subject to third-party claims. Accordingly, the Contracting authority agrees to indemnify the Provider and its directors, officers, stockholders and employees (collectively, "Provider Persons"), from and against all claims, liabilities, losses, damages, costs and expenses as incurred (including reasonable legal fees and costs), and to pay the Provider's standard rates for professional time spent (including for preparing, defending or giving testimony or furnishing documents), in connection with actual or threatened actions, proceedings or investigations, whether or not the Provider is a party (collectively "Losses"), relating to or arising out of the services provided hereunder or any matter relating to such services. However, the Contracting authority will not be liable under this indemnity to a Provider Person to the extent any Losses sustained by such Provider Person resulted primarily from the gross negligence, wilful misconduct or bad faith of any Provider Person."

"Ownership. All materials prepared by the Provider specifically and exclusively for the Contracting authority pursuant to this Contract shall be owned by the Contracting authority. We suggest further clarifying that the Provider shall retain all of its rights in its methodologies and methods of analysis, ideas, concepts, expressions, know how, methods, models, tools, techniques, skills, generic industry information, knowledge and experience (and any graphic representations of any of these) whether now possessed or hereafter acquired by the Provider (the "Provider IC"), and that the Provider's deliverables will inherently contain and/or embed Provider IC. We also suggest clarifying that any license with regard to Provider IC be non-transferable and limited to the Contracting authority's internal business use of Provider's deliverables.

While the services and deliverables provided by the Provider may include advice and recommendations, all decisions in connection with the implementation of such advice and recommendations shall be the sole responsibility of, and made by, the Contracting authority. The services and deliverables are furnished solely for the Contracting authority's internal use, and may not be disclosed to any person other than the Contracting authority's directors, officers, employees, legal advisors and contractors who have a need to know in connection with the Contracting authority's internal use thereof (and, in the case of contractors, who are bound by appropriate confidentiality restrictions) without Provider's prior written consent.

"Severability. It is the intent of the parties that the provisions of this Agreement shall be enforced to the fullest extent permitted by applicable law. To the extent that the terms set forth in this Agreement or any word, phrase, clause or sentence is found to be illegal or unenforceable for any reason, such word, phrase, clause or sentence shall be modified or deleted in such manner so as to afford the party for whose benefit it was intended the fullest benefit commensurate with making this Agreement, as modified, enforceable, and the balance of this Agreement shall not be affected thereby, the balance being construed as severable and independent."

"Non-Solicitation. During the term of this Agreement and for a period of one (1) year following the last date on which Provider provides services to the Contracting authority hereunder, neither party will solicit for employment, employ or otherwise engage (or assist any third party to solicit for employment, employ or otherwise engage) any officer, Provider or other professional or managerial level employee who was employed by the other party during the term of this Agreement and involved with the services provided hereunder."

"Use of Names. The Contracting authority will not refer to Provider or attribute any information to Provider in the press or for advertising or promotional purposes, without the Provider's prior written consent. Similarly, Provider will not refer to Contracting authority in the press, for advertising or promotional purposes, without the Contracting authority's prior written consent, provided that Provider may include the Contracting authority's name

and/or logo in a list of representative clients of the Provider for general client marketing and employee recruiting purposes.”

“Survival. Any sections that by their nature or meaning should survive the termination or expiration of this Contract shall survive the termination or expiration of this Contract.”

**CERTIFICATE OF THE CHIEF FINANCIAL OFFICER OF
NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC.**

██████████ Chief Financial Officer and legal representative of National Economic Research Associates, Inc. at office at ██████████ New York 10601, USA, and registration number 95-2879539 (the "Corporation" or "Tenderer"), in accordance with the Tender Documentation, relating to the selection of a tenderer to deliver professional consulting services and access to the software for the implementation of complex multi-object multi-round electronic auction for awarding radio frequencies in the 800 mhz, 900 mhz, 1800 mhz, 2100mhz and 2600 mhz frequency bands, Sections 12.1, 12.2 and 12.3 do hereby certify as follows:

1. The Corporation or its legal representatives in the case of legal persons have never been the subject of a conviction by final judgment of crimes listed below:
 - acceptance of bribe during the election;
 - fraud;
 - abuse of a position of monopoly;
 - false bankruptcy;
 - defrauding creditors;
 - commercial fraud;
 - fraud affecting the European Union;
 - deception in obtaining loan or advantages;
 - fraud in securities trading; deception of purchasers;
 - unauthorized use of another's mark or model;
 - unauthorized use of another's patent or topography;
 - forgery or destruction of business documents;
 - disclosure and unauthorized acquisition of trade secrets;
 - abuse of information system;
 - abuse of insider information;
 - abuse of financial instruments market;
 - abuse of position or trust in business activity;
 - prohibited acceptance of gifts;
 - prohibited giving of gifts;
 - counterfeiting money;
 - fabrication and use of counterfeit stamps of value or securities;
 - money laundering;
 - abuse of non-cash means of payment;
 - use of counterfeit non-cash means of payment;
 - fabrication, acquisition and disposal of instruments of forgery;
 - tax evasion;
 - smuggling;
 - disclosure of classified information;
 - acceptance of bribes;
 - giving bribes;
 - accepting benefits for illegal intermediation;
 - giving of gifts for illegal intervention;
 - criminal association.
2. The Corporation is not on the day of submission of an offer disqualified from being awarded public contracts due to the inclusion in the record of tenderers with negative references.

-2-

3. The Corporation has on the date of submission of the offer, in accordance with the regulations of the country in which it is established has no outstanding, unpaid obligations relating to the payment of social security contributions or in connection with the payment of taxes in the amount of 50 euros or more.
4. The Corporation has no any outstanding liabilities to subcontractors in previous public procurement procedures.
5. The Corporation has a valid registration to do business, which is the subject of this procedure (consulting services in the field of mobile industries and /or regulatory affairs) pursuant to the regulations of the state of its establishment.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of the Corporation this _____ day of April, 2013.

[Redacted Signature]

Witnesses:

[Redacted Witness Signature]

State of New York)
County of Westchester)

On the 12 day of April, 2013 before me personally came [Redacted] to me known, and known to me to be the individual described in, and who executed the foregoing instrument, and David C. Bucco acknowledged to me that he executed the same.

[Redacted Signature]
Notary Public

[Redacted Notary Seal]
Notary Public, State of New York
No. 01BE6155390
Qualified in Westchester County
Commission Expires November 13, 2014

**CERTIFICATE OF THE CHIEF FINANCIAL OFFICER OF
NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC.**

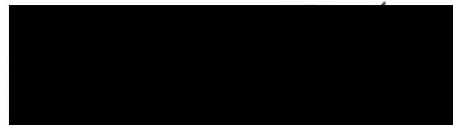
██████████ Chief Executive Officer and legal representative of < Optimal Auctions, Inc. at office at ██████████, ██████████, ██████████, USA, and Employer Identification Number 94-3353949 (the "Corporation" or "Subcontractor"), in accordance with the Tender Documentation, relating to the selection of a tenderer to deliver professional consulting services and access to the software for the implementation of complex multi-object multi-round electronic auction for awarding radio frequencies in the 800 MHz, 900 MHz, 1800 MHz, 2100MHz and 2600 MHz frequency bands, Sections 12.1, 12.2 and 12.3 do hereby certify as follows:

1. The Corporation or its legal representatives in the case of legal persons have never been the subject of a conviction by final judgment of crimes listed below:
 - acceptance of bribe during the election;
 - fraud;
 - abuse of a position of monopoly;
 - false bankruptcy;
 - defrauding creditors;
 - commercial fraud;
 - fraud affecting the European Union;
 - deception in obtaining loan or advantages;
 - fraud in securities trading; deception of purchasers;
 - unauthorized use of another's mark or model;
 - unauthorized use of another's patent or topography;
 - forgery or destruction of business documents;
 - disclosure and unauthorized acquisition of trade secrets;
 - abuse of information system;
 - abuse of insider information;
 - abuse of financial instruments market;
 - abuse of position or trust in business activity;
 - prohibited acceptance of gifts;
 - prohibited giving of gifts;
 - counterfeiting money;
 - fabrication and use of counterfeit stamps of value or securities;
 - money laundering;
 - abuse of non-cash means of payment;
 - use of counterfeit non-cash means of payment;
 - fabrication, acquisition and disposal of instruments of forgery;
 - tax evasion;
 - smuggling;
 - disclosure of classified information;
 - acceptance of bribes;
 - giving bribes;
 - accepting benefits for illegal intermediation;
 - giving of gifts for illegal intervention;
 - criminal association.
2. The Corporation is not on the day of submission of an offer disqualified from being awarded public contracts due to the inclusion in the record of tenderers with negative references.
3. The Corporation has on the date of submission of the offer, in accordance with the regulations of the country in which it is established has no outstanding, unpaid obligations relating to the

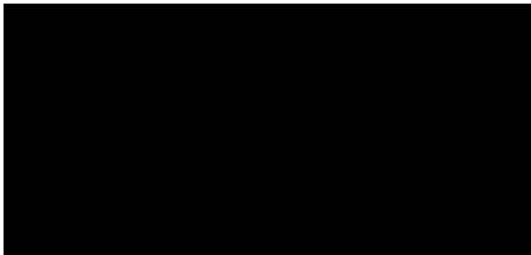
payment of social security contributions or in connection with the payment of taxes in the amount of 50 euros or more.

4. The Corporation has no any outstanding liabilities to subcontractors in previous public procurement procedures.
5. The Corporation has a valid registration to do business, which is the subject of this procedure (consulting services in the field of mobile industries and /or regulatory affairs) pursuant to the regulations of the state of its establishment.
6. The Corporation is offering its services to APEK as a Subcontractor to National Economic Research Associates, Inc. (hereafter "Tenderer"). The Corporation is aware that direct payments to Subcontractors by the Contracting Authority are in accordance with the seventh paragraph of Article 71 of the ZJN-2. The Corporation is also aware of its obligation to provide a copy of the contract that it enters into with the Tenderer, within 5 days of this contract being signed.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of the Corporation this 19th day of April, 2013.

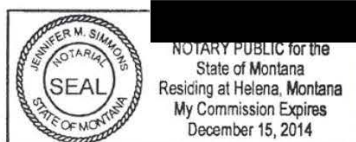
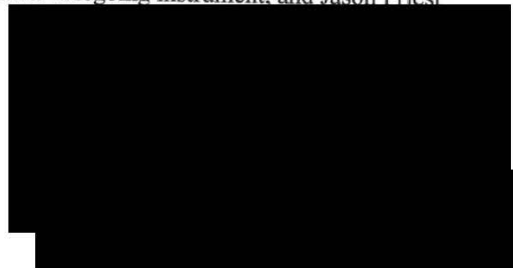


Witnesses:

