CM/GC CONSTRUCTION CONTRACT

LINDSEY-FLANIGAN COURTHOUSE GLASS GUARDRAIL REPLACEMENT

CONTRACT AND AGREEMENT

THIS AGREEMENT is made between the **CITY AND COUNTY OF DENVER**, a municipal corporation of the State of Colorado (the "City") and **HENSEL PHELPS CONSTRUCTION CO.**, a Colorado corporation whose address is 420 Sixth Avenue, Greeley, Colorado 80631 "the Contractor," jointly "the parties."

RECITALS

1. The City wishes to repair the glass guardrail at the Lindsey-Flanigan Courthouse located at 520 West Colfax Avenue, Denver, Colorado 80202.

Project Name: Lindsey-Flanigan Courthouse Glass Guardrail Replacement Project No. PWFAC2017-063 CONTRACT CONTROL NO. 201845871 (the "PROJECT")

- 2. In furtherance of the Project, the City has contracted with gkkworks, (the "Designers or Design Consultants or Consultant Team") to perform professional engineering and design services for the programming and design of the Project.
- 3. Pursuant to Section 20-56 of the Denver Revised Municipal Code, the City commenced on November 30, 2017, and advertised for at least three (3) consecutive days, the City's solicitation for qualification submissions from qualified contractors for the Project.
- 4. The City's solicitation sought a contractor to furnish all fast-track Construction Manager/General Contractor ("CM/GC") preconstruction and construction experience, expertise and services; and all construction administration, management, supervision, coordination and fast-track project construction experience and expertise; and all construction services, work effort, labor, tools, supplies, manufactured components, equipment, materials, and everything else necessary and required to assist in the Project design and to complete the construction of the Project on an expedited basis and within budget; while satisfying the City's longstanding commitment to quality, efficiency, value, innovation, partnering, responsiveness to agency and community needs and compliance with all applicable regulatory requirements in the performance of general public improvements.
- 5. Submissions received pursuant to said advertisement were evaluated and formal proposals were requested from selected firms best meeting the City's qualifications criteria for this Project.
- **6.** Proposals received were evaluated and ranked by a selection committee and a recommendation was made to the Executive Director of Public Works who evaluated the Proposals and recommended that a contract or contracts for performance on the Project be made and entered into with the above-named Contractor. The terms "Executive Director of Public Works", "Executive Director", "Manager of Public Works" and "Manager" are interchangable and shall have the same meaning.

- **7.** Based upon that ranking, the City and the Contractor entered into a Preconstruction Services Agreement, Contract No. 201842270, dated August 9, 2018, to perform preconstruction services.
- **8**. In accordance with the terms and conditions of the Preconstruction Services Agreement, the Contractor has reviewed the Project Site and design documents and has performed constructability, availability, scheduling and cost estimating analysis on design documents prepared for the Project.
- **9.** Based on this performance, the Contractor is thoroughly informed about the Project and the Project design. Contractor has submitted and the City has accepted a GMP to construct the project.
- 10. As a consequence of the Project's time limitations and in order to maintain the existing Project schedule, the Contractor and the City now desire to enter into a Construction Manager/General Contractor contract (the "Construction Contract") for a Guaranteed Maximum Price (the "GMP") for all of the Work necessary to complete the Project.
- 11. The Contractor is willing, able and has the present capacity to perform the construction phase services, as an independent contractor, in accordance with this Construction Contract, said advertisement, the preconstruction agreement and the referenced selection documents.

NOW THEREFORE, in consideration of the compensation to be paid the Contractor, the mutual agreements hereinafter contained, and subject to the terms hereinafter stated, it is mutually agreed as follows:

1.0 PROJECT SUMMARY AND DEFINITIONS:

1.1 Project. The "Project" as used herein shall mean the:

LINDSEY-FLANIGAN COURTHOUSE GLASS GUARDRAIL REPLACEMENT

- **1.1.1** The Project is located at the "Project Site" 520 West Colfax Avenue, Denver Colorado 80202.
- **1.1.2** The specific details of the Project are more particularly set forth in the shop drawing design submittal by Southwest Metalsmiths dated May 24, 2018 and accompanying Structural Calculation by GLR Engineering for Southwest Metalsmiths dated July 12, 2018 as reviewed by the Designers and determined to be consistent with the design intent as described in Cannon Design letter of September 4, 2018 and S. A. Miro letter of August 29, 2018.
- **1.1.3** The Project shall be comprised of the following: (Project Phases/or drawing set if single GMP).
- **1.1.3.1** Guaranteed Maximum Price (GMP) Work. The GMP proposal provides all necessary labor, materials and equipment necessary to complete the work more particularly set out in the Contract Drawings, Technical Specifications and the Contractors GMP Proposal.
- **1.1.4** Contractor Selection. In accordance with the requirements of Section 20-56 of the Denver Revised Municipal Code (the "**DRMC**"), the City implemented and completed a competitive selection process to identify qualified Contractors to perform both preconstruction and construction services for the Project. The Contractor was selected as the first ranked proposer to perform such services for the City as set forth in the City's Request for Qualifications (RFQ) dated November 30, 2017; and the Contractor's RFP Submittal dated January 4, 2018. In referencing these solicitations and submissions herein, the City and the Contractor acknowledge that the scope of the Project, as presented and addressed by these

documents, has materially evolved since the issuance of these documents and that some information presented will not be applicable to this Construction Contract or the Project.

- 1.2 <u>Budget.</u> The Contractor acknowledges and accepts that there are limited funds available to design and construct the Project. The Project construction budget (the "Budget") is **ONE MILLION SEVEN HUNDRED SIXTY-FOUR THOUSAND DOLLARS AND ZERO CENTS** (\$1,764,000.00) and is subject to increase or decrease at the sole discretion of the Executive Director of Public Works. The Contract further acknowledges and accepts that the GMP Work must be completed within the construction budget. As part of this acknowledgment and acceptance, the Contractor shall at all times cooperate fully with the City and the Design Consultant to develop the Project and its various components for construction and ultimately construct the Project so as not to exceed the limited funds available in the Project Budget.
- **1.3 Project Format.** In the performance of this Construction Contract, the Contractor acknowledges and accepts that scope and schedule are critical for Project delivery. Based on these considerations, the City has elected to utilize a Construction Manager/General Contractor ("CM/GC") project delivery approach and will fast track the Project.
- **1.3.1** The Contractor is familiar with this approach and understands that the CM/GC method is a specialized and rigorous delivery approach requiring maximum cooperation between all parties. As a consequence of the delivery approach, the Contractor acknowledges and accepts the following: (1) that the complete services to be rendered by the Contractor, the organizational and process inter-relationships governing construction and the construction cost, schedule and sequencing are either in the developmental stage or have not yet been fully defined; and (2) that portions of the Project could have their design completed as separate phases.
- **1.3.2** In preparing and submitting the GMP Proposal, the Contractor understands, confirms and agrees that its responsibility under this CM/GC approach is to construct the Project in accordance with the Contract Documents.
- **1.3.3** Subject to any allowed contingency provided for in Section 1.5, the Contractor further acknowledges and agrees the GMP fully accounts for any risks associated with failing to consider the design intent reasonably inferable from the Contract Documents. The Contractor has documented in the Basis of the GMP Proposal and provided or will provide to the City any and all clarifications regarding the design intent, including the intended level of quality of the Project. No GMP increase or extension of the Contract Time will be allowed to account for any assumption, exclusion and clarification the Contractor failed to document or for any other item of Work covered by the Contract Documents that the Contractor failed to account for in its GMP.
- **1.4** Allowances. The allowances set forth in the GMP Proposal have been accepted by the Project Manager. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the City may direct, but the Contractor shall not be required to employ any persons or entities against which the Contractor may make reasonable objection. The Contractor may also supply allowances for those items the Contractor and the Project Manager mutually determine require an allowance. **Exhibit L** (GMP Proposal) sets forth all allowances applicable to the Work. Unless otherwise provided for in the Contract Documents:
- **1.4.1** Materials and equipment under an allowance shall be selected promptly by the City to avoid delay in the Work;

- **1.4.2** Allowances shall cover the cost to the Contractor of materials and equipment delivered at the Project site and all required taxes, less applicable trade discounts;
- **1.4.3** Contractor's costs for unloading and handling at the Project site, labor, installation costs, and other expenses contemplated for the stated allowance amounts are included in the allowances. However, Contractor's home office overhead and profit for all allowance items are included in the Contractor's Fee and are not in the allowance; and
- **1.4.4** Whenever costs are more than or less than the allowances, the GMP shall be adjusted accordingly by change order. The amount of the change order shall reflect the difference between actual costs and the allowances. If actual costs exceed allowances, the change order shall include Fee on the difference in accordance with allowable Contractor Fee under the Construction Contract.

1.5 Contingency.

- 1.5.1 Construction Contingency Amount. The GMP will include a construction contingency in an amount equal to a lump sum of THIRTY-FIVE THOUSAND TWO HUNDRED EIGHTY DOLLARS AND ZERO CENTS (35,280.00) ("GMP Contingency") for the entire scope of the GMP Work
- 1.5.2 Contingency Accounting. The GMP Proposal is not a line item GMP. During the course of the Work, some GMP line items may exceed the estimated amounts and others may under run the estimated amounts shown in the GMP Proposal without impacting the overall GMP. The Contractor may charge to the Contingency any costs which are properly reimbursable as Cost of the Work, but not the basis for a Change Order. These costs may include costs attributable to errors and omissions by the Contractor; costs to correct defective, nonconforming or damaged work; costs generated from clarification of the Contract Documents; costs for code changes or code upgrades required by governmental agencies which are not otherwise the basis for a change order; overtime and acceleration costs to meet contract schedule; and costs, including legal fees, for contractual disputes, with parties other than the City. The Contingency shall be increased to the extent that there are underruns in budget items included in the GMP. The Contractor shall notify the Project Manager, in writing, of each such charge to or credit of the contingency prior to taking such action and shall provide a periodic reconciliation of contingency credits and expenditures in a format acceptable to the Project Manager.
- **1.5.3** Contingency Management. The Contractor acknowledges that, subject to available funding, it is the desire of the City to incorporate as many additional Work items into the Work as reasonable or otherwise increase the Work to be performed by the Contractor to enhance the Project. The Contractor agrees to accept a mutually agreeable reduction of the contingency whenever the City and the Contractor reasonably agree that the Project risk is substantially decreased and such agreement shall not be unreasonably withheld.
- **1.6 Design Consultant.** The "**Design Consultant**" or "**Designer**" as used herein shall mean the legally approved professional architect/engineer, or group or association or professional corporation or joint venture of such approved professional architects, engineers and/or consultants, who have contracted with the City to accomplish the architectural, engineering and other design and related technical services necessary to complete the Project. The Project Design Consultant is: gkkworks. In case of termination of the Design Consultant, the City will appoint a Design Consultant whose status under the Construction Contract shall be the same as that of the former Design Consultant.