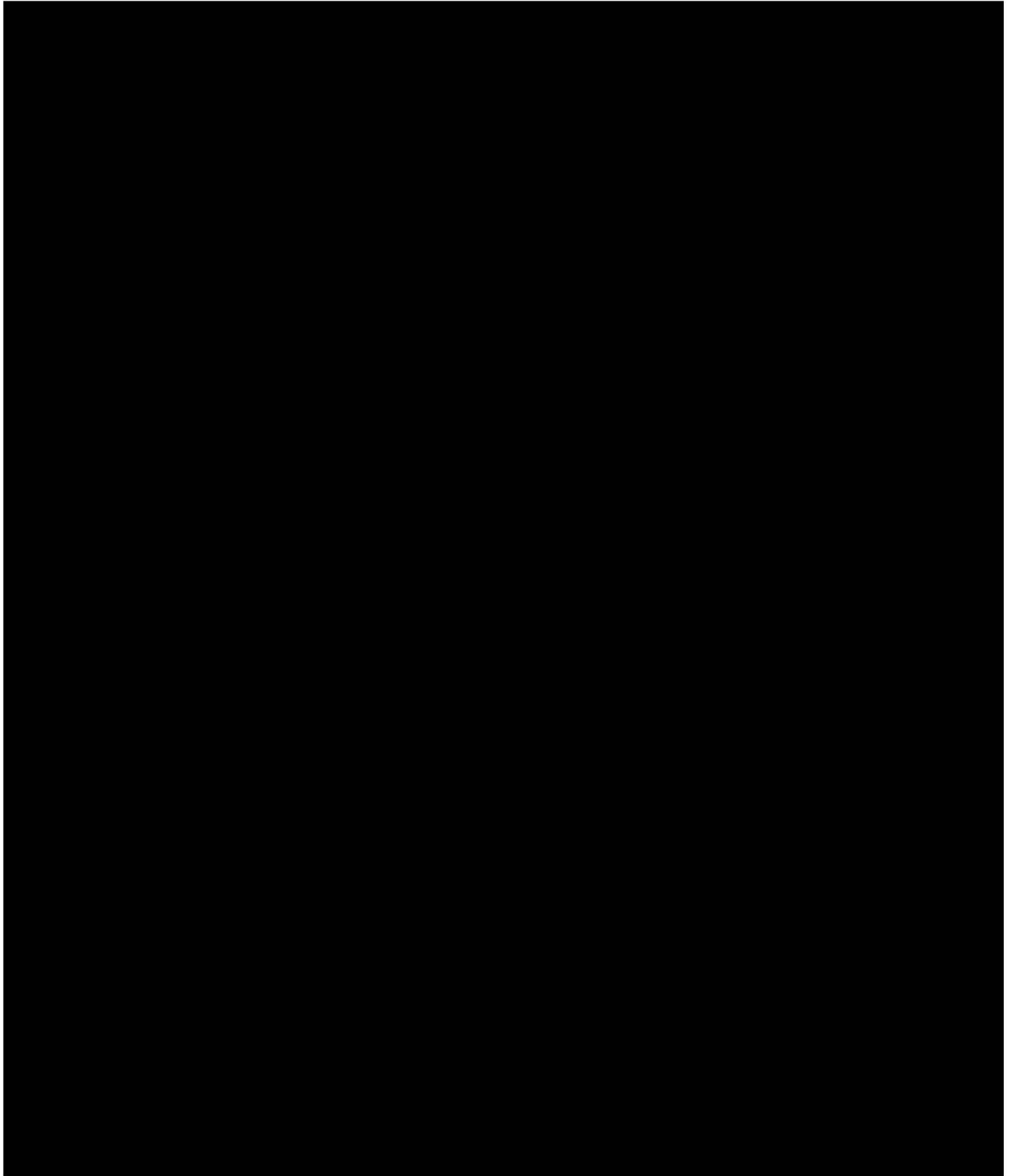


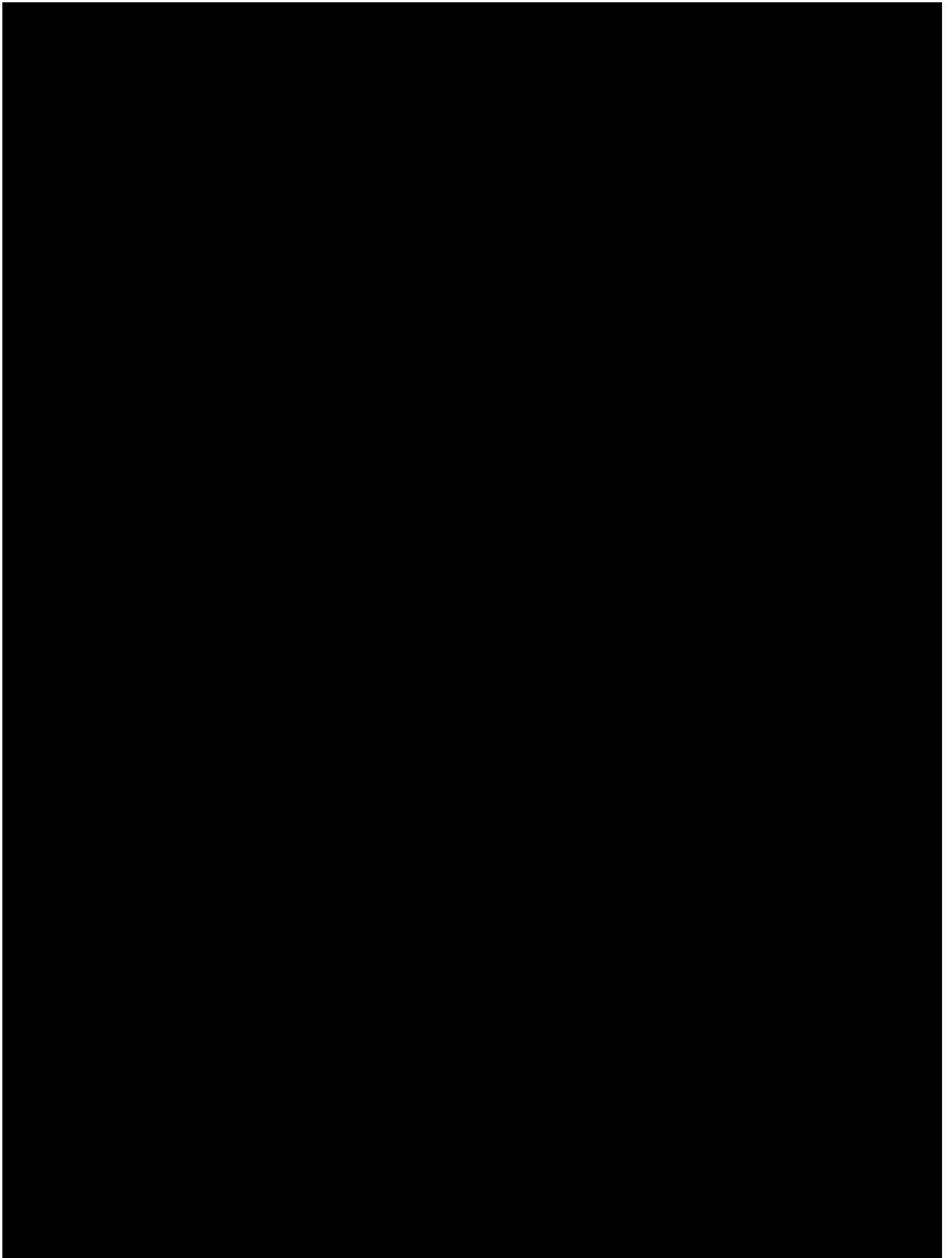
State of Montana
County of Lewis & Clark

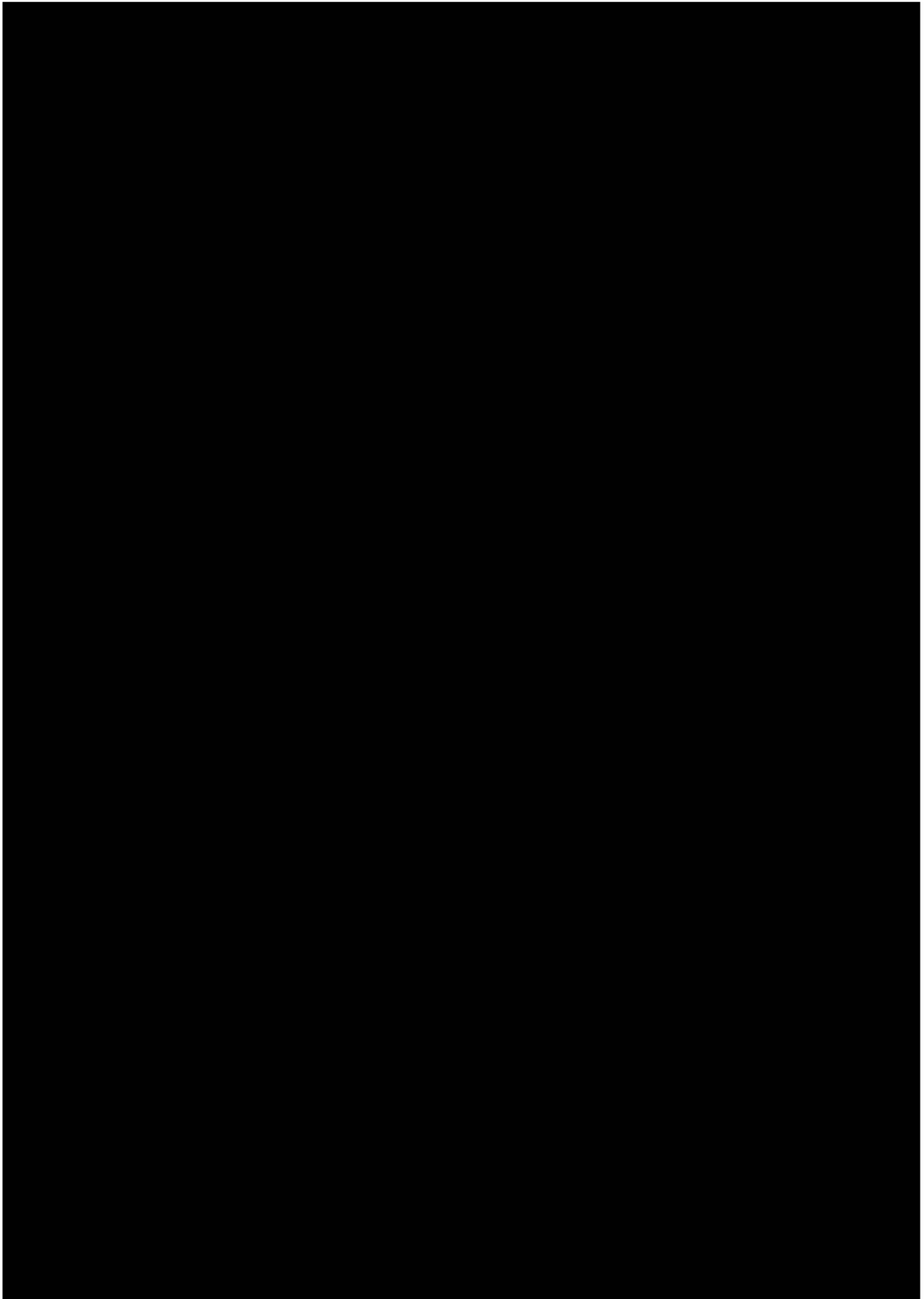
On the 23rd day of April, 2013 before me personally came Jason Priest to me known, and known to me to be the individual described in, and who executed the foregoing instrument, and Jason Priest acknowledged to me that he executed the same.