- **1.7** <u>User Agency</u>. The "User Agency" as used herein shall mean the City agency currently responsible for the operation and maintenance of the Project. The User Agency is the City and County of Denver Department of Public Works.
- **1.8** <u>Construction Team.</u> The Contractor, the City, and the Design Consultant, called the "Construction Team," shall work together to complete the Project. The Contractor shall provide leadership to the Construction Team on all matters relating to Construction.

2.0 CONTRACT DOCUMENTS:

2.1 It is agreed by the parties hereto that the following list of instruments, drawings and documents which are attached hereto, bound herewith or incorporated herein by reference constitute and shall be referred to as the "Contract Documents" and all of said instruments, drawings and documents taken together as a whole constitute the Contract and Agreement between the parties hereto, and they are as fully a part of this Contract and Agreement as if they were set out verbatim and in full herein. The Contract Documents represent the entire and complete integration of all understandings between the City and the Contractor and supersedes all prior negotiations, representations or agreements. No prior or contemporaneous addition, deletion or other amendment hereto shall have any force or effect whatsoever, unless embodied herein in writing. No subsequent novation, renewal, addition, deletion or other amendment hereto shall have any force or effect unless embodied in a written amendatory or other agreement or change order properly executed by the parties.

This CMGC Construction Contract

Advertisement of Notice of Invitation for Qualification, dated November 30, 2017 (incorporated herein by reference)

Contractor Response to RFQ, dated January 4, 2018 (incorporated by reference)

General Contract Conditions (incorporated by reference; table of contents attached as **Exhibit A**)

Special Contract Conditions (attached as **Exhibit B**)

Preconstruction Services Agreement, dated August 9, 2018 (incorporated by reference as **Exhibit C**)

Equal Employment Opportunity Provisions (attached as **Exhibit D**)

Prevailing Wage Rate Schedule(s) (attached as **Exhibit E**)

Performance and Payment Bond (attached as **Exhibit F**)

Final/Partial Lien Release Form (attached as **Exhibit G**)

Notice to Proceed Form (attached as **Exhibit H**)

Contractor's Certification of Payment Form (attached as **Exhibit I**)

Final Receipt Form (attached as **Exhibit J**)

Contract Drawings (incorporated herein by reference as **Exhibit K**)

Equipment Rental Rates (to be later attached as **Exhibit L**)

Billing Rates for Salaried Personnel (attached as **Exhibit L**)

GMP Proposal (attached as **Exhibit L**)

Certificate of Insurance (attached as **Exhibit M**)

- **2.2** If anything in the Contract Documents is inconsistent with this Construction Contract, this Construction Contract will govern. The order of precedence of the Contract Documents shall be as follows:
- **2.2.1** this Construction Contract, as may be modified by amendment or change orders;
- 2.2.2 the Special Conditions
- **2.2.3** the General Contract Conditions;
- **2.2.4** the Basis of the GMP Work Proposal,
- 2.2.5 the Contract Drawings; and
- **2.2.6** all other Exhibits, whether attached to this Construction Contract, incorporated by reference or later added by Change Order.
- 2.3 The intent of the Contract Documents is to include all terms, conditions, work items and services necessary or required for the proper execution and completion of the Work. The Contract Documents are complementary, and what is required by any one shall be binding as if required by all. Work items or services not covered in the Contract Documents will be required unless they are not consistent with the Contract Documents and are not inferable from the Contract Documents as being necessary to produce the result intended by the Contract Documents. Words and abbreviations that have well known technical or trade meanings are used in the Contract Documents in accordance with such recognized meaning.
- **2.4** Where reference is made in this Construction Contract to a provision of the General Conditions or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

3.0 SCOPE OF WORK:

- **Completion Obligation.** The Contractor shall execute the Project described in the Contract Documents, except to the extent specifically indicated in the Contract Documents as the responsibility of others. The Contractor agrees to commence and undertake the performance of the Work under this Construction Contract within ten (10) days of the date of issuance of a Notice to Proceed in substantially the form attached as **Exhibit H** and agrees to substantially complete said Work within the Contract Time and fully complete said Work in accordance with the Contract Documents. The Contractor may complete the Project earlier than the date for substantial completion established by the Contract Time, but any claim by the Contractor based on delay shall be based upon the date for substantial completion established by the Contract Time and not on an earlier projected completion date that the Contractor may propose.
- **Scope of Work.** The entire Scope of Work shall include the following:
- **3.2.1 Preconstruction Phase Services**. The Preconstruction Services are comprised of all those services, obligations and responsibilities set forth in the Preconstruction Services Agreement, incorporated

herein by this reference as **Exhibit C**. In order to expedite Project completion, the Parties entered into the Preconstruction Agreement to perform Preconstruction Services, in anticipation of the start of the Construction Phase of the Project. In accordance with the terms of the Preconstruction Agreement, compensation for the performance of such services is based on a lump sum fee for services. For the duration of this Construction Contract, the Contractor shall continue to perform any further Preconstruction Services required by the Project as part of its obligations under this Construction Contract as a Cost of the Work with no increase to the GMP.

- **3.2.2 Construction Services.** The Construction Phase Services shall include the furnishing of all construction administration, management, supervision and coordination experience and expertise, as well as all construction services, work effort, labor, tools, supplies, manufactured components, equipment, materials, and everything else necessary and required to complete the construction of the Project on time and within budget; while satisfying the City's longstanding commitment to quality, efficiency, value, innovation, partnering, responsiveness to agency and community needs and compliance with all applicable regulatory requirements in the performance of general public improvements. Compensation for the Construction Phase Services shall be in accordance with the terms and conditions of this Construction Contract.
- **3.2.2.1 GMP Scope of Work.** The Contractor shall perform all Construction Services, as set forth in the GMP Proposal, which is attached as **Exhibit L**.
- **3.2.3 The Work.** The terms "Scope of Work" or "Work" as used herein shall mean all Construction Services required by or reasonably inferable from the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work shall constitute the whole of the Project.
- **3.3** Acknowledgement of Scope of Work. The Contractor expressly recognizes and acknowledges that this Project must be completed within the time and fiscal constraints as set forth throughout this Construction Contract.
- **3.3.1** The Contractor further represents to the City that by executing this Construction Contract, it has been fully informed of and has thoroughly reviewed the following: the objectives of the Project; the work effort of the Design Consultant performed to date for the Project; all of the Contract Documents attached to this Construction Contract or incorporated by reference; the City's general time and budget constraints and contingencies applicable to the Budget; and all of the Work required by the Contractor by the Contract Documents. Based upon this thorough review and analysis and recognizing that the contract for design services is between the City and the Designer, the Contractor nonetheless represents to the City that it will provide or perform all of the necessary Work within the requirements of the Contract Documents.
- **3.3.2** Also by execution of this Construction Contract, the Contractor covenants and represents that the Contractor has visited the site of the Project (the "Site") and has had sufficient time and opportunity to independently examine and is sufficiently familiar with: the Site, the character and nature of the Site layout and materials, the character and nature of all Site constraints, restrictions and limitations, and limitations on ingress, egress and construction staging and performance; and the local conditions under which the Work is to be performed, including weather conditions and any other factors which may impact the Work. The Contractor further represents that it has taken into consideration and correlated these direct observations, examinations and investigations with the requirements of the Contract Documents and in the pricing of the Work, the formulation of the GMP, the Contractors Fee and in preparing all Exhibits.

- **3.3.3** Also by execution of this Construction Contract, the Contractor represents that it has reviewed and is familiar with the City's general expectations and scheduling assumptions regarding the completion of the Project and opening of the completed facility and that, given the Scope of Work, these scheduling assumptions are reasonable and achievable. The Contractor further represents that it will take into consideration and correlate these assumptions and constraints with the requirements of the Contract Documents and in the pricing of the Work, the GMP and the Contractor's Fee.
- **3.3.4** Finally, the Contractor represents that it has reviewed the 100% Design Drawings, accepts the terms and requirements thereof and affirmatively states that the Project, as expressed by the design documents and the Project requirements and constraints as modified by value engineering suggestions, budget adjustments and cost cutting measures suggested by the Contractor as of August 29, 2018 is a reasonable and constructible Project, incorporating a reasonable and workable delivery approach, schedule and budget.

4.0 RELATIONSHIP OF THE PARTIES:

- **4.1** The parties intend herein to establish a relationship wherein the City relies upon the integrity and fidelity of the Contractor to complete the Project within the time and budget constraints set forth in this Construction Contract and in a manner which satisfies the City's longstanding commitment to quality, efficiency, value, innovation, partnering, responsiveness to agency and community needs and compliance with all applicable regulatory requirements in the performance of general public improvements.
- 4.2 The Contractor accepts the relationship of trust and confidence established by this Construction Contract with the City. The Contractor further agrees to utilize the Contractor's best skills, efforts, and judgment in furthering the interests of the City regarding the Project; to furnish at all times an adequate supply of qualified and competent workers and quality materials; and to perform the work in the best, most expeditious, and economical manner. Further, the Contractor agrees to furnish efficient business administration, construction management and superintendence and to use its best efforts to complete the Work in an expeditious and economical manner, consistent with the interests of the City.
- 4.3 The City will have a separate agreement with the Design Consultant to design the Project and to provide construction contract administration services necessary to ensure that the Work conforms to the Contract Documents. Both the Contractor and the Design Consultant shall be given direction by the City, or the City's designated and authorized representative(s). The Contract Documents shall not be deemed to create any contractual relationship between the Design Consultant and the Contractor or any separate contractors, subcontractors of any tier or suppliers on the Project. The relationship between the Contractor and the Design Consultant is intended to be cooperative and proactive, with both participating on the same team with the City.
- **4.4** The Contractor shall accept the designated and authorized representatives of the City identified in the Contract Documents and perform its obligations toward and in response to such representatives in the same manner it would toward and in response to the City, pursuant to such designation and authorization.
- **4.5** <u>City Delegation of Authority.</u> With reference to G.C. 212, CITY'S CONTRACT ADMINISTRATION LINE OF AUTHORITY, the Manager delegates to the City Engineer the authority necessary to undertake the responsibilities identified as the responsibilities of the Deputy Manager under this Construction Contract. The City Engineer hereby designates as Project Manager with authority to handle the day to day administration of this Construction Contract, the following personnel:

Department of Public Works Project Manager

Telephone Email

Michael Young

720-913-4523 michael.young@denvergov.org

5.0 COORDINATION AND COOPERATION:

- 5.1 The Contractor agrees to cooperate and coordinate fully with the City in its performance of the Work to meet or exceed the City's time and budgetary objectives and limitations, while maintaining the City's longstanding commitment to quality, efficiency, value, innovation, partnering, responsiveness to agency and community needs and compliance with all applicable regulatory requirements in the construction of general public improvements.
- **5.2** The Contractor shall, as a continuing work item under this Construction Contract, facilitate coordination, communication and cooperation regarding its performance hereunder between the City's Department of Public Works ("Public Works"), the Project Manager, the Design Consultant, the User Agency, other City consultants and any affiliated entities. In addition, the Contractor shall coordinate its efforts under this Construction Contract with all involved governmental and regulatory entities.
- **5.3** The Contractor shall be responsible for taking accurate and comprehensive minutes at all Construction meetings attended by the Contractor regarding the Project. Those minutes shall be prepared in a format approved by the Project Manager and issued to all attendees, as well as those other parties designated by the City, no later than three working days after the meeting. Unless approved in advance in writing by the Project Manager and to the greatest extent practicable, Project meetings with the City shall be conducted in the City and County of Denver, Colorado.
- **5.4** Nothing contained in the Contract Documents shall be deemed to give any third party any claim or right of action against the City, the Design Consultant or the Contractor that does not otherwise exist without regard to the Contract Documents.
- 5.5 The Contractor shall use its best efforts and take all necessary precautions to protect and prevent damage and/or disruption to all City facilities and equipment, and shall coordinate all ingress and egress requirements with appropriate persons and agencies.

6.0 CONTRACT TIME, SUBSTANTIAL COMPLETION AND LIQUIDATED DAMAGES:

- **6.1** <u>Substantial Completion</u>. The term "Substantial Completion" shall mean 222 calendar days from the date set forth in the Notice to Proceed.
- **Construction Time.** The term "Construction Time" is defined as the total number of days between the date of the Notice to Proceed with Construction and the date on which Substantial Completion of all Work must be completed by the Contractor. The Construction Time shall be: **222 Calendar Days.**
- **6.3 Final Completion.** Final Completion of the Work occurs following Substantial Completion when all punch list items are completed and the Contractor has provided the City with a Final Lien Release Form (which may be contingent upon receipt of Final Payment) (in the form of **Exhibit G**). The term "Final Completion" is defined in the General Conditions.

6.4 Liquidated Damages. The parties recognize and agree that time is of the essence of this Contract. In the event that the Work is not Substantially Complete within the Construction Time, as that time may be extended for delays for which an extension of time is permitted under the terms of the Contract Documents, the City and the Contractor acknowledge and agree, after a full discussion of the implications of this section, that it would be impractical and extremely difficult to estimate the damages (including, by way of example but without limitation, direct and indirect, incidental, special and consequential damages) which the City might incur for failure of the Contractor to timely achieve Substantial Completion within either the Construction Time. Therefore, the City and the Contractor have determined that a reasonable estimate of the total detriment that the City would suffer in the event that the Contractor so defaults and the Project is not Substantially Complete within the Construction Time, as extended as permitted herein, is and shall be, in the event of said default and failure, as the sole and exclusive remedy (whether at law or in equity) of the City for this delay, and not as a penalty, the amount per day stated below that the Work shall remain not Substantially Complete after the Construction Time, as applicable, including extensions, has elapsed. It is understood and agreed that the City reserves all of its other rights and remedies for any other or different breach or default of this Construction Contract by Contractor, or for any other cause of action.

Liquidated Damages Table

Amount Per Day Substantial Completion

\$1000.00

7.0 SUBCONTRACTS AND OTHER AGREEMENTS:

7.1 Subcontractor Selection. The Contractor recognizes and accepts that the subcontractor and supplier selection and contracting procedures specified herein are intended to promote pricing or buyout of the Work which is fair and reasonable and, to the greatest extent practicable, is based on fair and open competition. As such, all Work, except for Work or Services included in the Contractor's Fee, the Contractor's General Conditions or Work performed by the Contractor with the prior written approval of the Project Manager ("Self-Performed Work") shall be procured based upon competitive bids awarded to the lowest, responsive and qualified bidder and subcontracted to "Subcontractors" and "Suppliers," which may include Contractor Self-Performed Work under Section 7.1, in accordance with **Exhibit N/A** and in compliance with the General Conditions, attached hereto and incorporated herein as **Exhibit A**. Each Subcontractor and Supplier selection shall be reviewed by the City and the City reserves the right to reject any Subcontractor or Supplier in accordance with the terms and conditions of the General Conditions or in the event the City determines that the selection was not made after a competitive bid. Upon request of the Contractor, the City may waive the competitive bid requirement of this Section with the express written approval of the Project Manager.

7.2 <u>Self-Performed Work</u>.

7.2.1 Upon prior written approval of the Project Manager, the Contractor may compete for designated Subcontractor or Supplier Work packages. Should the Contractor submit a proposal for any such package, such proposal shall be submitted directly to the Project Manager prior to any proposal deadline and all bid or selection requirements specified in **Exhibit N/A** shall apply to proposal or bid opening and evaluation. The Project Manager shall review with the Contractor all bids submitted where the Contractor has submitted a bid and shall make the final award after consultation with the Contractor. The City must approve any Self-Performed Work award to the Contractor. The Contractor shall perform for the Contractor's lump sum bid amount on the basis of a Stipulated Lump Sum Subcontract, which shall also be subject to City review and written approval of the Project Manager prior to commencement of any Self-Performed Work, but shall not be subject to the cost of work limitations of the Contract Documents.

- **7.2.2** No Self Performed Work is currently anticipated for this project.
- **Subcontract Forms.** All subcontracts will be between the Contractor and the selected Subcontractors or Suppliers. The form of each subcontract shall be furnished to the City for review and acceptance as to form, which acceptance shall not be unreasonably withheld. All subcontracts shall require that all Subcontractors or Suppliers of any tier performing Work accept and agree to be bound by the terms and conditions of the Contract Documents and to assume toward the Contractor all obligations and responsibilities the Contractor, by the Contract Documents, assumes toward the City. All subcontracts shall preserve and protect the rights of the City under the Contract Documents with respect to the Work to be performed by the Subcontractor so that the subcontracting thereof shall not prejudice these rights.
- **7.4** <u>Substitution</u>. The Contractor shall make no substitution for a Subcontractor or Supplier previously selected without the prior written approval of the Project Manager and such approval shall not be unreasonable withheld.
- **Responsibility.** The Contractor shall be responsible to the City for the acts and omissions of its agents and employees, Subcontractors and Suppliers of any tier, and their agents and employees performing Work under this Construction Contract.

8.0 COMPENSATION.

- **8.1** Cost of the Work. The term Cost of the Work shall consist of costs necessarily incurred in the proper performance of the Work for the Project as delineated below which shall be paid by the City to the Contractor. Cost of the Work shall not include any Fee of the Contractor. Any allowable mark-up by the Contractor is included in the Contractor's Fee. Cost of the Work shall consist of the following Contractor incurred items set forth below:
- Cost of wages paid for labor in the performance of the Work at the site or with the City's 8.1.1 agreement at offsite workshops, which shall as a minimum be in accordance with the prevailing wage rates established by the City and County of Denver for construction projects, as set out in DRMC Section 20-76, and in effect at the time that the GMP is established. In the event the prevailing wage rates are increased in accordance with DRMC Section 20-76, on the anniversary date of this Construction Contract, these increases shall also be included as a cost of the work. Costs paid or incurred by the Contractor shall include actual wages for the Contractor's own personnel (including overtime premiums as applicable), taxes, insurance, contributions, assessments and benefits required by law or collective bargaining agreements and for personnel not covered by such agreements, customary benefits and the Contractor's company policy such as sick leave, individual and dependent medical and health benefits, disability insurance, holidays, craft training fund, vacation, pension, and, as applicable, 401K contributions. The City and the Contractor agree that the wages and burden for the personnel referenced in this paragraph and paragraphs 8.1.17 and 8.1.18 shall be charged as a Cost of the Work at not less than the stipulated fixed rates set forth on Prevailing Wage Rate Schedule, attached as Exhibit E, or as appropriate charges at the stipulated fixed rates set forth on the Billing Rates for Salaried Personnel attached as Exhibit L.
- **8.1.2** Cost of contributions, assessments or taxes for such items as unemployment compensation and social security, insofar as such cost is based on wages, salaries or other remuneration paid pursuant to Section 8.1.1.
- **8.1.3** Cost of mock-ups and testing, as may be previously approved by the Project Manager.