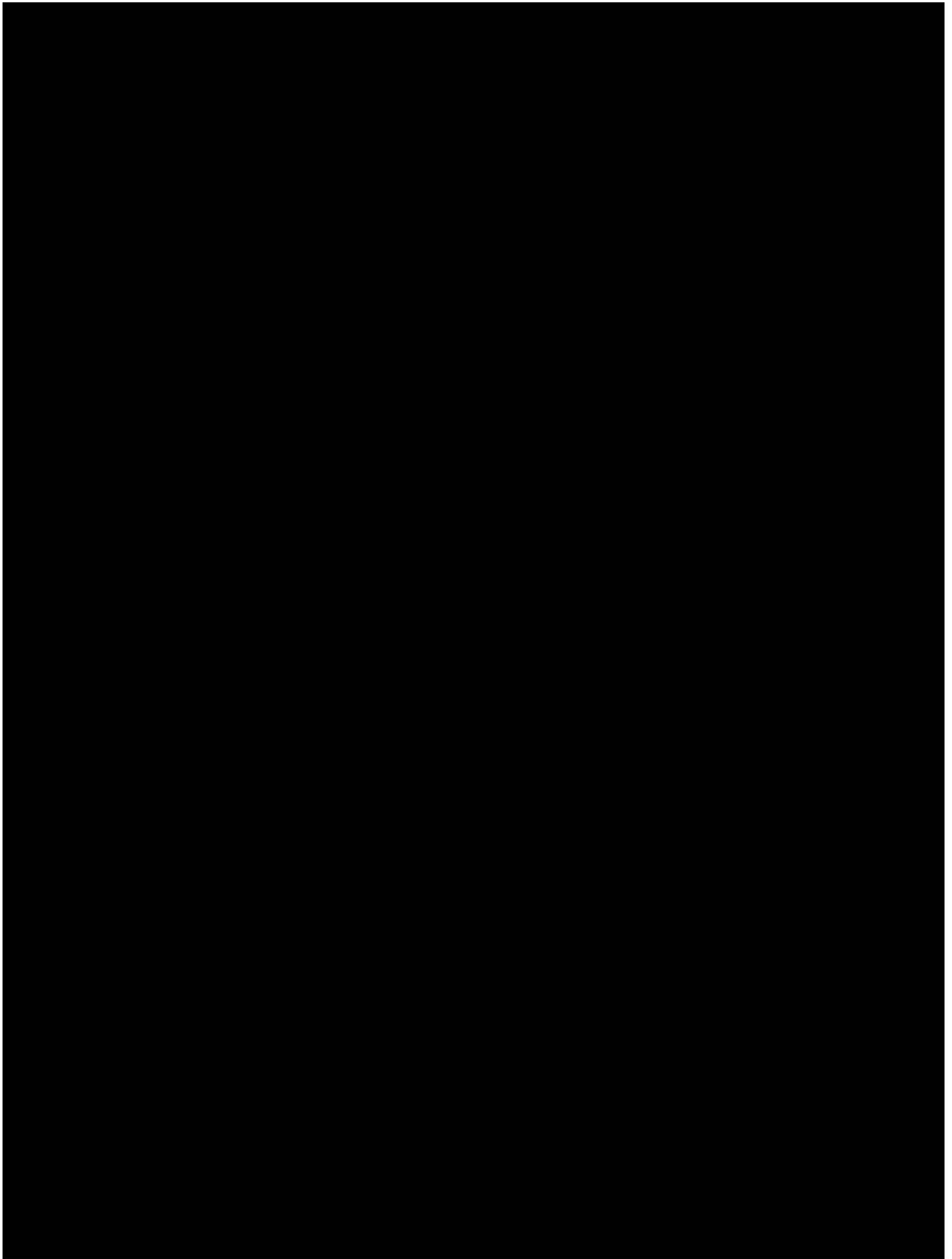


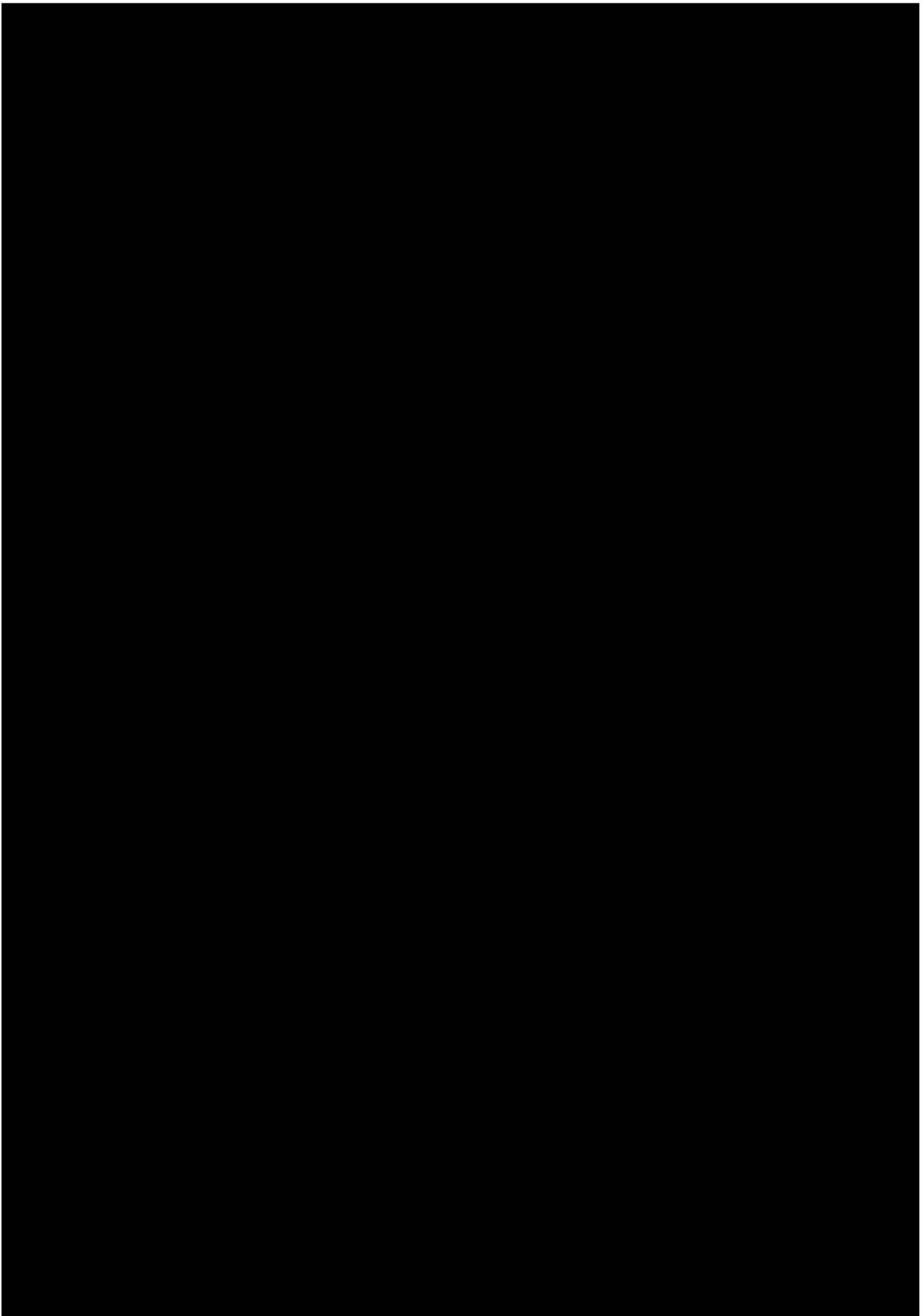
Appendix A. Curricula Vitae

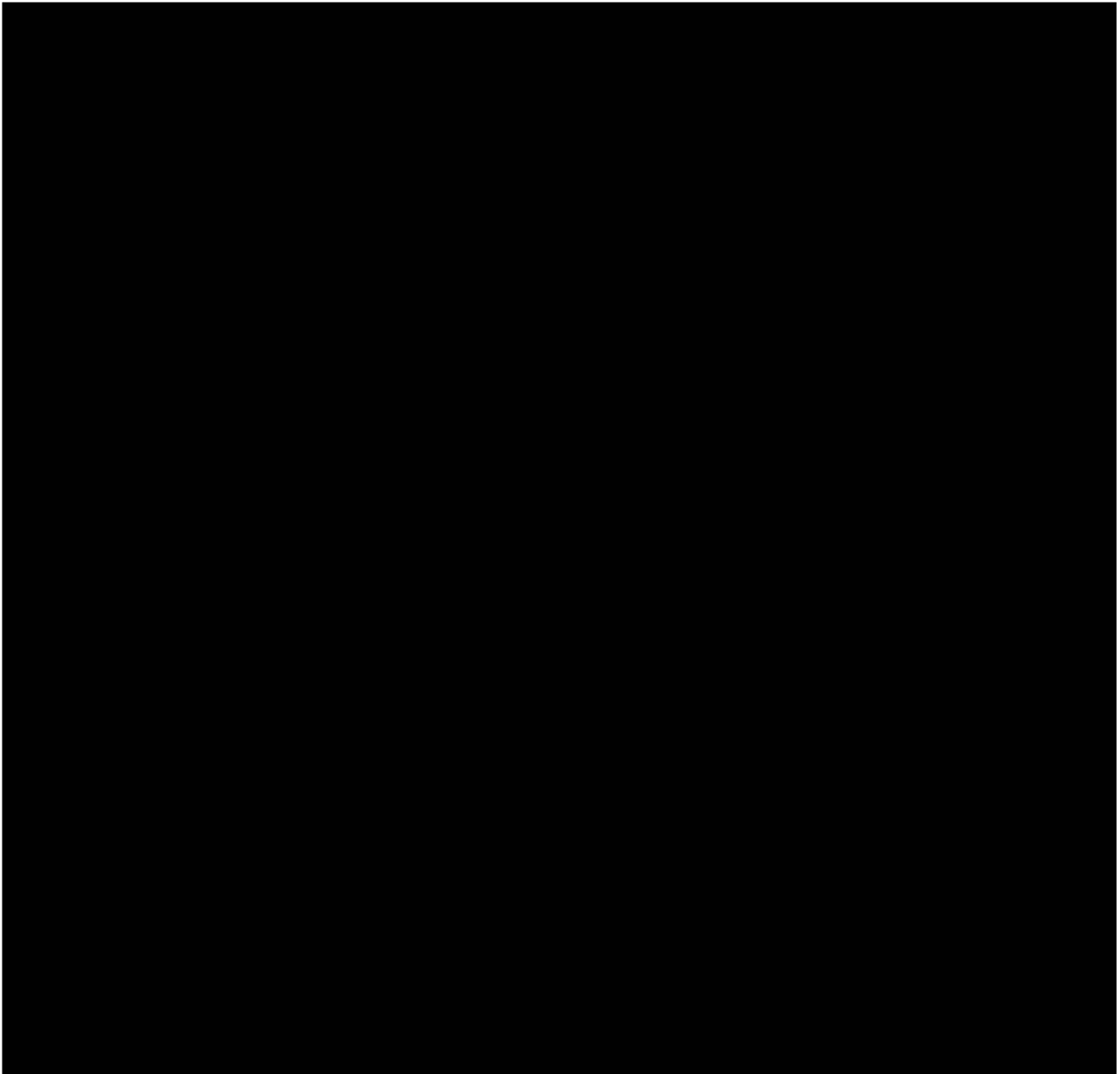


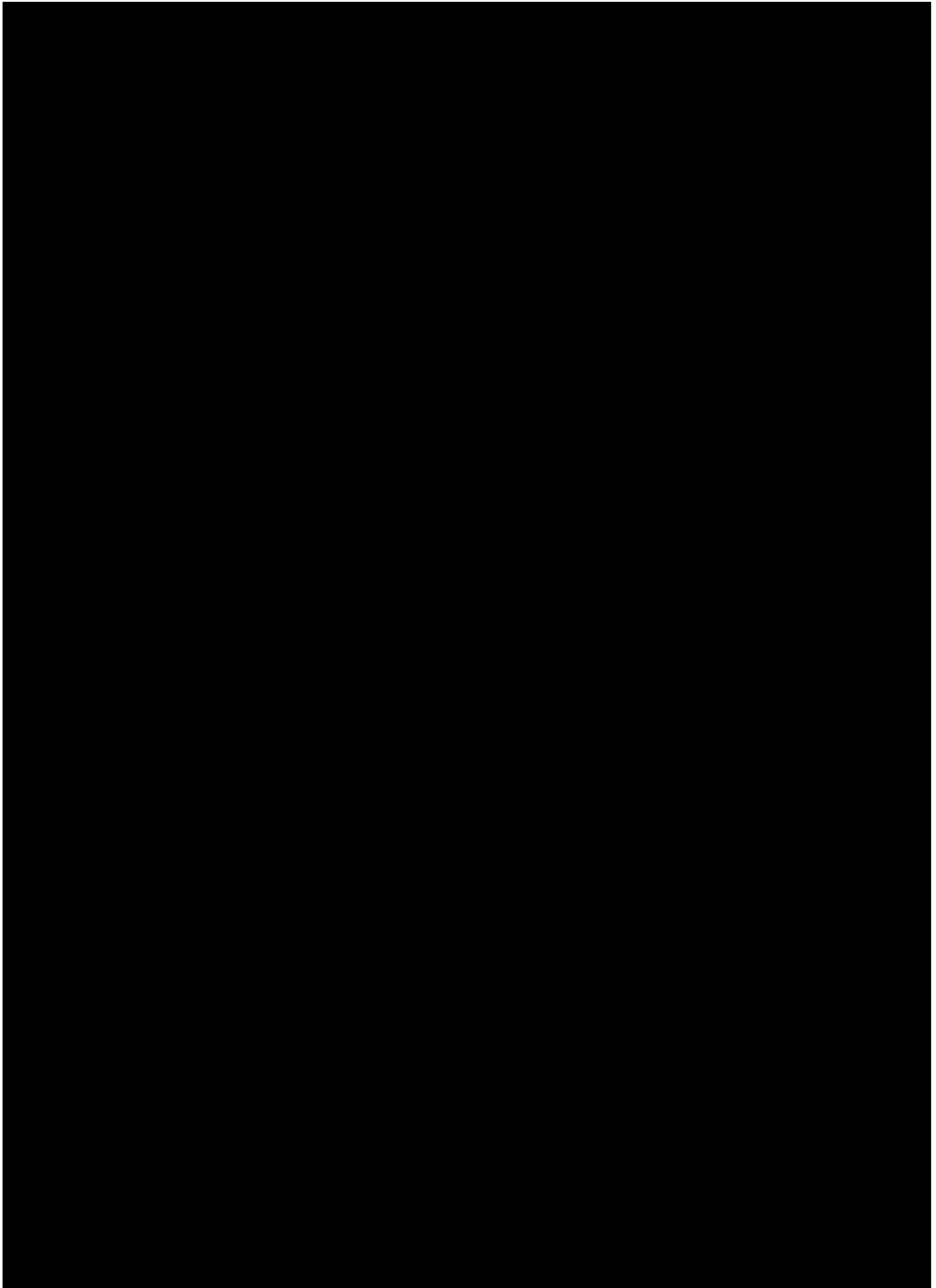


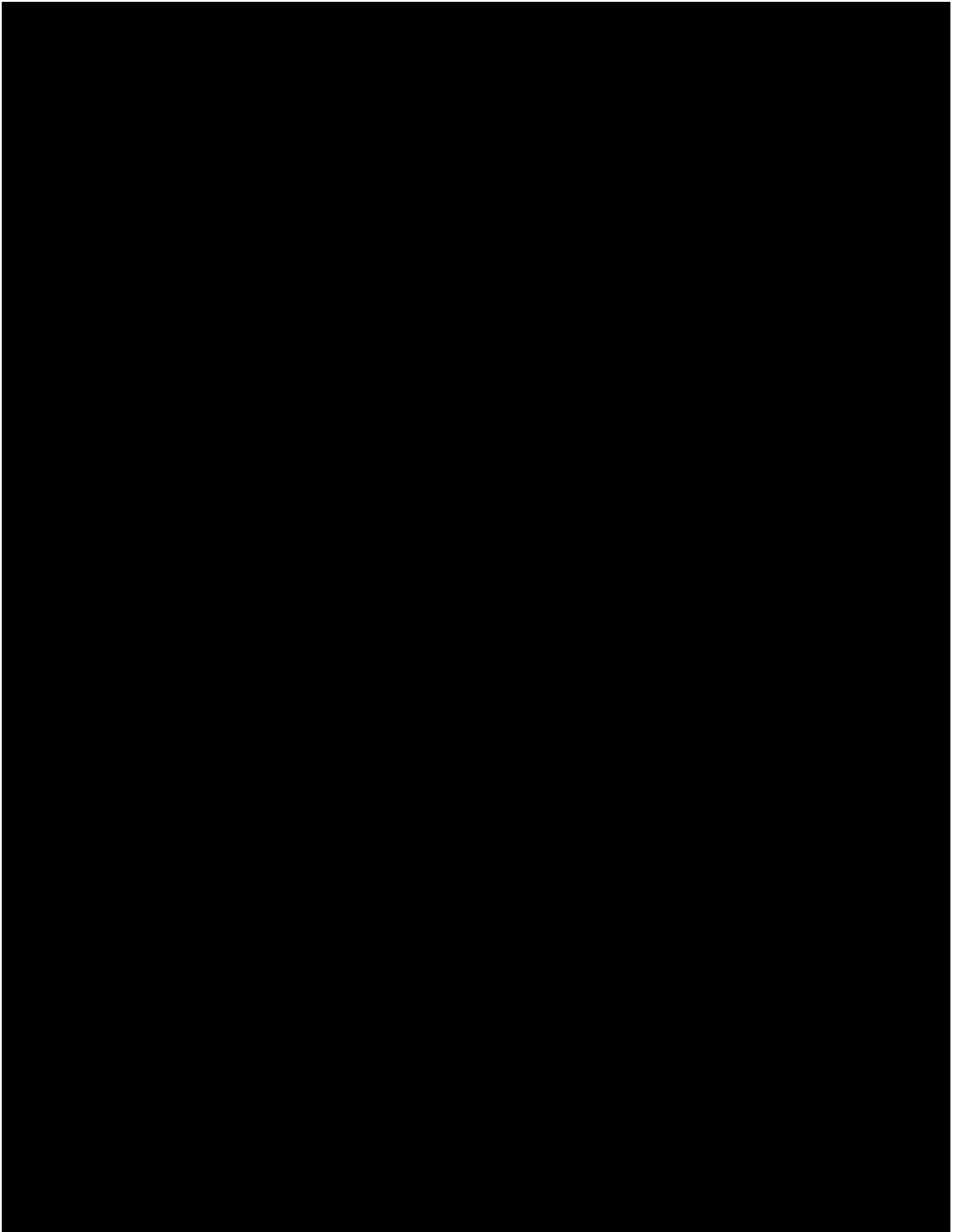