- **8.1.4** Cost of all materials, supplies and equipment incorporated in the Work, including costs of transportation thereof.
- **8.1.5** Payments properly made by the Contractor to Subcontractors and Suppliers under Project subcontracts for performance of portions of the Work including insurance required by this Contract and bond premiums incurred.
- **8.1.6** Payments actually made for architects, engineers and other consultants providing services to the Contractor reasonably required to perform the work, unless such services are to be provided to the Owner by the Design Consultant or other City-Retained Consultants (as defined in the Design Consultant's Agreement for Professional Design Services).
- **8.1.7** Cost, including transportation, inspection, handling, storage and maintenance, of all temporary facilities and all materials, supplies, equipment and hand tools not owned by the workmen that are consumed in the performance of the Work on the Project. The Contractor shall negotiate with the City the salvage value of all items purchased and used on the Project but not consumed, damaged, lost or stolen at the completion of the work, crediting any proceeds against the Cost of the Work. If the Contractor and the City cannot agree on the salvage value of the above items then said items shall remain the property of the City and the Contractor shall give no credit to the Cost of the Work. The Contractor may institute a voluntary recycling program.
- **8.1.8** Actual rental charges of all necessary machinery and equipment, exclusive of hand tools, used at the Site, whether rented from the Contractor (at rental rates approved by City and specified on **Exhibit L**) or others, including equipment owned by the Contractor that is assigned to salaried staff and charged to the Project and costs of fuel, oil, insurance, maintenance and minor repairs and replacements, transportation, installation, dismantling and removal thereof. The City and the Contractor agree that the rates for the rented equipment shall be charged as a Cost of Work at the stipulated fixed rates set forth on the Equipment Rental Rate Schedule, attached as **Exhibit L**.
- **8.1.9** The cost of the premiums for all bonds and Builder's Risk insurance that the Contractor is required to procure by this Construction Contract. The costs of the premiums for all other insurance that the Contractor is required to procure by this Construction Contract or that are deemed necessary by the Contractor with the City's written approval shall be charged as a Cost of the Work at the stipulated fixed percentage of 1.28% of the Cost of Work, and all deductibles that are attributable to this Construction Contract, including equipment insurance deductibles.
- **8.1.10** Applicable sales, use or similar taxes related to the direct performance of the Work and for which the Contractor is liable, imposed by any governmental authority.
- **8.1.11** Permits, fees, licenses, costs of all tests, commissioning costs, inspections and approvals, as may be required by the Contract Documents or applicable laws, ordinances or public authority for the performance of the work (except for inspection and testing performed by the City, at its cost).
- **8.1.12** Actual costs of reproduction, telegrams, facsimile transmissions, mobile phones, long distance telephone calls, telephone service at the Site, postage and express delivery charges, and reasonable petty cash expenses of the site office in connection with the Work.
- **8.1.13** Cost of removal of all debris from the Site.
- **8.1.14** Costs for temporary and permanent power, lighting, heat, chilled drinking water, sewer and water services as required to complete the Work at the Site, and costs for snow removal as required.

- **8.1.15** Cost incurred by the Contractor in repairing or correcting defective, damaged or nonconforming work, provided that such defective, damaged or nonconforming work was beyond the control of the Contractor, Subcontractors, or Suppliers, or caused by the ordinary mistakes or inadvertence, and not the negligence of the Contractor's or any Subcontractor's or Supplier's supervisory personnel. If the costs associated with such defective, damaged or nonconforming work are recoverable from insurance or Subcontractors or Suppliers, the Contractor shall exercise its best efforts to obtain recovery from the appropriate source and credit the Cost of the Work if recovery is obtained.
- **8.1.16** Costs incurred due to any emergency affecting the safety of persons and property and related to the Work unless otherwise covered by insurance or reimbursable from a Subcontractor or Supplier, or unless such costs are due to the fault or negligence of the Contractor or a Subcontractor or Supplier of any tier.
- **8.1.17** Wages or salaries of the Contractor's supervisory and administrative personnel when stationed at the site, and when stationed off-site and working on the Project in accordance with the staffing and salary schedule set forth in **Exhibit L**, including vacation time, in accordance with the Contractor's company policy, accrued and taken during the performance of the Work. This includes estimators, safety personnel, quality control personnel and their assistants.
- **8.1.18** Wages or salaries of the Contractor's supervisory or administrative personnel engaged at factories, workshops or on the road, in expediting the production or transportation of materials or equipment required for the Work, but only for that portion of their time required for the Work in accordance with the staffing and salary schedule set forth in **Exhibit L**.
- **8.1.19** With prior written approval of the Project Manager, that portion of the reasonable travel and subsistence expenses of the Contractor's personnel incurred while traveling in discharge of duties connected with the Work.
- **8.1.20** Fees of testing laboratories for tests required by the Contract Documents.
- **8.1.21** Legal, mediation and arbitration costs other than those arising from disputes between the City and the Contractor reasonably incurred by the Contractor in the performance of the Work and with the City's prior written permission of the Project Manager.
- **8.1.22** Other costs incurred in the performance of the Work if and to the extent approved in advance in writing by the City.
- **8.1.23** Costs associated with the implementation of any established company safety program, which costs shall be subject to City's reasonable approval.
- **8.1.24** Contractor's General Conditions expenses as identified in **Exhibit A**. These expenses include rented or purchased materials and equipment used by the Contractor at the Project site office in connection with the Work.
- **8.1.25** Cost of warranty repairs, to the extent not covered by a subcontract or purchase agreement (provided that the Contractor shall use its best efforts to enforce the warranties received from subcontractors, suppliers and vendors). These costs include the Contractor's administrative staff associated with supervision and management of the warranty repairs.
- **8.1.26** Reasonable data processing costs related to the work, including data line service, internet charges, software costs and licenses fees.

- **8.1.27** All costs and fees incurred in the performance of work and approved for payment under the Preconstruction Services Agreement (**Exhibit C**).
- **8.1.28** Deposits for materials, design of manufactured items and supplied items is the responsibility of the contractor. Reimbursements will be made once the item is installed and accepted by the Project Manager.
- **8.2** Costs Not To Be Reimbursed. Cost of the Work shall not include expenditures made for any of the following:
- **8.2.1** Salary of any officer of the Contractor.
- **8.2.2** Salary of the Contractor's employees stationed at the Contractor's main office not working on the Project.
- **8.2.3** Overhead, profit and general expenses of any kind except as included in the Contractor's Fee.
- **8.2.4** The capital expenses of the Contractor, including interest on capital employed for the work.
- **8.2.5** Expenses of the Contractor's principal office and offices, other than the Site office.
- **8.2.6** Costs incurred by the Contractor in situations where such costs may be covered by insurance or recoverable from a Subcontractor or Supplier, if the Contractor failed to use its best efforts to obtain such insurance proceeds or recovery from the responsible Subcontractor(s) or Supplier(s).
- **8.2.7** Expenses incurred for relocation and temporary living expenses of personnel required for the Work, or when such relocation is for the convenience of the Contractor.
- **8.2.8** Any cost that would cause the GMP to be exceeded.
- **8.2.9** Any costs not specifically included in the Cost of the Work, Section 8.1.
- **8.2.10** Costs of retesting non-conforming Work.
- **8.3** Contractor's Fee. The "Contractor's Fee" (the "Fee") to be paid to the Contractor and included in the GMP shall be a lump sum of ONE HUNDRED FIFTY-EIGHT THOUSAND SEVEN HUNDRED SIXTY DOLLARS AND ZERO CENTS (\$158,760.00), payable in progress installments pursuant to a mutually agreeable schedule of progress installments.

8.4 Guaranteed Maximum Price.

- **8.4.1** Guaranteed Maximum Price. The GMP is incorporated herein as Exhibit L, subject to adjustments as provided in the Contract Documents.
- **8.4.2** The Guaranteed Maximum Price consists of the sum of (i) the estimated Cost of the Work; and (ii) the Fee. The Contractor has presented, and the City has accepted the Guaranteed Maximum Price and Basis of the GMP Proposal attached hereto as **Exhibit L**. The Parties specifically agree that the City shall not be subject to any cost, charge or fee under this Agreement that is not specified above.
- **8.5** Savings. In the event that the actual Cost of the Work plus the Fee shall be less than the GMP, the resulting savings shall inure One Hundred Percent (100%) to the City. The Contractor shall distribute

such savings to the City by Change Order that either reduces the GMP or implements enhancements or additions to the Project requested by the City.

8.6 <u>Construction Contract Amount and Funding</u>. In accordance with the terms of this Construction Contract, the maximum Construction Contract Amount to be paid by the City to the Contractor under this Agreement shall not exceed ONE MILLION SEVEN HUNDRED SIXTY-FOUR THOUSAND DOLLARS AND ZERO CENTS (\$1,764,000.00). The Contractor guarantees and warrants that the Project will be completed by its performance hereunder for the GMP amount. In no event will the City's liability exceed the maximum Construction Contract Amount, as adjusted by duly authorized change order in accordance with this Construction Contract. The parties specifically agree that any performance by the Contractor hereunder shall not subject the City to any cost, charge or fee not specified above.

9.0 **DISPUTE RESOLUTION:**

It is the express intention of the parties to this Construction Contract that all disputes of any nature whatsoever regarding the Construction Contract including, but not limited to, any claims for compensation or damages arising out of breach or default under this Construction Contract, shall be resolved by administrative hearing pursuant to the provisions of Section 56-106, DRMC or, with respect to appropriate issues involving Small Business Enterprise contracting, by Section 28-33, DRMC. The Contractor expressly agrees that this dispute resolution process is the sole and only dispute resolution mechanism that will be recognized and employed by the parties for any claims put forward by the Contractor, notwithstanding any other claimed theory of entitlement on the part of the Contractor or its Subcontractors or Suppliers.

10.0 ADDITIONAL PROVISIONS:

- 10.1 No Discrimination in Employment. In connection with the performance of work under this Agreement, the Contractor may not refuse to hire, discharge, promote or demote, or discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender identity or gender expression, marital status, or physical or mental disability. The Contractor shall insert the foregoing provision in all subcontracts.
- **10.2** <u>Insurance</u>. In addition to the requirements and obligations set forth in Title 16, the Contractor shall comply with the insurance requirements set forth in **Exhibit B**.
- **10.3** <u>Title to the Work.</u> The parties agree that the City shall have title to all components and aspects of the Project which are in place and title to all materials for which any payment has been made to the Contractor hereunder.
- Compliance with Minority/Women Owned Business Enterprise Requirements. This Agreement is subject to Article III, Divisions 1 and 3 of Chapter 28, Denver Revised Municipal Code (D.R.M.C.), designated as Sections 28-31 to 28-36 and 28-52 to 28-90 D.R.M.C. (the "M/WBE Ordinance") and any Rules or Regulations promulgated pursuant thereto. However, Division of Small Business Opportunity has waived goals for this project. The City encourages MBE and WBE participation when available.

10.5 Compliance with Wage Rate Requirements.

10.5.1 Contractor shall comply with, and agrees to be bound by, all requirements, conditions and City determinations regarding the Payment of Prevailing Wages Ordinance, Sections 20-76 through 20-79, D.R.M.C. including, but not limited to, the requirement that every covered worker working on a City owned or leased building or on City-owned land shall be paid no less than the prevailing wages and fringe benefits in effect on the date the bid or request for proposal was advertised. In the event a request for bids, or a request for proposal, was not advertised, Contractor shall pay every covered worker no less than the prevailing wages and fringe benefits in effect on the date funds for the contract were encumbered. A copy of the applicable prevailing wage rate schedule is attached as **Exhibit E** and incorporated herein by reference.

Date bid or request for qualifications/proposals was advertised November 30, 2017.

- **10.5.2** Prevailing wage and fringe rates will adjust on, and only on, the anniversary of the date the Contract was fully executed. Unless expressly provided for in this Agreement, Contractor will receive no additional compensation for increases in prevailing wages or fringe benefits.
- **10.5.3** Contractor shall provide the Auditor with a list of all subcontractors providing any services under the contract.
- **10.5.4** Contractor shall provide the Auditor with electronically-certified payroll records for all covered workers employed under the contract.
- **10.5.5** Contractor shall prominently post at the work site the current prevailing wage and fringe benefit rates. The posting must inform workers that any complaints regarding the payment of prevailing wages or fringe benefits may be submitted to the Denver Auditor by calling 720-913-5000 or emailing auditor@denvergov.org.
- **10.5.6** If Contractor fails to pay workers as required by the Prevailing Wage Ordinance, Contractor will not be paid until documentation of payment satisfactory to the Auditor has been provided. The City may, by written notice, suspend or terminate work if Contractor fails to pay required wages and fringe benefits. A copy of the applicable prevailing wage rate schedule is attached as **Exhibit E**.
- Applicability of Laws. This Contract and Agreement between the Contractor and the City shall be deemed to have been made in the City and County of Denver, State of Colorado and shall be subject to, governed by and interpreted and construed in accordance with the laws of the State of Colorado and the Charter, the Revised Municipal Code, Rules, Regulations, Executive Orders and fiscal rules of the City. As such, the Contractor shall at all times comply with the provisions of the Charter, Revised Municipal Code, Rules, Regulations, Executive Orders and fiscal rules of the City, and those of the State of Colorado and Federal Laws and Rules and Regulations, which in any manner limit, control or apply to the actions or operations of the Contractor, any Subcontractors, employees, agents or servants of the Contractor engaged in the Work or affecting the materials and equipment used in the performance of the Work, as the same may be, from time to time, promulgated, revised or amended. The Charter and Revised Municipal Code of the City, as the same may be amended from time to time, are hereby expressly incorporated into this Construction Contract as if fully set out herein by this reference.
- 10.7 <u>Appropriation</u>. Notwithstanding any other term, provision, or condition herein, all payment obligations under this Construction Contract shall be limited to the funds appropriated or otherwise made available by the Denver City Council and paid into the Treasury of the City. As of the date of this Construction Contract, ONE MILLION SEVEN HUNDRED SIXTY-FOUR THOUSAND DOLLARS AND ZERO CENTS (\$1,764,000.00) have been appropriated for this Construction Contract. The Manager of Public Works, upon reasonable written request, will advise the Contractor in

writing of the total amount of appropriated and encumbered funds that are or remain available for payment to the Contractor.

- 10.8 The issuance of any form of order or directive by the City which would cause the aggregate amount payable to the Contractor to exceed the amount appropriated for the Work to be performed in accordance with the Contract Documents is expressly prohibited. In no event shall the issuance of any change order or other form of order or directive by the City be considered valid or binding if it requires additional compensable Work to be performed, which Work will cause the aggregate amount payable for such Work to exceed the amount appropriated and encumbered for the Work, unless and until such time as the Contractor has been advised in writing by the Manager of Public Works that a lawful appropriation sufficient to cover the entire cost of such additional Work has been made. It shall be the responsibility of the Contractor to verify that the amounts already appropriated for the Work are sufficient to cover the entire cost of such Work, and any Work undertaken or performed in excess of the amount appropriated is undertaken or performed in violation of the terms of this Agreement, without the proper authorization for such Work, and at the Contractor's own risk and sole expense.
- 10.9 <u>Approvals.</u> In the event this contract calls for the payment by the City of **FIVE HUNDRED THOUSAND DOLLARS AND ZERO CENTS** (\$500,000.00) or more, approval by the City Council of the City and County of Denver, acting by ordinance, in accordance with Section 3.2.6 of the Charter of the City and County of Denver, is and shall be an express condition precedent to the lawful and binding execution and effect and performance of this contract.
- **10.10** Assignment Strictly Prohibited. The Contractor shall not assign or otherwise transfer, in whole or in part, any of its rights, benefits, claims, obligations, duties or entitlement to monies owed or which may become due under this Construction Contract, except upon the prior written consent and approval of the Executive Director to such assignment.
- **10.11** Conflict of Interest. The parties agree that no official, officer or employee of the City shall have any personal or beneficial interest whatsoever in the services or property described herein and the City further agrees not to hire or contract for services with any official, officer or employee of the City or any other person which would be in violation of the Denver Revised Municipal Code Chapter 2, Article IV, Code of Ethics, or Denver City Charter provisions 1.2.9 and 1.2.12.
- **10.12** Taxes, Charges and Penalties. Except as provided in the City's Prompt Payment ordinance, codified at DRMC Sections 20-107, 20-108 and 20-109, the City shall not be liable for the payment of any taxes, late charges, interest or penalties of any nature arising out of this Construction Contract.
- **10.13** Waiver of C.R.S. 13-20-802 et. seq. The Contractor specifically waives all the provisions of Part 8 of Article 20 of Title 13, Colorado Revised Statutes regarding defects in the Work under this Construction Contract.

10.14 Proprietary or Confidential Information.

10.14.1 City Information: The Contractor understands and agrees that, in performance of this Construction Contract, the Contractor may have access to private or confidential information that may be owned or controlled by the City and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to the City. The Contractor agrees that all information disclosed by the City to the Contractor shall be held in confidence and used only in performance of the Construction Contract. The Contractor shall exercise the same standard of care to protect such information as a reasonably prudent Contractor would to protect its own proprietary data.

10.14.2 Contractor Information: The parties understand that all the material provided or produced under this Construction Contract may be subject to the Colorado Open Records Act, C.R.S. 24-72-201, et seq., and that in the event of a request to the City for disclosure of such information, the City shall advise the Contractor of such request in order to give the Contractor the opportunity to object to the disclosure of any of its proprietary or confidential material. In the event of the filing of a lawsuit to compel such disclosure, the City will tender all such material to the court for judicial determination of the issue of disclosure and the Contractor agrees to intervene in such lawsuit to protect and assert its claims of privilege against disclosure of such material. The Contractor further agrees to defend, indemnify and save and hold harmless the City, its officers, agents and employees, from any claim, damages, expense, loss or costs arising out of the Contractor's intervention to protect and assert its claims of privilege against disclosure under this Section including, but not limited to, prompt reimbursement to the City of all reasonable attorney fees, costs and damages that the City may incur directly or may be ordered to pay by such court.

10.15 Status of Contractor. It is understood and agreed that the status of the Contractor shall be that of an independent contractor retained on a contractual basis to perform work or services for limited periods of time, and it is not intended, nor shall it be construed, that the Contractor, or any member of its staff or any consultant, is an employee or officer of the City for any purpose whatsoever.

10.16 Rights and Remedies Not Waived. No payment or failure to act under the Construction Contract by the City shall constitute a waiver of any breach of covenant or default which may then exist on the part of the Contractor. No assent, expressed or implied, by either party to any breach of the Construction Contract shall be held to be a waiver of any default or other breach.

10.17 Notices. Any notices, demands, or other communications required or permitted to be given by any provision of this Construction Contract shall be given in writing, delivered personally or sent by registered mail, postage prepaid and return receipt requested, addressed to the parties at the addresses set forth herein or at such other address as either party may hereafter or from time to time designate by written notice to the other party given in accordance herewith. Notice shall be considered received on the day on which such notice is actually received by the party to whom it is addressed, or the third (3rd) day after such notice is mailed, whichever is earlier. Unless changed in writing, such notices shall be mailed to:

If to the Contractor:

Hensel Phelps Construction Co. 420 Sixth Avenue Greeley, Colorado 80631

If to the City:

Executive Director of Public Works Department of Public Works City and County of Denver 201 West Colfax, Department 608 Denver, Colorado 80202

With a copy to:

City Attorney
City and County of Denver

201 West Colfax, Department 1207 Denver, Colorado 80202

- **10.18** Survival of Certain Provisions. The parties understand and agree that all terms, conditions and covenants of this Construction Contract, together with the exhibits and attachments hereto, if any, any or all of which, by reasonable implication, contemplate continued performance or compliance beyond the expiration or termination of this Construction Contract (by expiration of the term or otherwise), shall survive such expiration or termination and shall continue to be enforceable as provided herein. Without limiting the generality of the foregoing, the Contractor's obligations for the provision of insurance, for indemnity to the City and for preserving confidentiality of trade secrets and other information shall survive for a period equal to any and all relevant statutes of limitation, plus the time necessary to fully resolve any claims, matters, or actions begun within that period.
- **10.19** Contract Binding. It is agreed that this Construction Contract shall be binding on and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and duly authorized assigns.
- **10.20 Paragraph Headings.** The captions and headings set forth herein are for convenience of reference only and shall not be construed so as to define or limit the terms and provisions hereof.
- **10.21** Severability. It is understood and agreed by the parties hereto that, if any part, term, or provision of this Construction Contract, except for the provisions of this Construction Contract requiring prior appropriation and limiting the total amount to be paid by the City, is by the courts held to be illegal or in conflict with any law of the State of Colorado, the validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Construction Contract did not contain the particular part, term or provision held to be invalid.