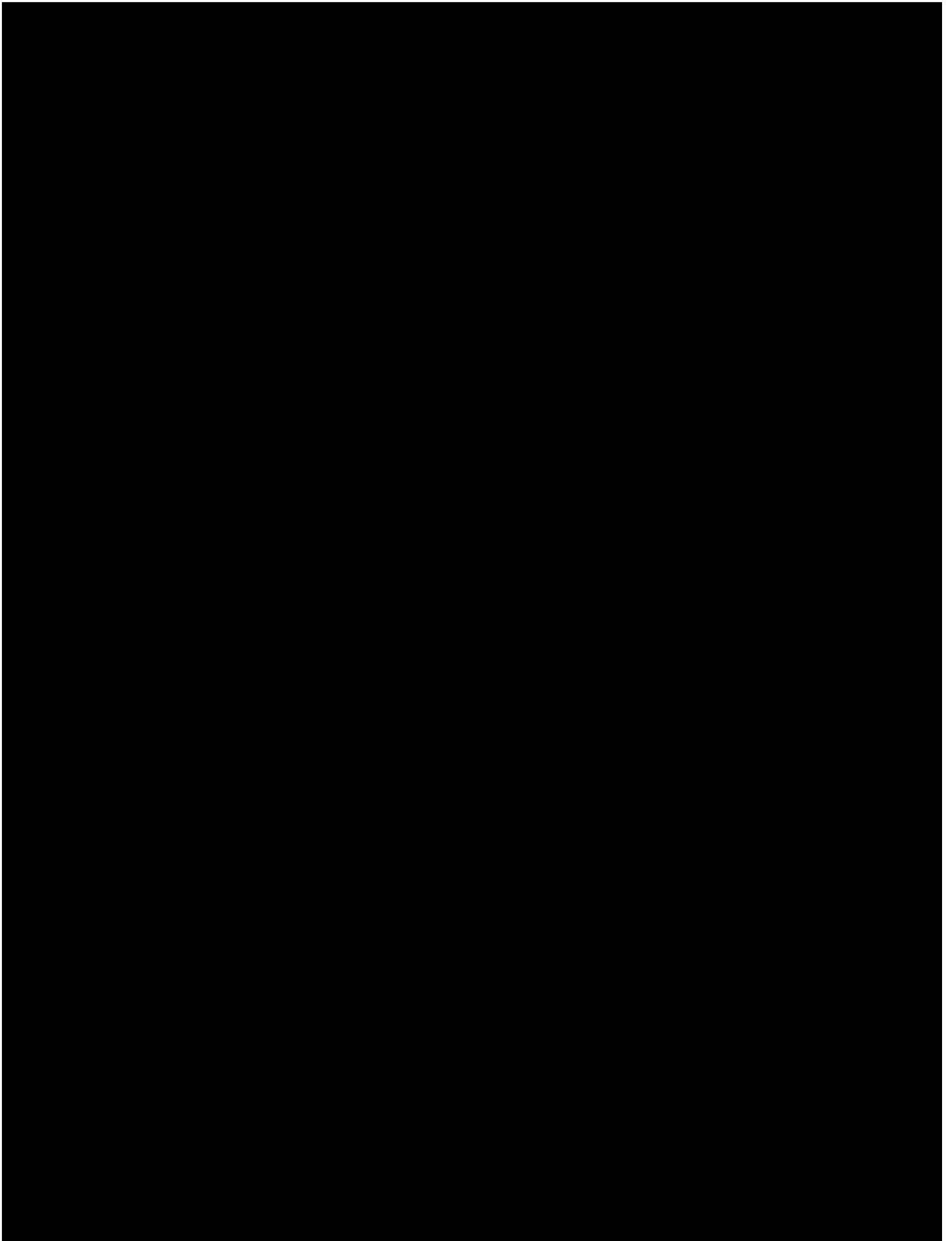


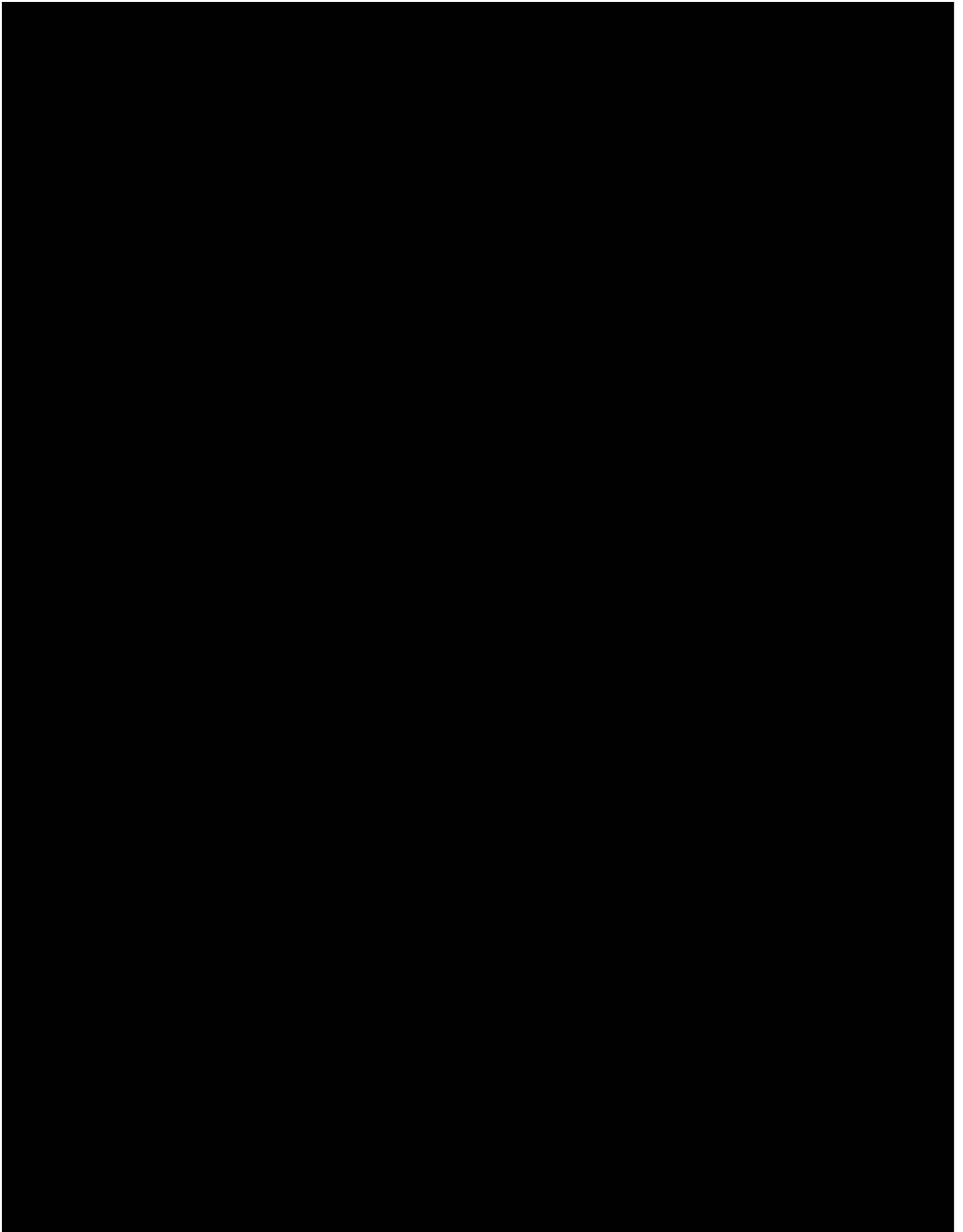


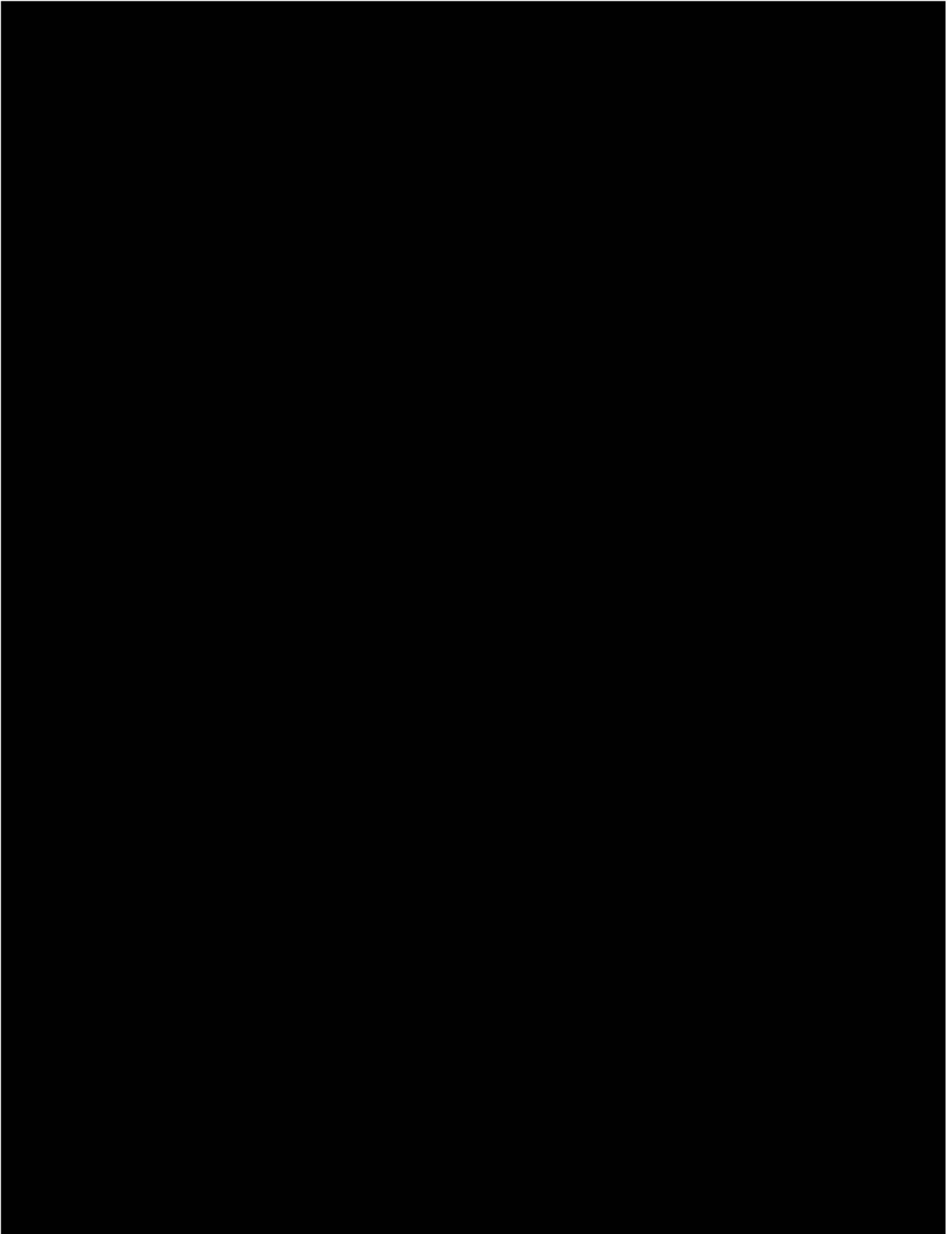


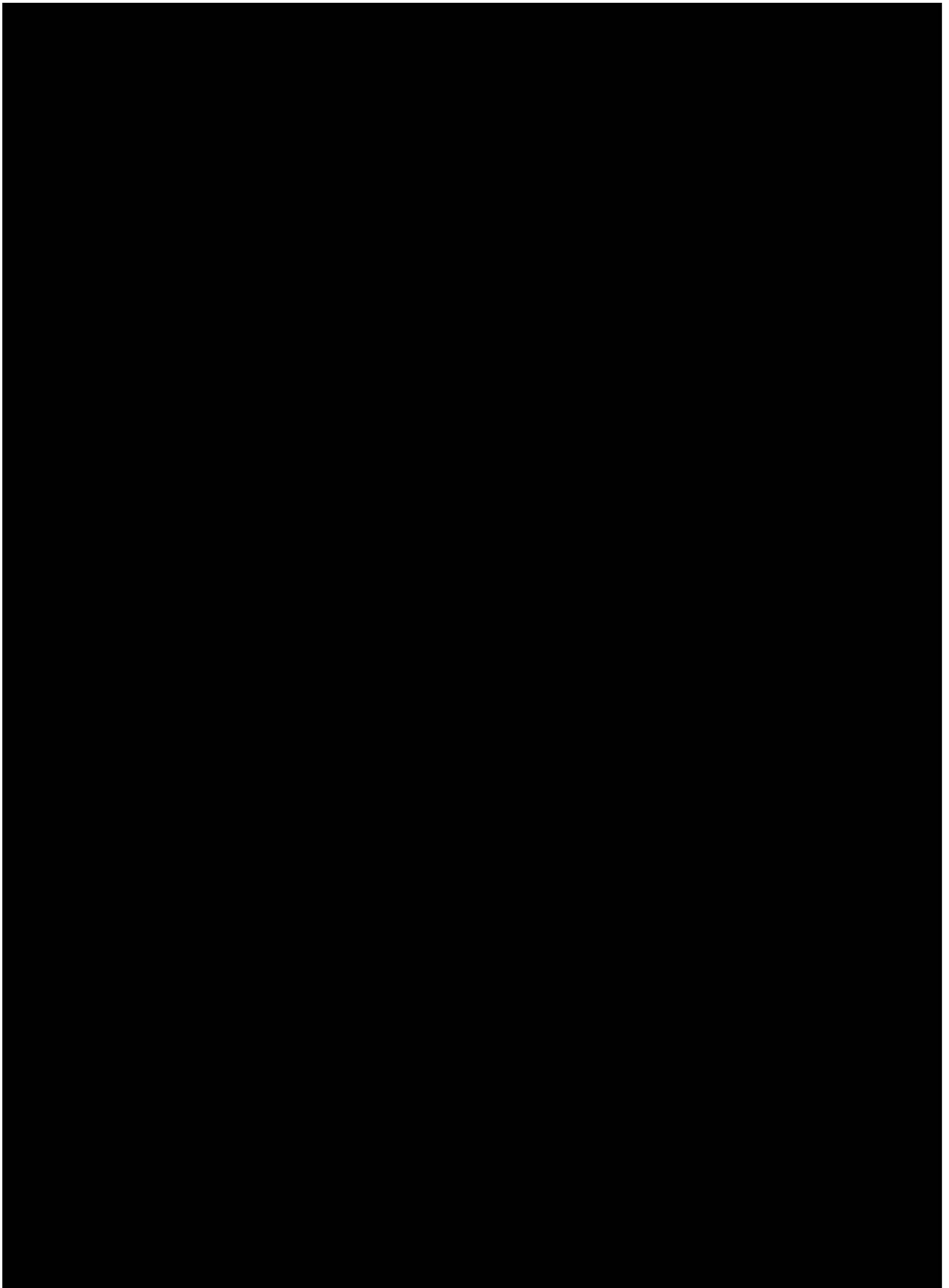


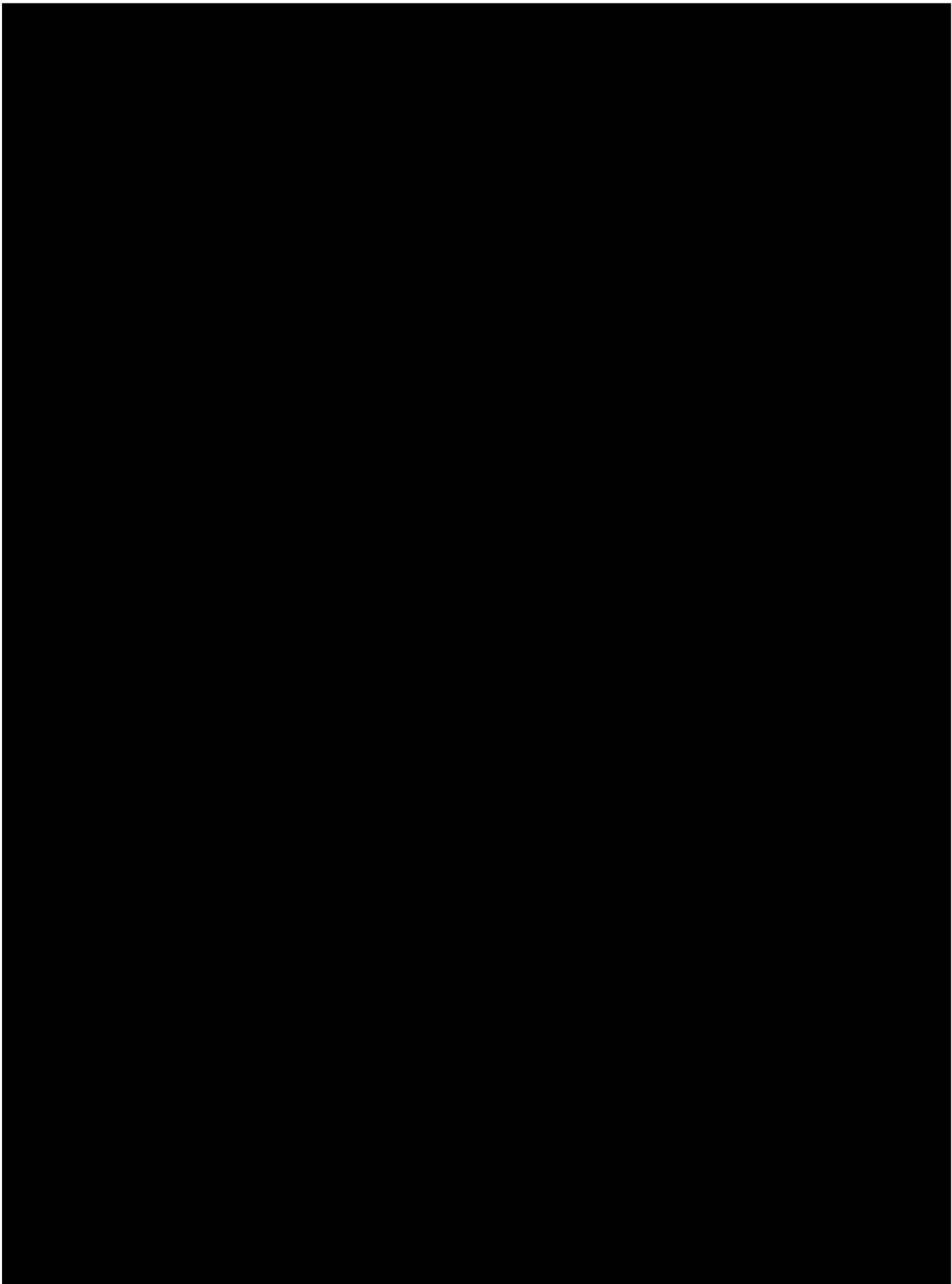


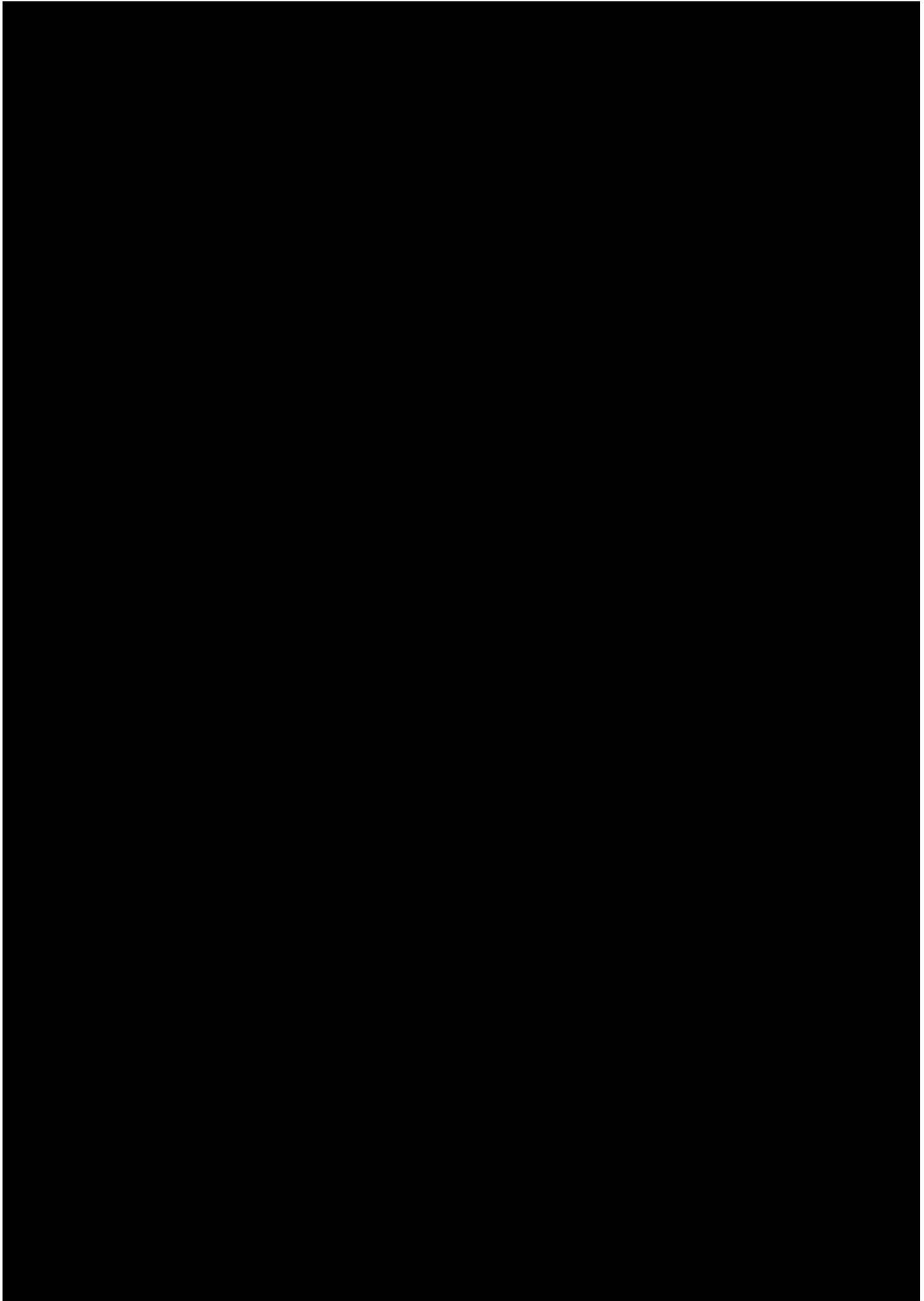