[SIGNATURE PAGES FOLLOW]

Contract Control Number:	
IN WITNESS WHEREOF, the parties Denver, Colorado as of	s have set their hands and affixed their seals at
SEAL	CITY AND COUNTY OF DENVER
ATTEST:	By
APPROVED AS TO FORM:	REGISTERED AND COUNTERSIGNED
By	By
	Ву



Contractor Name:	HENSEL PHELPS CONSTRUCTION CO.
	Ву:
	Name: Edwin Glen Miller (please print)
	Title: Vice-President (please print)
	ATTEST: [if required]
	By:
	Name:(please print)

PWADM-201845871-00

Contract Control Number:



Title: (please print)

Exhibit A General Contract Conditions 2011 Edition

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

INDEX

TITLE 1	
DEFINITIO	NS
101	CITY
102	CONTRACT
103	CONTRACT AMOUNT
104	CONTRACT DOCUMENTS
105	CONTRACT TIME
106	CONTRACTOR
107	CONTRACTOR PERSONNEL
108	DAYS
109	DEPUTY MANAGER
110	DESIGNER
111	FINAL COMPLETION
112	MANAGER
113	PRODUCT DATA
114	PROJECT
115	PROJECT MANAGER
116	SAMPLES
117	SHOP DRAWINGS
118	SUBCONTRACTOR
119	SUBSTANTIAL COMPLETION
120	SUPPLIER
121	WORK
TITLE 2	
CITY ADM	INISTRATIVE ORGANIZATIONS; LINE OF AUTHORITY
201	DEPARTMENT OF AVIATION
202	MANAGER OF AVIATION
203	DEPARTMENT OF PUBLIC WORKS
204	MANAGER OF PUBLIC WORKS
205	BUILDING INSPECTION
206	ZONING
207	DIVISION OF SMALL BUSINESS OPPORTUNITY
208	CITY AUDITOR
209	MANAGER OF FINANCE
210	CITY ATTORNEY
211	OFFICE OF RISK MANAGEMENT
212	CITY'S CONTRACT ADMINISTRATION LINE OF AUTHORITY
213	CITY'S COMMUNICATION WITH THE CONTRACTOR

IIILE 3	TOD DEDUCATION AND GEDVICES
	TOR PERFORMANCE AND SERVICES
301	CONSIDERATION
	(CONTRACTOR'S PROMISE OF PERFORMANCE)
302	NOTICE TO PROCEED AND COMPLETION OF THE WORK
303	EXACT CONTRACTOR PERFORMANCE
304	SUBSTITUTED PERFORMANCE
305	WORK PERFORMED UNDER ADVERSE
	WEATHER CONDITIONS
306	WORKING HOURS AND SCHEDULE
307	CONTRACTOR'S SUPERINTENDENT
308	COMMUNICATIONS
309	CONTRACTOR SUBMITTALS
	AND OTHER WRITTEN COMMUNICATIONS TO THE CITY
310	COMPETENCE OF CONTRACTOR'S WORK FORCE
311	NO EMPLOYMENT OF ILLEGAL ALIENS
TO I	PERFORM WORK UNDER THE CONTRACT
312	CONDUCT OF CONTRACTOR'S PERSONNEL
313	SUGGESTIONS TO CONTRACTOR
314	WORK FORCE
315	CONSTRUCTION MACHINES AND STANDBY EQUIPMENT
316	CUTTING AND PATCHING THE WORK
317	PERMITS AND LICENSES
318	CONSTRUCTION SURVEYS
319	PRESERVATION OF PERMANENT
	LAND SURVEY CONTROL MARKERS
320	TRADEMARKS, COPYRIGHTS AND PATENTED DEVICES,
	MATERIALS, AND PROCESSES
321	PROJECT SIGNS
322	PUBLICITY AND ADVERTISING
323	TAXES
324	DOCUMENTS AND SAMPLES AT THE SITE
325	CLEANUP DURING CONSTRUCTION
326	SANITARY FACILITIES
327	POWER, LIGHTING, HEATING, VENTILATING,
	AIR CONDITIONING AND WATER SERVICES
TITLE 4	
	T DOCUMENTS (DRAWINGS AND TECHNICAL SPECIFICATIONS)
401	CONTRACT DOCUMENTS - REVIEW AND INTERPRETATION
402	OWNERSHIP OF CONTRACT DRAWINGS
	AND TECHNICAL SPECIFICATIONS
403	CONTRACT DRAWINGS AND TECHNICAL SPECIFICATIONS
	ISSUED TO THE CONTRACTOR
404	
405	
406	·
100	ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
TITLE 5	
	RACTS

501	SUBCONTRACTS	24
502	SUBCONTRACTOR ACCEPTANCE	24
TITLE 6	OMMENCEMENT AND COMPLETION	27
601		
	LIQUIDATED DAMAGES; ADMINISTRATIVE COSTS;	21
002	ACTUAL DAMAGES	27
602	DELAY DAMAGES	
003	DELAT DAMAGES	20
TITLE 7		
	ΓΙΟΝ, COORDINATION AND RATE OF PROGRESS	
701	COOPERATION WITH OTHER WORK FORCES	
702	COORDINATION OF THE WORK	
	COORDINATION OF PUBLIC CONTACT	
704	RATE OF PROGRESS	30
TITLE 8		
PROTECTI	ON OF PERSONS AND PROPERTY	32
801	SAFETY OF PERSONS	32
802	PROTECTIVE DEVICES AND SAFETY PRECAUTIONS	33
803	PROTECTION OF PROPERTY AND WORK IN PROGRESS	33
804	PROTECTION OF MUNICIPAL, PUBLIC SERVICE	
	OR PUBLIC UTILITY SYSTEMS	34
805	PROTECTION OF STREET AND ROAD SYSTEM	
806	PROTECTION OF DRAINAGE WAYS	
807	PROTECTION OF THE ENVIRONMENT	
808	HAZARDOUS AND EXPLOSIVE MATERIALS OR SUBSTANCES	
809	ARCHAEOLOGICAL AND HISTORICAL DISCOVERIES	
TITLE 9		
	ATION	20
901	CONSIDERATION (CITY'S PROMISE TO PAY)	
901	PAYMENT PROCEDURE	
902	SCHEDULE OF VALUES IN LUMP SUM CONTRACTS	
	UNIT PRICE CONTRACTS	
905	PROGRESS PERIOD	
	APPLICATIONS FOR PAYMENT	<i>39</i> 40
	RELEASES AND CONTRACTORS	40
907	CERTIFICATIONS OF PAYMENT	<i>1</i> 1
908	RETAINAGE	
908	ADDITIONAL WITHHOLDING OF PROGRESS PAYMENTS	
909	FINAL ESTIMATE AND PAYMENT	
910	ACCOUNTING OF COSTS AND AUDIT	
911	ACCOUNTING OF COSTS AND AUDIT	43
TITLE 10		
WAGES		
	PREVAILING WAGE ORDINANCE	
	POSTING OF THE APPLICABLE WAGE RATES	
	RATE AND FREQUENCY OF WAGES PAID	
[() () \(\Delta \)	REPORTING WAGES PAID	45

1005 FAILURE TO PAY PREVAILING WAGES	46
TITLE 11	
CHANGES IN THE WORK, CONTRACT PRICE OR CONTRACT TIME	47
1101 CHANGE ORDER	
1102 CITY INITIATED CHANGES	
1103 CONTRACTOR CHANGE REQUEST	48
1104 ADJUSTMENT TO CONTRACT AMOUNT	51
1105 TIME EXTENSIONS	
TITLE 12	
CONTRACTOR CLAIMS FOR ADJUSTMENT AND DISPUTES	56
1201 NOTICE OF INTENT TO CLAIM	
1202 SUBMITTAL OF CLAIMS	
1203 WAIVER OF CLAIMS	
TITLE 13	
DISPUTES	59
1301 DISPUTES	59
TITLE 14	
SITE CONDITIONS	60
1401 DIFFERING SITE CONDITIONS	
1402 SITE INSPECTIONS AND INVESTIGATIONS	60
TITLE 15	
PERFORMANCE AND PAYMENT BONDS	62
1501 SURETY BONDS	62
1502 PERFORMANCE BOND	62
1503 PAYMENT BOND	62
TITLE 16	
INSURANCE AND INDEMNIFICATION	63
1601 INSURANCE	
1602 DEFENSE AND INDEMNIFICATION	63
TITLE 17	
INSPECTION AND DEFECTS	
1701 CONSTRUCTION INSPECTION BY THE CITY	
1702 AUTHORITY OF INSPECTORS	
1703 OBSERVABLE DEFECTS	
1704 DEFECTS - UNCOVERING WORK	64
1705 LATENT DEFECTS	65
1706 REMOVAL OF DEFECTIVE MATERIALS AND WORK	65
TITLE 18	
WARRANTIES, GUARANTEES AND CORRECTIVE WORK	66
1801 CONTRACTOR'S WARRANTIES, GUARANTEES	
AND CORRECTION OF WORK	
1802 PERFORMANCE DURING WARRANTY PERIOD	67

TITLE 19	
SUBSTANTIAL COMPLETION OF THE WORK	
1901 CONTRACTOR'S NOTICE OF SUBSTANTIAL COMPLETION	
1902 INSPECTION AND PUNCH LIST	
1903 CERTIFICATE OF SUBSTANTIAL COMPLETION	
1904 RIGHT OF EARLY OCCUPANCY OR USE	69
TITLE 20	
FINAL COMPLETION AND ACCEPTANCE OF THE WORK	
2001 CLEAN-UP UPON COMPLETION	
2002 FINAL COMPLETION AND ACCEPTANCE OF THE WORK	
2003 FINAL SETTLEMENT	71
TITLE 21	
SUSPENSION OF WORK	
2101 SUSPENSION OF WORK	
2102 SUSPENSION OF THE WORK FOR THE CITY'S CONVENIENCE	
2103 SUSPENSION BECAUSE OF ORDER OF CITY, STATE OR FEDERAL	
COURT OR AGENCY	75
2104 SUSPENSION RESULTING FROM CONTRACTOR'S	
FAILURE TO PERFORM	75
TITLE 22	
CITY'S RIGHT TO TERMINATE THE CONTRACT	
2201 TERMINATION OF CONTRACT FOR CAUSE	76
2202 TERMINATION OF CONTRACT FOR CONVENIENCE OF THE	
CITY	77
TITLE 23	
MISCELLANEOUS PROVISIONS	80
2301 PARTIES TO THE CONTRACT	
2302 FEDERAL AID PROVISIONS	80
2303 NO WAIVER OF RIGHTS	
2304 NO THIRD PARTY BENEFICIARY	
2305 GOVERNING LAW; VENUE	81
2306 ABBREVIATIONS	81
2307 STATUTE OF LIMITATIONS IN C R S & 13-80-102(1)(h)	81

EXHIBIT B SPECIAL CONTRACT CONDITIONS

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

SC-1 CONSTRUCTION SPECIFICATIONS

Except as amended herein, all Work performed under the terms of this Contract shall be governed by the applicable provisions of the following latest editions:

Standard Specifications for Construction, GENERAL CONTRACT CONDITIONS, City and County of Denver (The Index for which is bound herein and commonly referred to as the "Yellow Book") (2011 Edition)

Manual on Uniform Traffic Control Devices for Streets & Highways (MUTCD)

Building Code of the City and County of Denver

National Fire Protection Association Standards (As referenced in the Building Code of the City and County of Denver)

The aforementioned documents are available for review at the Capital Projects Management Office, 201 W. Colfax Ave., Dept. 506, (5th floor), Denver, CO 80202. *The Standard Specifications for Construction*, GENERAL CONTRACT CONDITIONS, *City and County of Denver*, and the *Standards and Details for the City and County of Denver* are available online at:

 $\frac{http://www.denvergov.org/Portals/480/documents/2011\%20DENVER\%20GENERAL\%20CON}{TRACT\%20CONDITIONS.pdf}$

 $\frac{http://www.denvergov.org/rightofwayservices/RightofWayServices/ConstructionInspection/RightofWayConstructionInspection/StandardsandDetails/TransportationStandardsandDetails/tabid/442}{463/Default.aspx}$

 $\frac{http://www.denvergov.org/wastewatermanagement/WastewaterManagement/EngineeringandPermits/StandardsandDetails/tabid/438018/Default.aspx}{}$

The Manual on Uniform Traffic Control Devices for Streets & Highways is available for review as stated above, or can be viewed at the Federal Highway Administration Website at: www.fhwa.dot.gov, where you will also find purchase information.

SC-2 CITY DELEGATION OF AUTHORITY

With reference to General Contract Condition 109, DEPUTY MANAGER, General Contract Condition 206, ENGINEERING DIVISION and General Contract Condition 214, CITY'S

CONTRACT ADMINISTRATION LINE OF AUTHORITY, the Manager hereby designates the City Engineer as the City official responsible for those certain actions and decisions designated as the responsibility of the Deputy Manager under the General Conditions and delegates to the City Engineer the authority necessary to undertake those responsibilities under this Contract. The Director shall have supervisory responsibility over the Project Manager. Additionally, Contractor questions concerning the Plans and Technical Specifications shall be directed to:

Denver Department of Public Works / Engineering Division,

Project Manager

Michael Young, Public Works/ Infrastructure Project Management

Consultant

Cannon Design (Formerly GKK)

SC-3 CONTRACT AMOUNT; BID PRICE, GUARANTEED MAXIMUM PRICE

General Condition 103, CONTRACT AMOUNT, is hereby deleted in its entirety and replaced with the following:

"Contract Amount," "Bid Price," "Bid Amount," or "Maximum Contract Amount" means the Guaranteed Maximum Price ("GMP") under the Contract.

In the General Conditions, the phrases "provided to the City at no cost," "at no cost to the City," "cost . . . shall be borne by the Contractor," "costs shall be reimbursed by the Contractor," "at the expense of the Contractor," "Contractor shall bear any and all costs," and "Contractor shall bear any and all additional costs," mean that the costs in question are to be included as a Cost of the Work without any increase to the Guaranteed Maximum Price. Also, whenever a General Condition states that the Contractor shall be required to take any action, or responsible for any action or thing, it means that such requirements and responsibilities are included as a Cost of the Work without any increase to the Guaranteed Maximum Price, unless there is a specific statement to the contrary as to any such requirement or responsibility.

SC-4 TIME OF BIDDING; TIME OF CONTRACTING

In the General Conditions, the words "time of bidding," "bidding," and the like, shall mean the time when the Contract is signed.

SC-5 CONTRACT DOCUMENTS

General Condition 104 CONTRACT DOCUMENTS is hereby deleted in its entirety and replaced with the following:

"The Contract Documents" consist of the documents which are listed in the Contract Form."

SC-6 CONTRACT TIME

General Condition 105 CONTRACT TIME is hereby deleted in its entirety and replaced with the following:

"Contract Time" is the time specified in the Contract within which the Contractor is required to substantially complete the Work. Substantial Completion shall occur prior to Final Completion. The Contract Documents may require completion on or before a certain specified date.

SC-7 DEPUTY MANAGER/CITY ENGINEER

General condition 109 DEPUTY MANAGER is hereby deleted in its entirety and replaced with the following:

The "Deputy Manager" means the official who reports directly to the Manager and exercises supervisory responsibility in the City agency defined in Title 2 herein that is responsible for the Project. The Manager hereby designates the City Engineer as the Deputy Manager for purposes of this Contract. The City Engineer shall have responsibility for this Project and shall undertake all duties, responsibilities, rights and authority, including specific actions and decisions, delegated to the Deputy Manager under the various terms and conditions of this Contract.

SC-8 SUBCONTRACTOR

General Condition 118, SUBCONTRACTOR, is hereby amended by adding a new final sentence to read as follows:

"Subcontractor" may also mean the Contractor pursuant to a subcontract for lump-sum self-performed work, as authorized in the Contract Form.

SC-9 WORK

General Condition 121 WORK is hereby deleted in its entirety and replaced with the following:

The terms "Scope of Work" or "Work" as used herein shall mean all Preconstruction and Construction Phase services required by or inferable from the Contract Documents, whether completed or partially completed, and includes all other labor, management, administration, supervision, materials, supplies, manufactured components, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations under the Contract.

SC-10 WORKING HOURS AND SCHEDULE

General Condition 306 WORKING HOURS AND SCHEDULE is hereby deleted in its entirety and replaced with the following:

- 1. Contractor acknowledges that the Work is to take place within the secured portion of the courthouse. Work shall take place at night while the facility is not open for normal operations and closed to the public unless the Contractor receives prior written approval from the Project Manager.
- 2.. Work shall normally not be done on Saturdays, Sundays, City observed holidays, or outside of the working hours which may be specified in the Special Conditions, except for such work as may be necessary for proper

care, maintenance, and protection of Work already done, or in cases when the Work would be endangered or when hazard to life or property would result The Contractor shall comply with Denver's noise control ordinance during all working hours.

- If the Contractor believes it may be necessary to work on Saturdays, Sundays, holidays, city furlough days, or outside of the working hours specified in the Special Condition, the Contractor shall make prior arrangements with the Project Manager and receive written approval at least two working days before such work period so that proper inspection and engineering services can be provided. Such approval may be revoked by the Project Manager if the Contractor fails to maintain adequate equipment and lighting at night for the proper prosecution, control and inspection of the Work. If Work is done outside of approved working hours, and the Project Manager has not assigned inspectors to the Work, the Work performed during those periods of time may be declared defective solely on the grounds that it was not properly inspected.
- 4. The Contractor shall schedule and coordinate the performance of all of its Subcontractors and Suppliers, including their use of the Work site. The Contractor shall keep the Subcontractors and Suppliers informed of the Project construction schedule to enable the Subcontractors and Suppliers to plan and perform their work properly.
- 5. The Contractor shall submit, with the GMP Proposal, a construction schedule which shall provide for the expeditious and practicable execution of the Work. Such construction schedule shall be in a Critical Path Method (CPM) format or such other format approved by the Project Manager. This Schedule shall be considered, upon City acceptance, the baseline schedule for the Project. A Critical Path Method schedule shall be required in any event for any Contractor Change Request pursuant to G.C. 1103.4 and any resulting claim. The receipt of the schedule by the Project Manager shall in no way constitute acceptance of the Contractor's anticipated schedule of construction activities. The schedule will be reviewed for comment by the Project Manager. The Project Manager's review and comment on the schedule shall not constitute approval or acceptance thereof by the City.
- 6. The Critical Path Method schedule shall provide reasonable detail as described in the Technical Specifications and shall include a time scaled network and computer printout. Additionally, float or slack is defined as the amount of time between the early start date and the late start date, or the early finish date and the late finish date, of any activities in the schedule. Float or slack is not time for the exclusive use or benefit of either the Contractor or the City.
- 7. The Contractor shall, once a month, submit a progress report and an updated schedule in a form acceptable to the Project Manager.