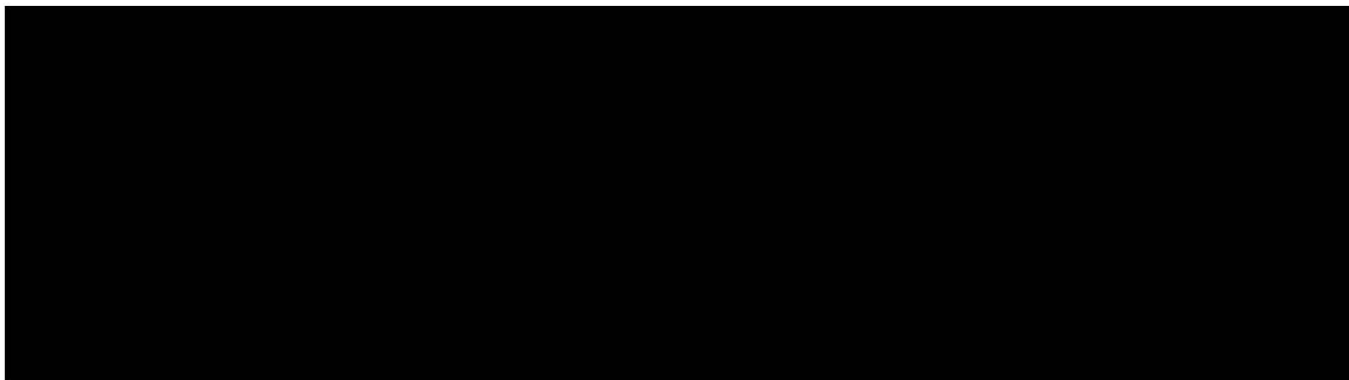


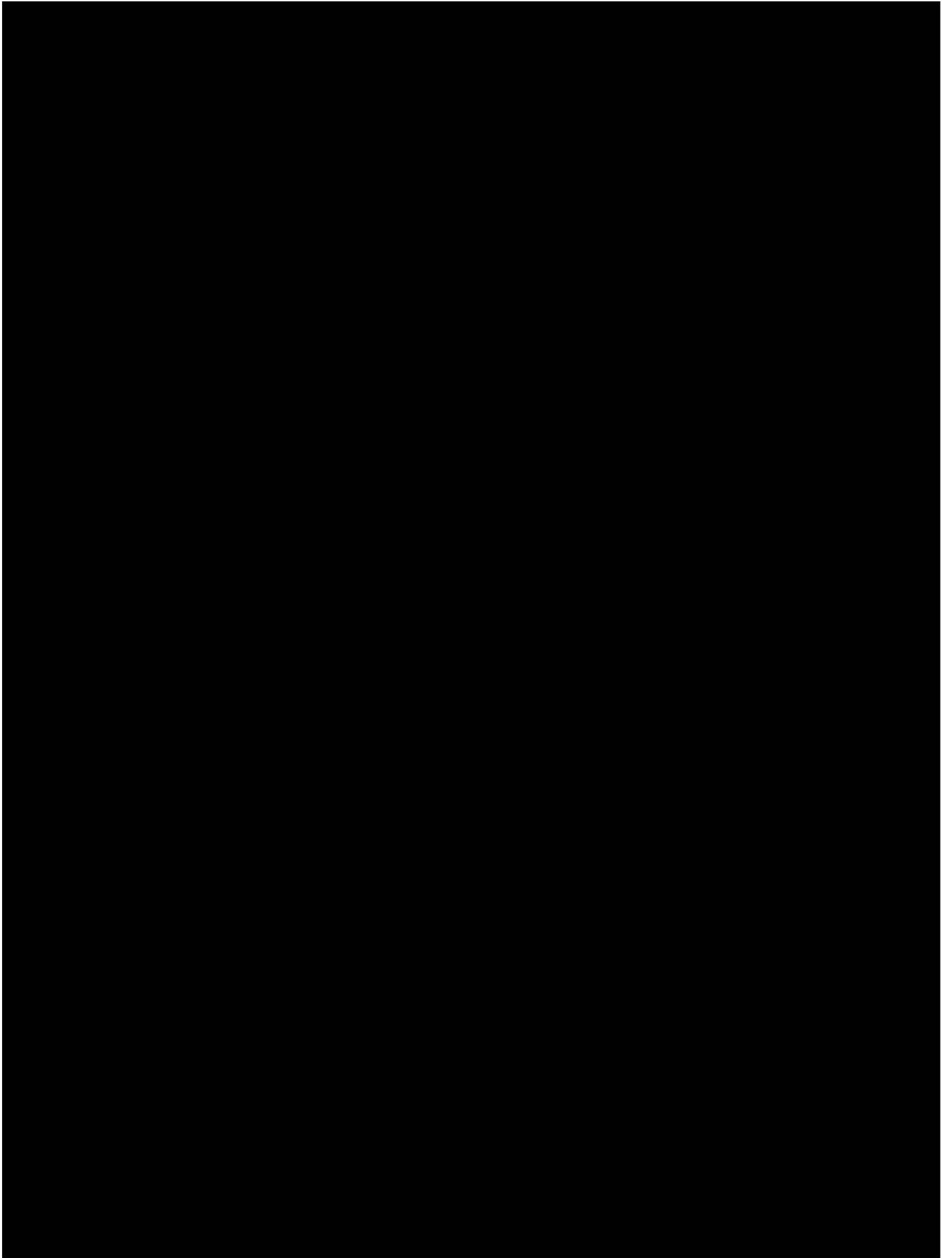


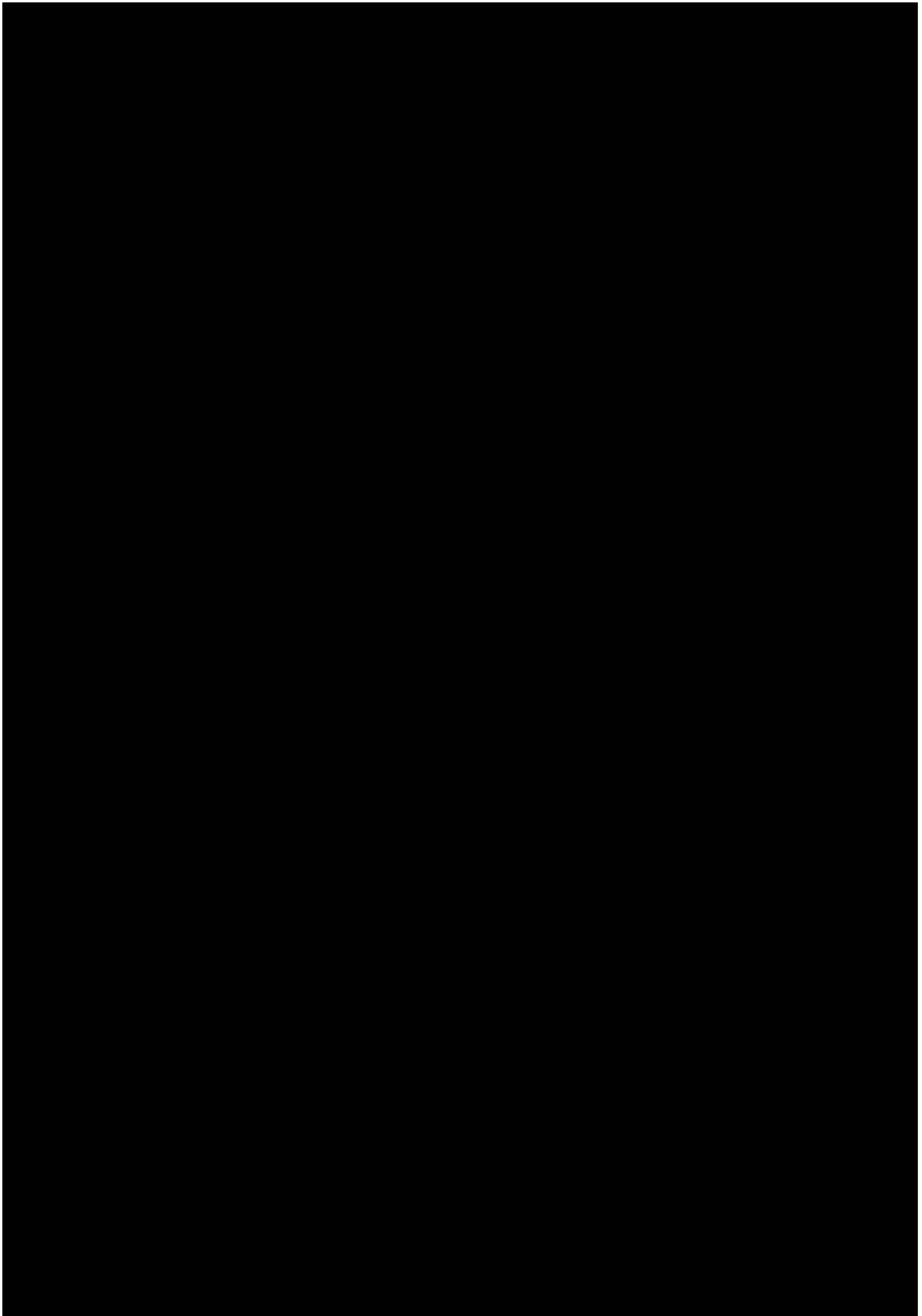


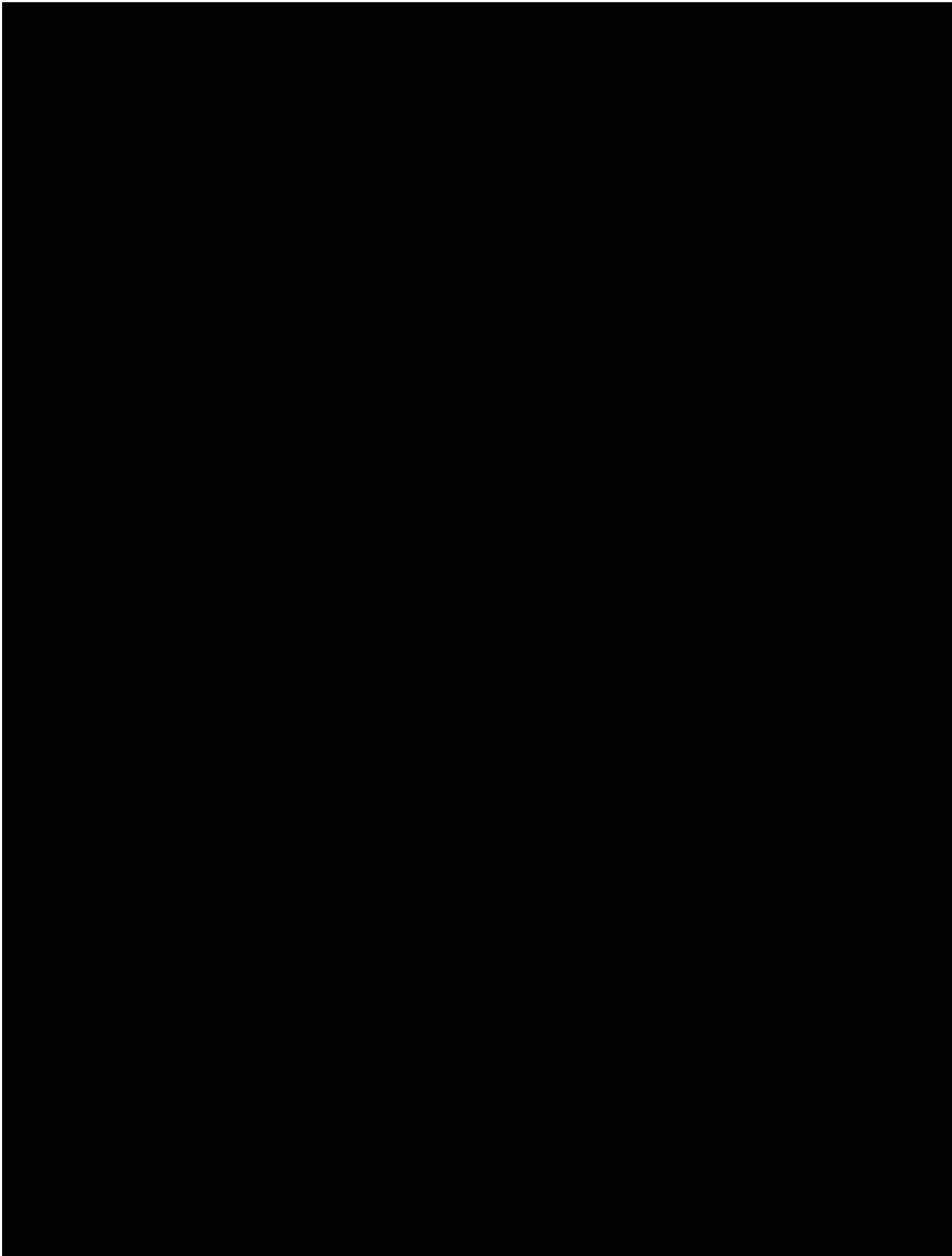


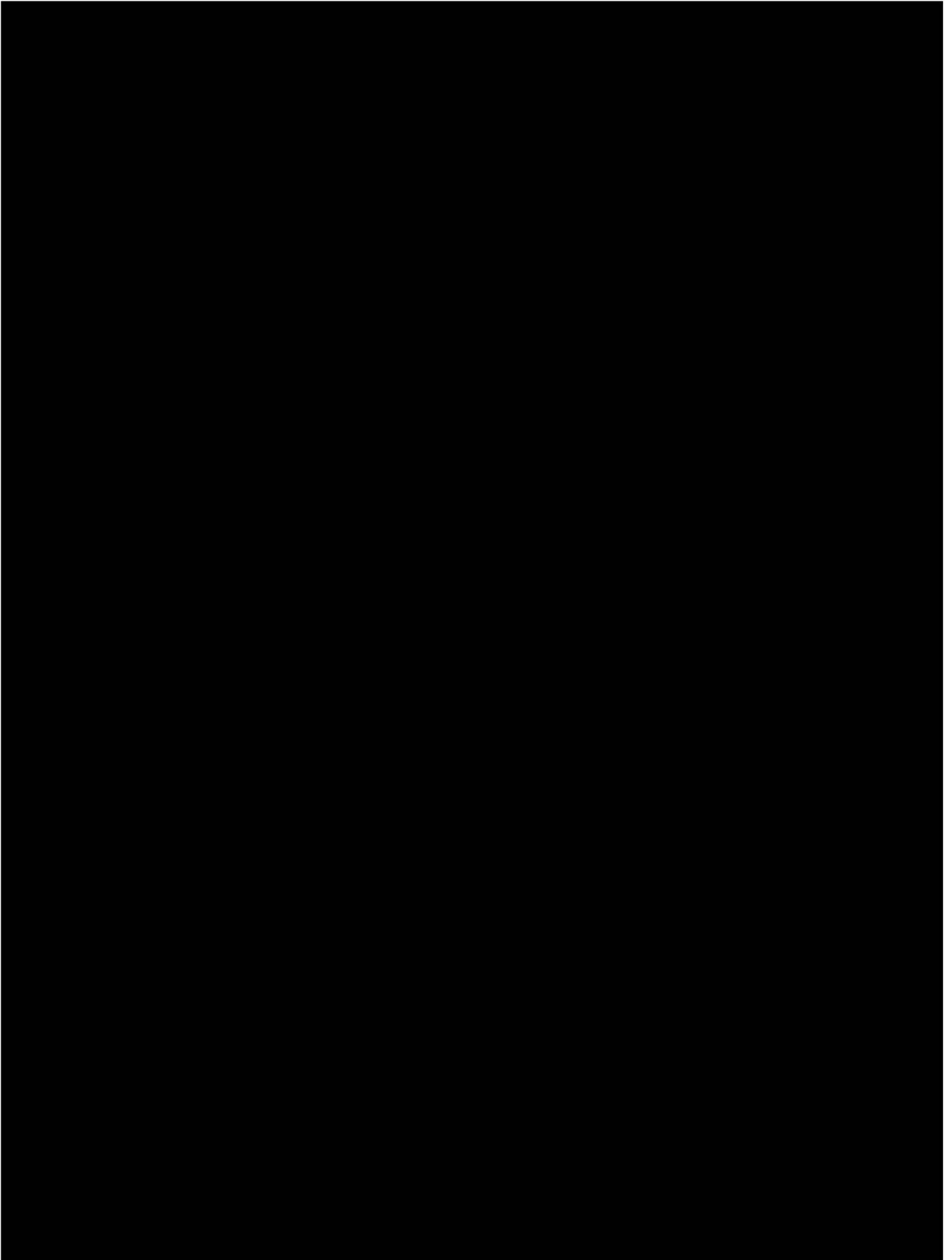


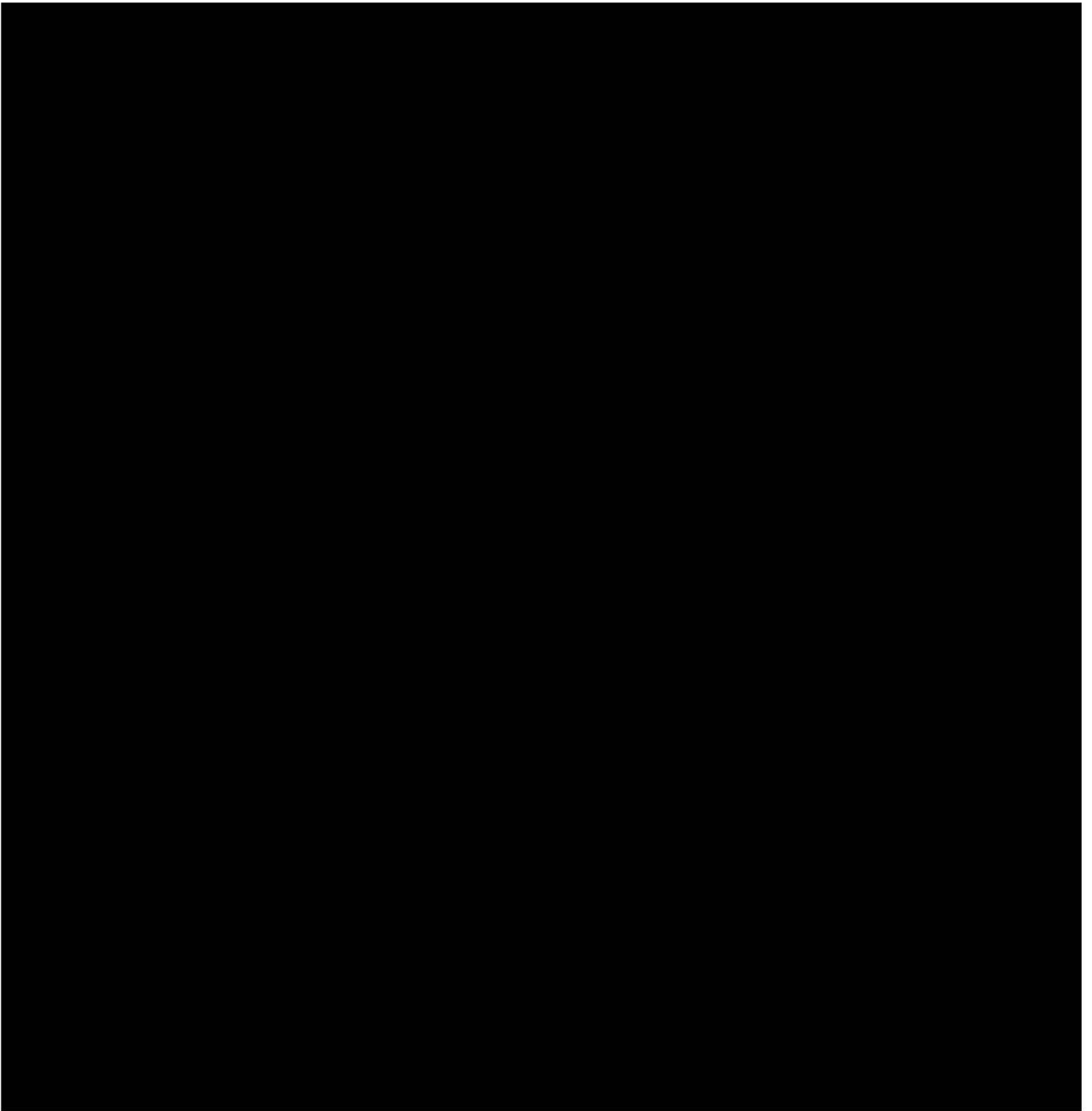


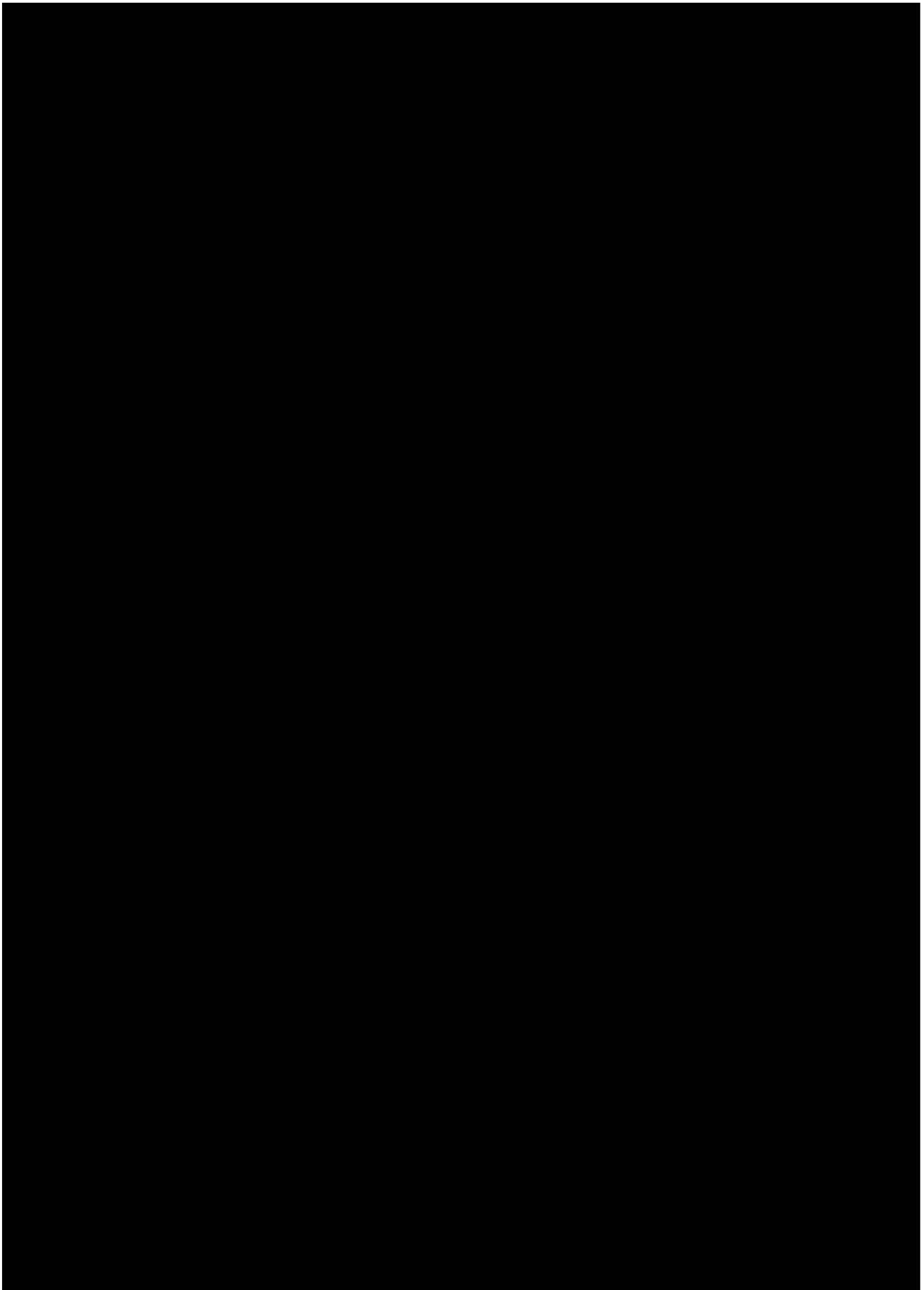


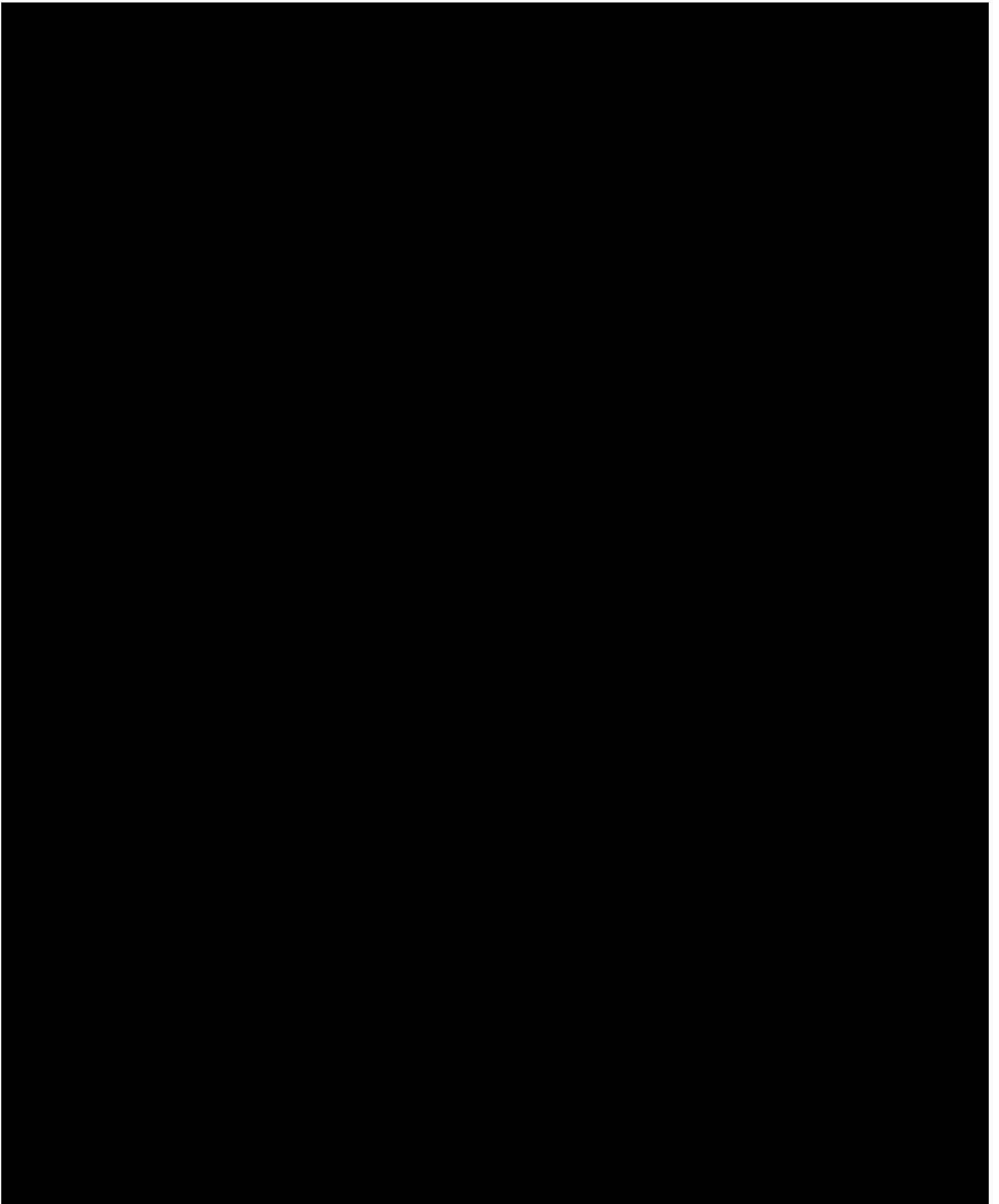


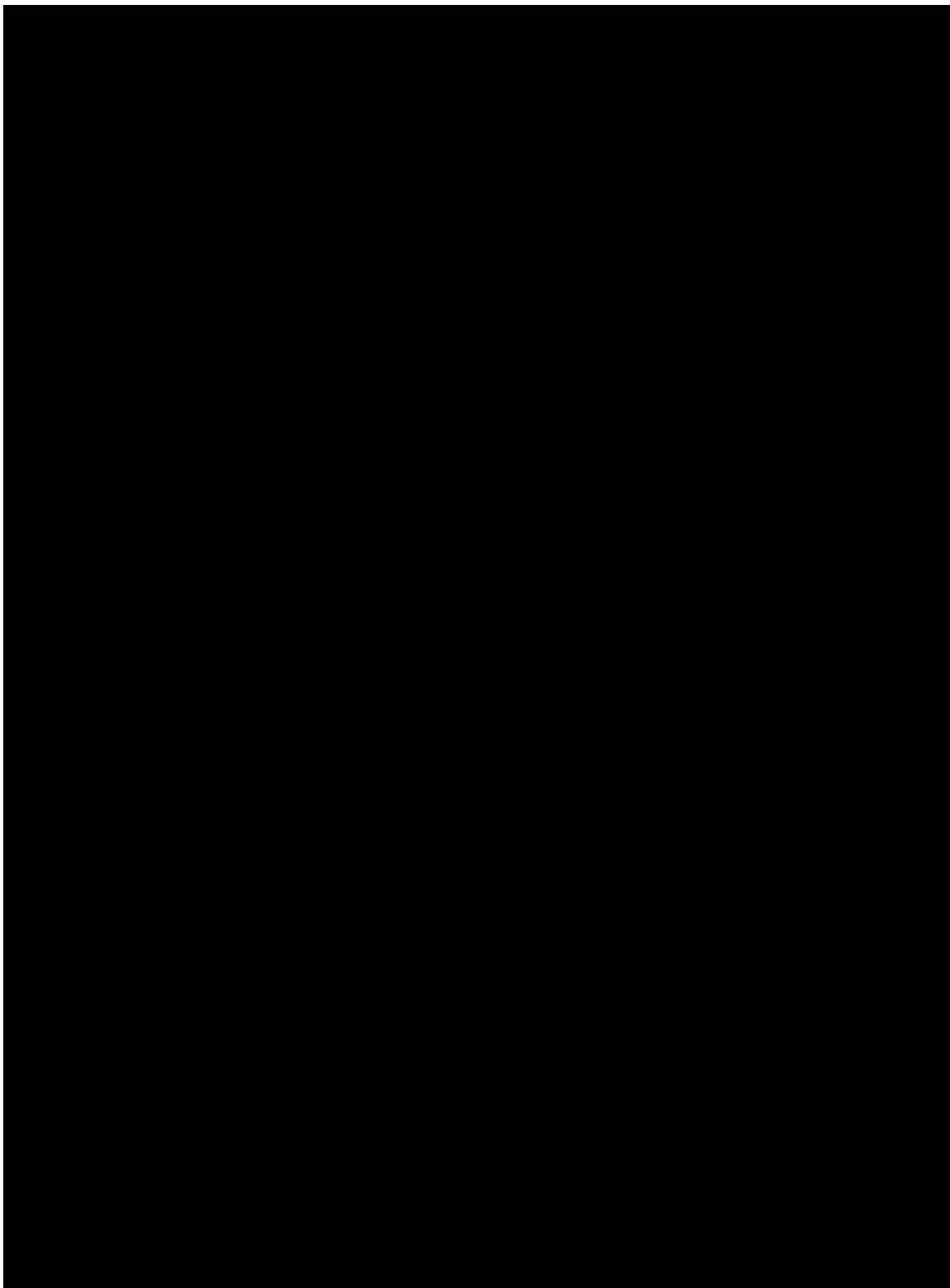


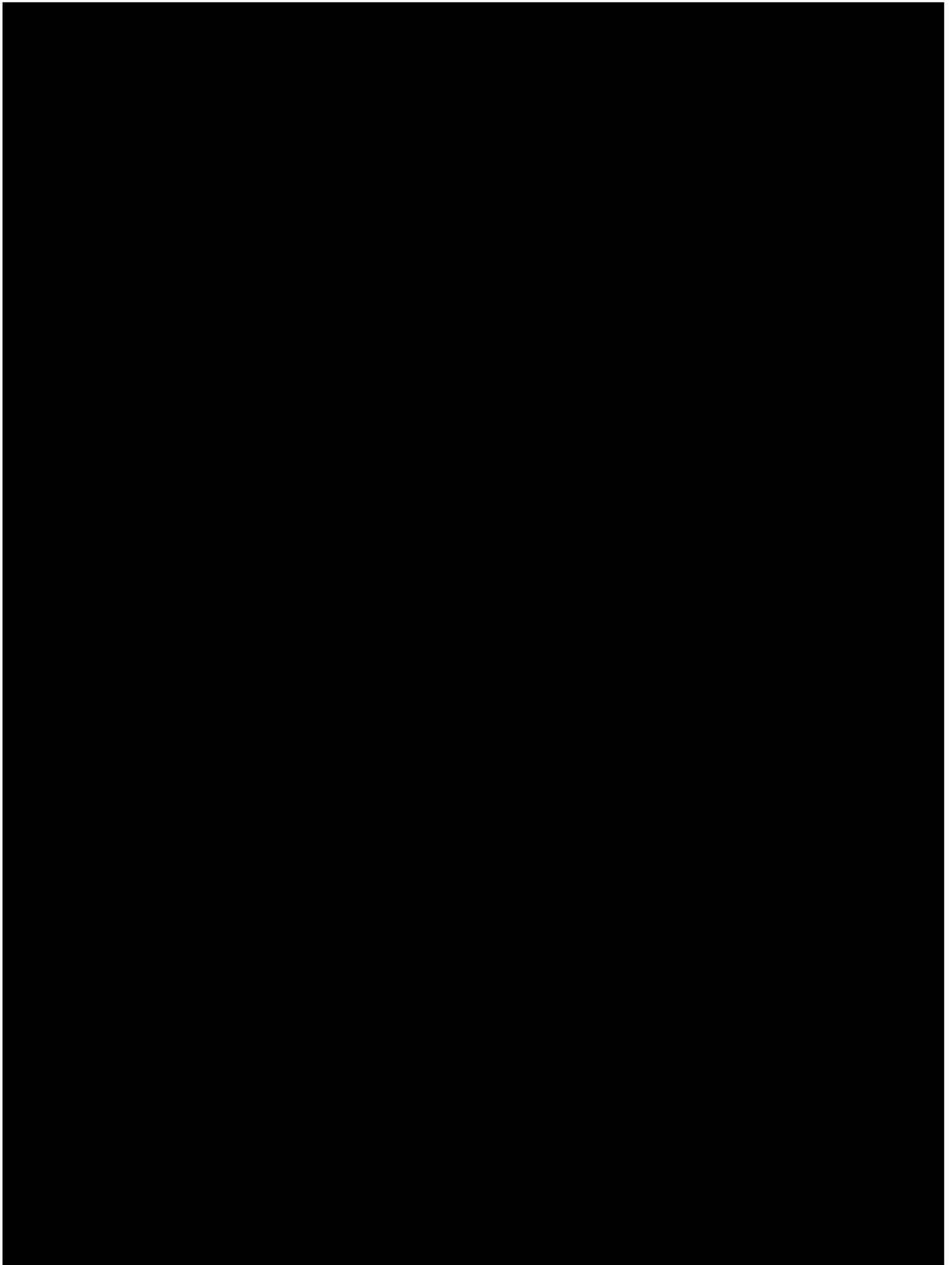


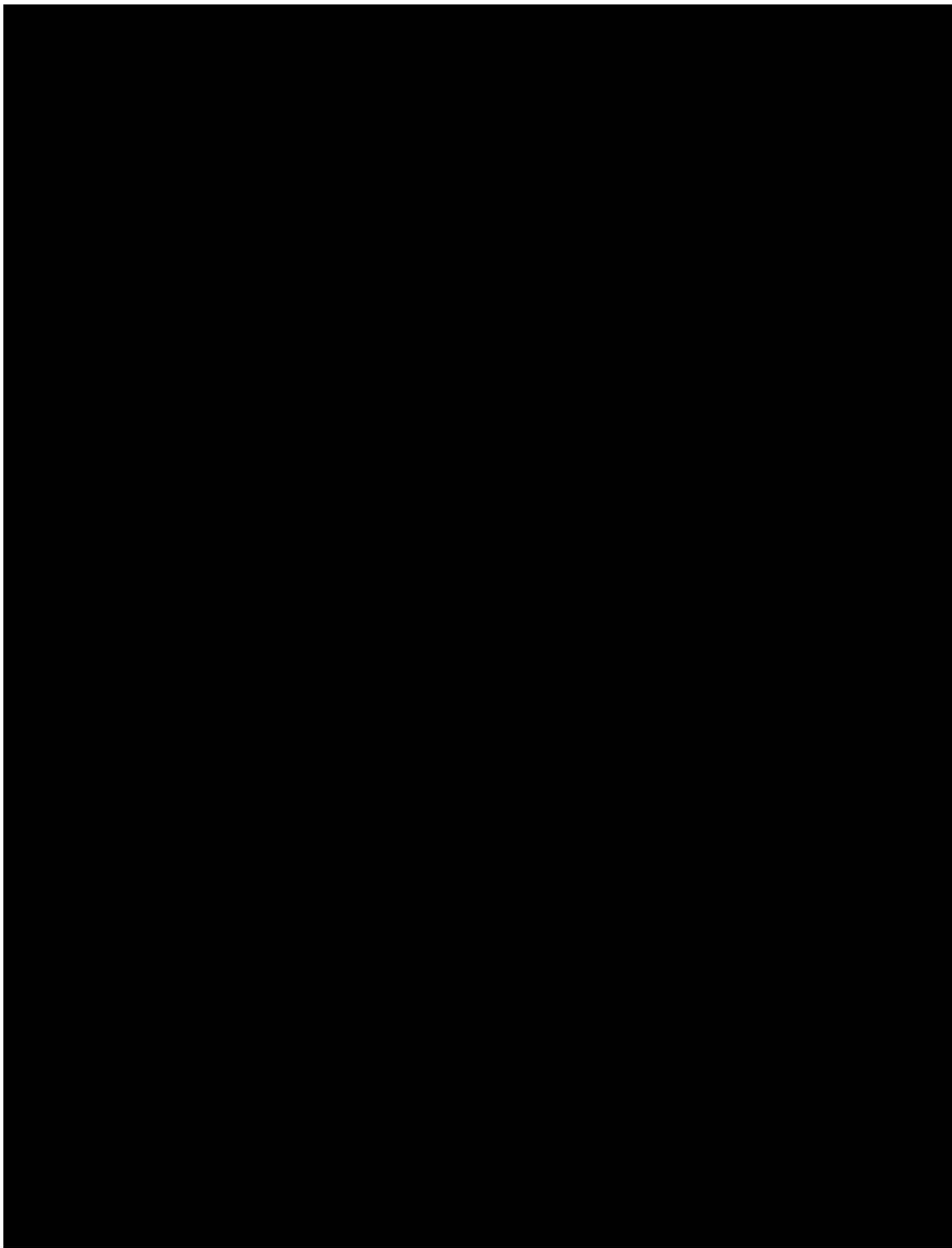


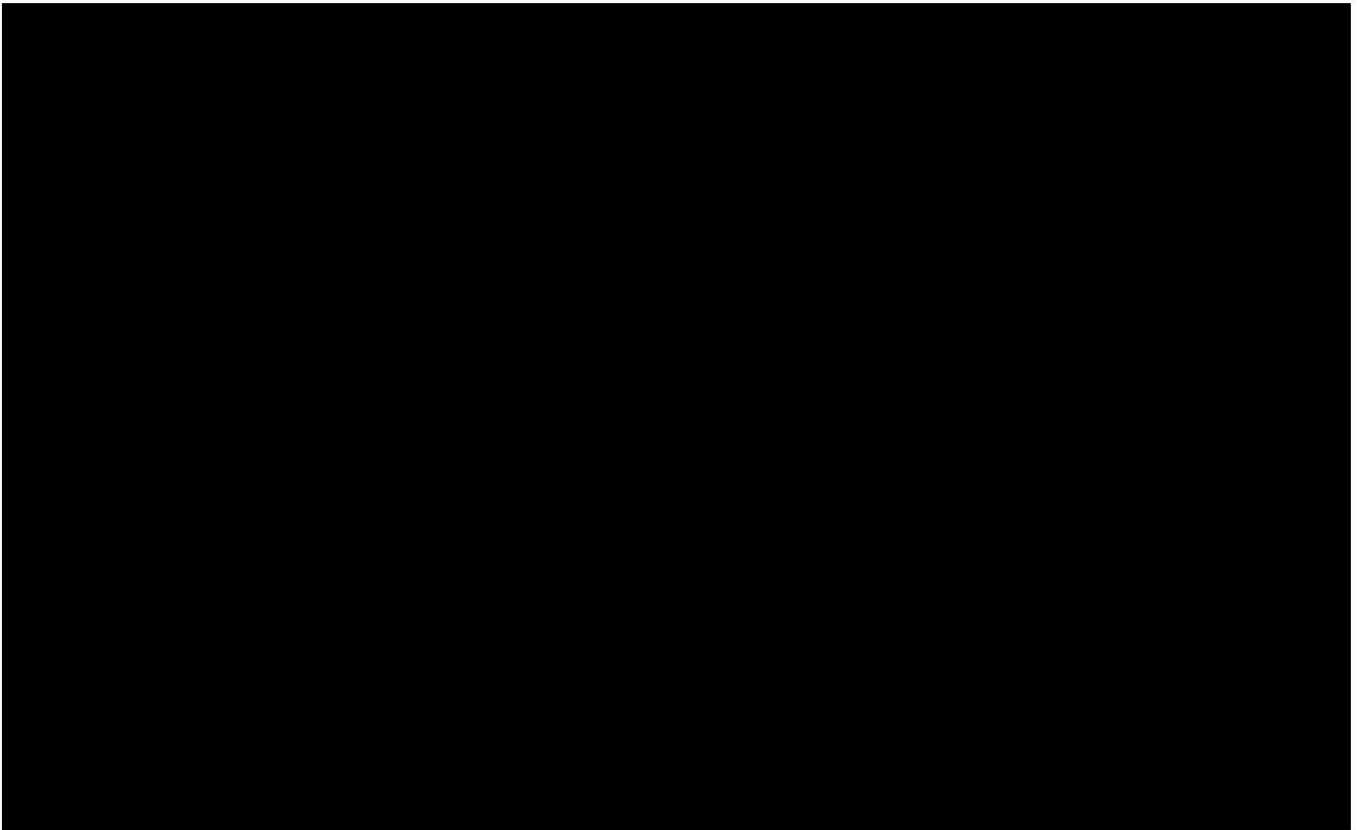


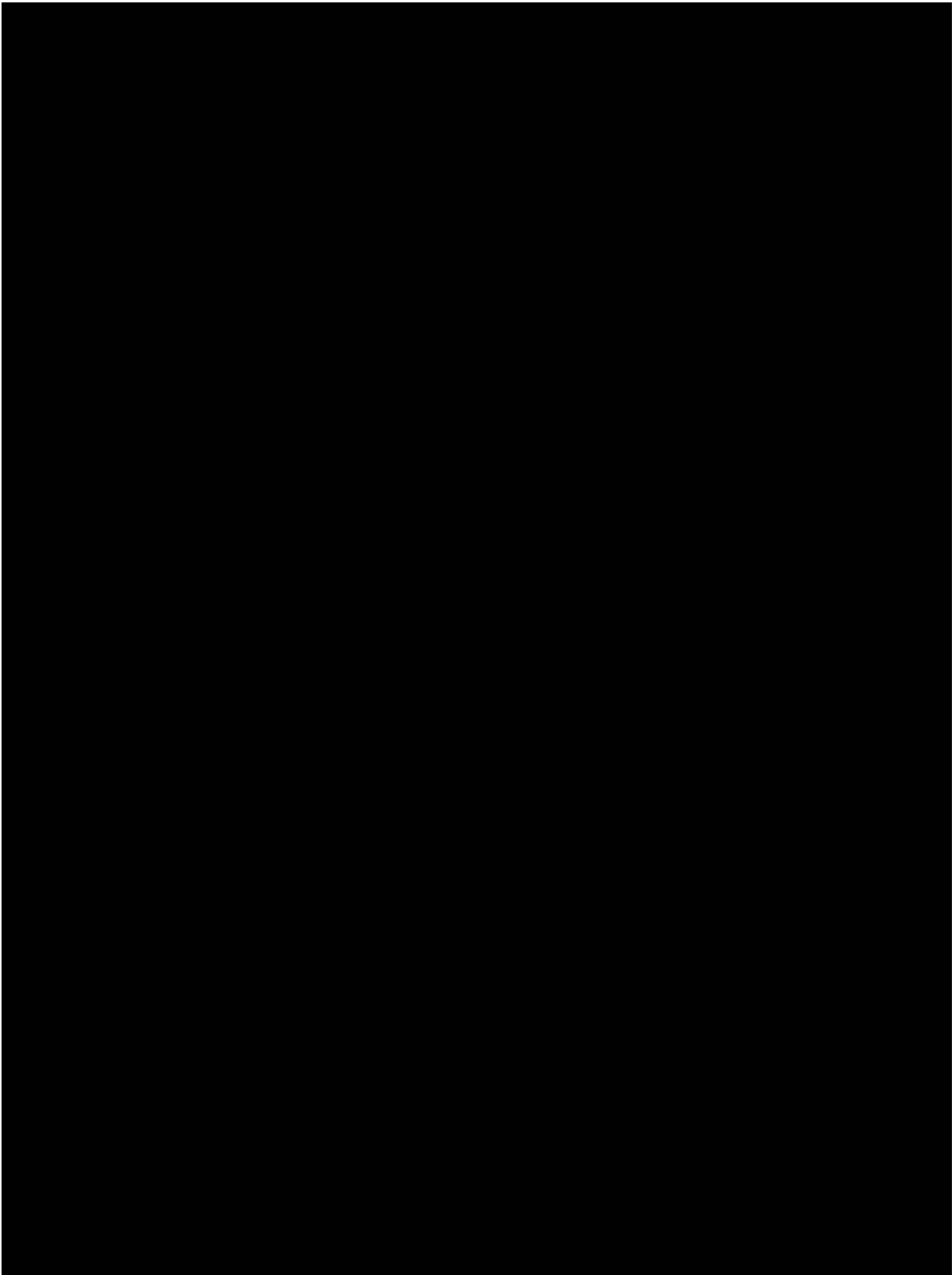


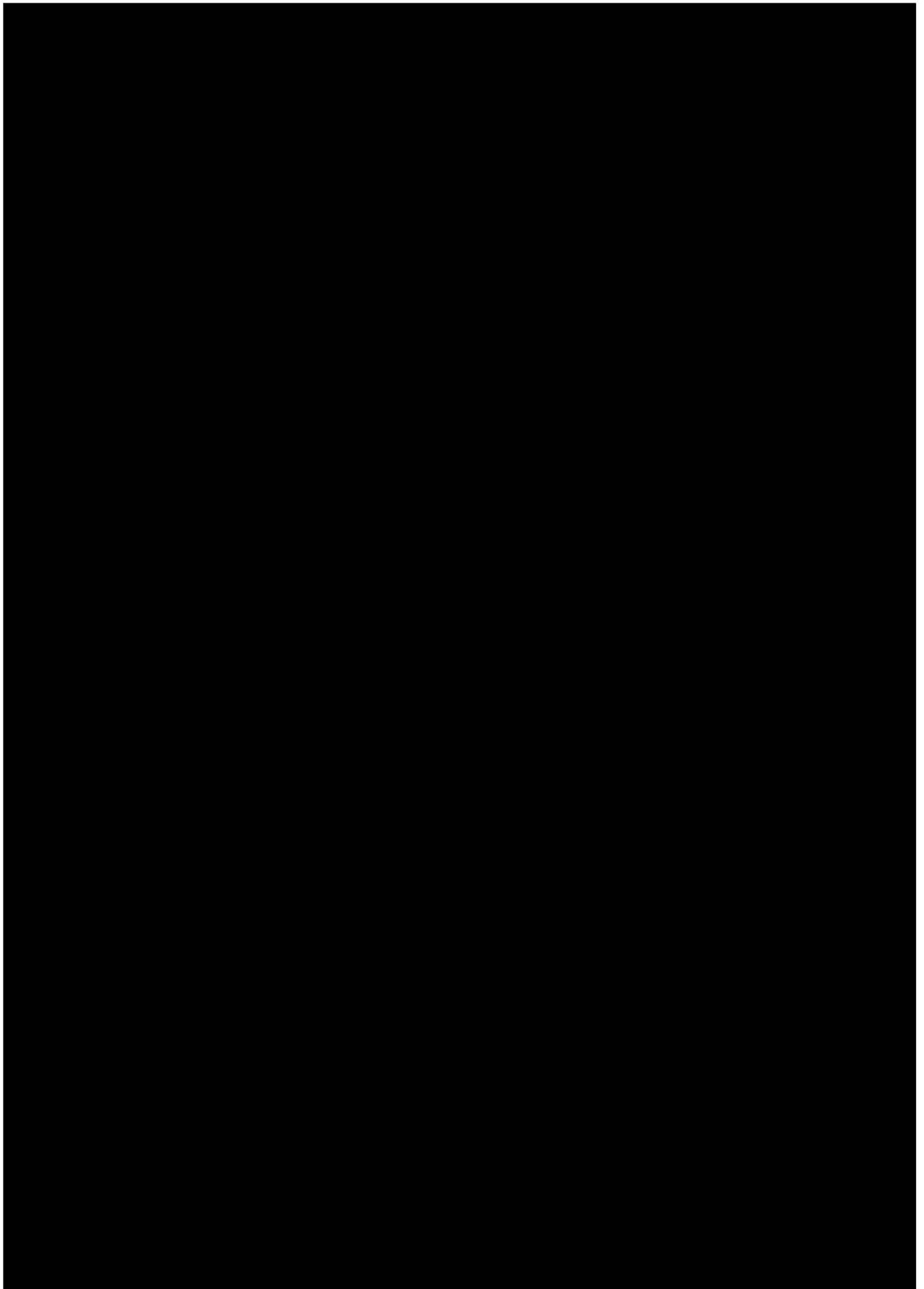


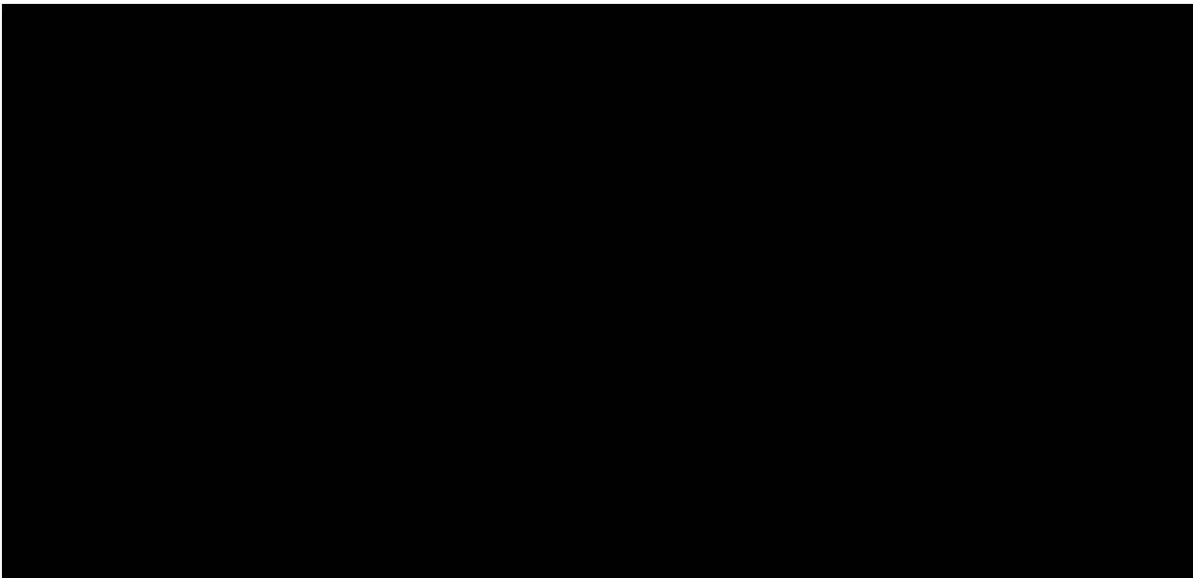


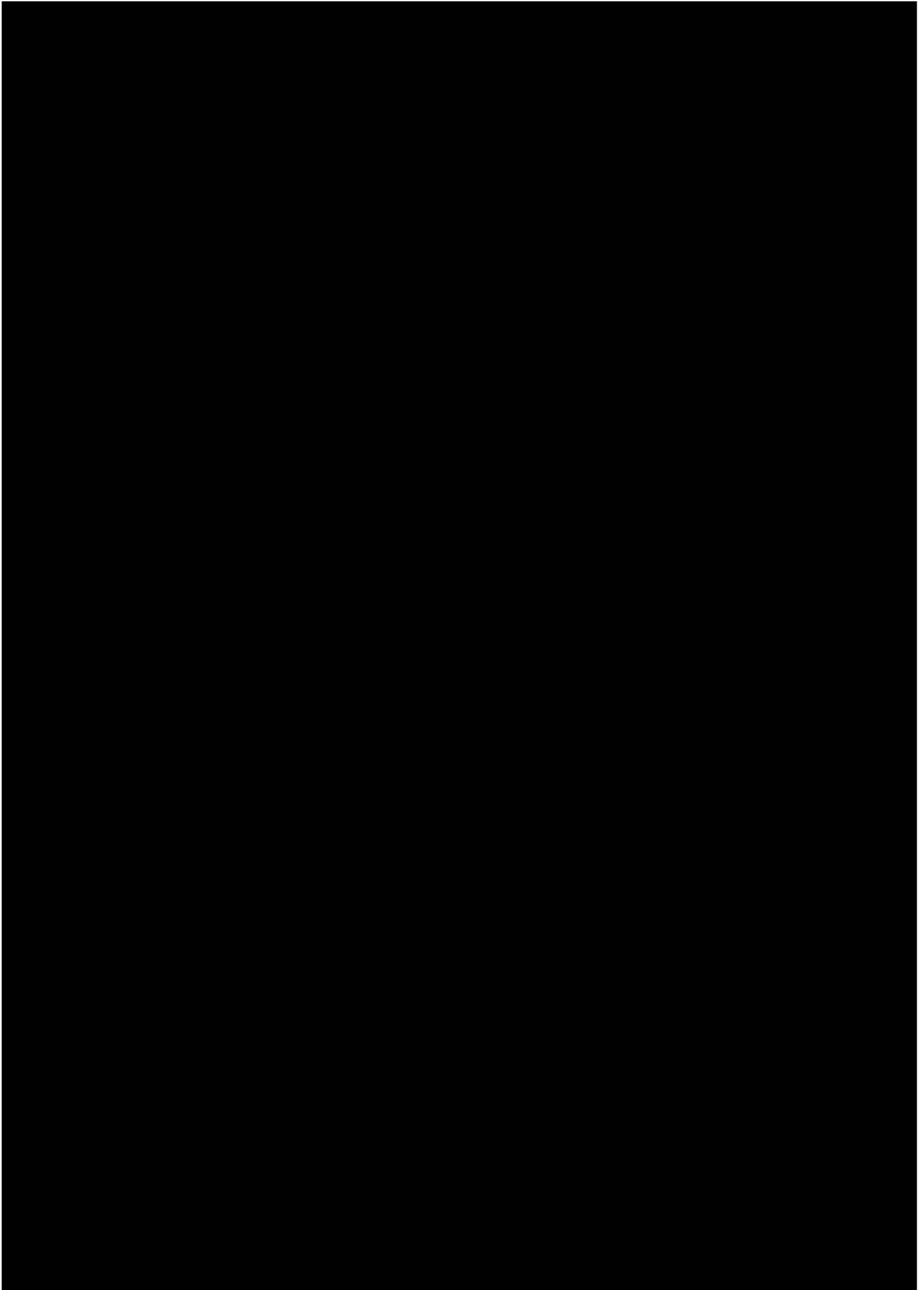


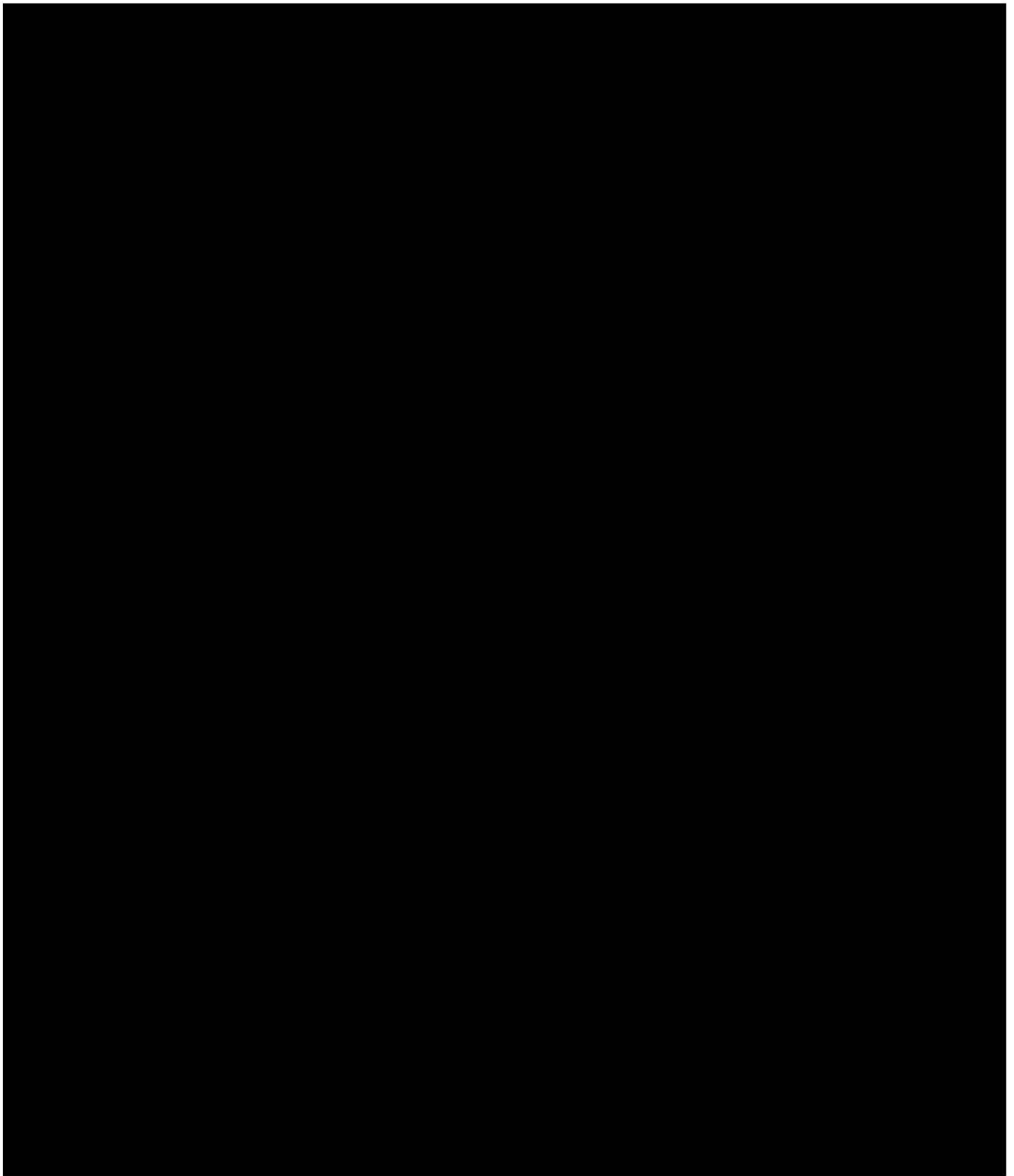












NERA

ECONOMIC CONSULTING

NERA Economic Consulting
1166 Avenue of the Americas
New York, NY 10036-2708
USA
Tel: 1 212 345 3000 Fax: 1 212 345 4650
www.nera.com

NERA Economic Consulting
15 Stratford Place
London W1C 1BE
United Kingdom
Tel: 44 20 7659 8500 Fax: 44 20 7659 8501
www.nera.com