SC-11 SUBCONTRACTOR ACCEPTANCE

General Condition 502, SUBCONTRACTOR ACCEPTANCE, is hereby deleted in its entirety and replaced by the following:

- Except as provided in the City's Small Business Enterprise (SBE), Disadvantaged Business Enterprise (DBE), or Minority and Women Business Enterprise (M/WBE) contracting requirements, the City recognizes that prior to bidding, the bidder may not have been able to negotiate for all portions of the Work which the bidder proposes to subcontract. The City will, therefore, permit the successful bidder to propose additional Subcontractor(s) at any time during the Contract period provided, however, that any limitation on subcontracting has not been exceeded, and that all such SBE, DBE, or M/WBE requirements are adhered to, including, if applicable, the Contractor's SBE or M/WBE Compliance Plan. If the proposed Subcontractor(s) are acceptable and the City, by letter to the Contractor, approves of the Subcontractor(s), the Contractor may enter into agreements with these parties. If any proposed Subcontractor(s) are not acceptable to the City, the Contractor must submit for City approval the names of substitute Subcontractors.
- 2. Each Subcontractor which the Contractor expects to perform Work must be accepted in writing by the Project Manager before the Subcontractor begins work. The acceptance or rejection of any proposed Subcontractor shall be at the Project Manager's sole discretion. The reasons the Project Manager may use for not accepting a Subcontractor include, but are not limited to, the following:
 - A. Default on a contract within the last five (5) years.
 - B. Default on a contract which required that a surety complete the contract under payment or performance bonds issued by the surety.
 - C. Debarment within the last five (5) years by a public entity or any organization which has formal debarment proceedings.
 - D. Significant or repeated violations of Federal Safety Regulations (OSHA).
 - E. Failure to have the specific qualifications listed in the Contract Documents for the work that the Subcontractor will perform.
 - F. Failure to have the required City or Colorado licenses to perform the work described in the subcontract.
 - G. Failure to pay workers the proper wage and benefits or to pay suppliers or subcontractors with reasonable promptness within the last five (5) years.
 - H. Conviction, plea of <u>nolo</u> <u>contendere</u>, entry into a formal agreement admitting guilt or entry of a plea of guilty or otherwise admitting culpability to criminal offenses of bribery, kickbacks, collusive bidding, bid-rigging, anti-trust, fraud, undue influence, theft, racketeering, extortion or any offense of a similar nature in connection with Subcontractor's business, on the part of Subcontractor's principal owners, officers, or employees, within the last five (5) years.
 - I. Failure to pay taxes or fees to the City.

- J. Evidence that the Subcontractor was selected by the Contractor through the process of bid shopping, dishonesty or buyout.
- 3. The Contractor shall submit a statement signed by an officer or principal of the Contractor certifying that the Contractor has investigated the qualifications and background of each proposed Subcontractor and certifying under oath that, to the best of his or her knowledge, none of the bases for rejection listed above exist. In lieu of this certification, the Contractor may identify, for each proposed Subcontractor, any of the issues listed above applicable to that Subcontractor and attach to that statement a list of all judicial and administrative proceedings in the last five (5) years in which any proposed Subcontractor is or was a party, the proceedings involving any of the issues listed above or in which any proposed Subcontractor filed for bankruptcy.
- 4. This Title 5 does not create, and shall not be interpreted as creating, any contractual relationship or privity of contract between the City and any Subcontractor. The acceptance or rejection of a proposed Subcontractor shall not create in that Subcontractor a right to any subcontract nor shall said acceptance or rejection relieve the Contractor of its responsibilities for the work of any Subcontractor.

SC-12 PAYMENT PROCEDURE

The application for payment shall be submitted through Textura® Corporations Construction Management Website. Contractor recognizes and agrees that it shall be required to use the Textura Construction Payment Management System for this Project. Contractor further agrees that, to the fullest extent possible within the CPM System, the City shall be entitled to all non-Confidential records, reports, data and other information related to the project that are available to Contractor through the CPM System, including, but not limited to, information related to Contractor and subcontractor billings. To that end, Contractor agrees that it will activate any available settings within the CPM System that are necessary to grant the City access to such non-Confidential information related to the contract and the project. Applications for payment shall be based on the Contract Unit Prices or the approved Schedule of Values described in GC 903.1

In accordance with General Contract Condition 902, PAYMENT PROCEDURE, the party(ies) responsible for review of all Pay Applications shall be:

<u>Agency/Firm</u> <u>Name</u> Public Works/ Infrastructure Project Management Michael Young 720-913-4523

In accordance with General Contract Condition 906, APPLICATIONS FOR PAYMENT, each Application submitted shall include the following:

- 1. The estimate of Work completed shall be based on the approved schedule of values or unit prices, as applicable, and the percent of the Work complete.
- 2. Each Application for Payment shall include each and every independent subcontractor's payroll information including pay dates and pay amounts.
- 3. The Contractor shall also submit to the Auditor and other appropriate officials of the City in a timely fashion, information required by General Contract Condition 1004, REPORTING WAGES PAID.

In accordance with General Contract condition 907, RELEASES AND CONTRACTORS CERTIFICATION OF PAYMENT, Applications for Payment must be accompanied by completed Partial or Final Claim Release Form, as appropriate, from EACH subcontractor and supplier, **AND/OR** the Contractors' Certification of Payment Form. The forms, Final/Partial Release and Certificate of Payment (Subcontractor/Supplier) and the Contractor's Certification of Payment, both of which must be used are attached.

SC-13 SCHEDULE OF VALUES FOR LUMP SUM SUBCONTRACTS

Special Condition 903, SCHEDULE OF VALUES FOR LUMP SUM CONTRACTS, is hereby deleted in its entirety and replaced by the following:

- 1. The Contractor shall furnish to the Project Manager, for review and approval, a Schedule of Values for lump sum subcontracts, in such detail as the Project Manager shall request, no later than thirty (30) Days prior to the issuance of the first pay application. The Schedule of Values shall show the amount included for each principal category of work and shall be in proper balance. No pay application shall be submitted until the submitted Schedule of Values is approved in writing by the Project Manager.
- 2. Should the City issue a Change Order that decreases or increases the Contract Amount, the Schedule of Values shall be modified to reflect the amount of such decrease or increase and resubmitted to the Project Manager at least fifteen (15) Days prior to the pay application reflecting such increase or decrease.

SC-14 APPLICATIONS FOR PAYMENT

General Condition 906, APPLICATIONS FOR PAYMENT, is hereby deleted in its entirety and replaced by the following:

- 1. Each complete application shall contain a list of Subcontractor and material invoices. If requested by the City, the Contractor will furnish the City with invoices shown on the lists which accompany any application for payment.
- 2. Application for payment shall be based on approved Cost of the Work items incurred, completed and/or certified by the Contractor. The application shall specify the Cost of the Work so certified as having been incurred by the Contractor for Work performed during the preceding period. The Contractor's Fee shall be paid based on the actual Cost of Work items incurred. Each application for payment shall also be accompanied by a written schedule of values which sets out the Cost of the Work for the Project together with the Contractor's accounting of the percentage of completion of each line item of Cost of the Work of which the City is liable to pay the Contractor.
- 3. The Contractor shall certify in writing with each application for payment that to its knowledge the Project will be completed at a cost within the Guaranteed Maximum Price, as modified by change orders, and shall identify with reasonable particularity any circumstances which could result in the total cost to the Contractor (including Fee) in completing the Project exceeding the Guaranteed Maximum Price.

Page 12

4. Reserved

- 5. Each application for payment for materials or equipment stored on or off the Project site shall be accompanied by bills of sale to establish the City's title to such material or equipment free and clear of liens and encumbrances; evidence of property insurance covering such materials or equipment; evidence, as to material and equipment stored off the Project site, that the same have been properly labeled as the City's property and segregated from the vendor's other inventory; and, if required by the City, contracts and financing statements sufficient to create a security interest in favor of the City in materials or equipment stored off the Project site which remain in the possession of the vendor of such materials or equipment.
- 6. Each progress payment application shall show each Subcontractor or Supplier participating in the Work completed during the previous progress period and the dollar amount of such participation. The Contractor will assure that the Subcontractors and/or Suppliers are filing for and are being paid for only the value of materials and services delivered and performed upon or incurred for the Project and that the Subcontractors and/or Suppliers are not over-billing for the effort performed. The Contractor shall, prior to or with the submission of each application for payment, furnish to the City proper evidence accounting for the distribution to Subcontractors and/or Suppliers of funds received under prior applications together with proper releases and waiver, in form and content acceptable to the City, obtained in connection therewith.
- 7. If the Contractor disputes a Subcontractor's or Supplier's entitlement to a portion of the previous progress payment, the Contractor shall submit to the City copies of any written communication from the Contractor to such Subcontractor or Supplier explaining the Contractor's determination not to render payment to such Subcontractor or Supplier, together with proof of service of such written communication upon such Subcontractor or Supplier.
- 8. Each application for payment shall be signed. Such signed application for payment shall constitute a representation by the Contractor to the City that the Work has progressed to the point indicated; that the quality of the Work covered by the estimate is in accordance with the Contract Documents; that each obligation covered by the payment application has been properly incurred, is a proper charge and has not been the basis of any previous application (except as otherwise noted); that the money received as a result of the application will be used to discharge the Contractor's obligations under the Contract; and that the Contractor is entitled to payment in the amount requested. The Project Manager or the Design Consultant, as appropriate, must also verify and certify the estimate of Work completed prior to any acceptance by the City.
- 9. By submitting an application for payment, the Contractor warrants that: (i) the title to the Work covered by an application for payment will pass to the City upon receipt of payment by the Contractor; (ii) the Work covered by previous payment applications is free and clear of liens, claims, security interests or encumbrances, hereinafter referred to as "liens", except for any interest created by retainage; and (iii) no Work covered by an application for payment is subject to an agreement

Page 13

- under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or any other person or entity.
- 10. The Contractor shall not include in its application for payment any billing for defective Work or for work performed by Subcontractors or Suppliers if it does not intend to pay the Subcontractors or Suppliers for such work.
- 11. Approval of an application for payment of Work completed or actual payment by the City shall not foreclose the right of the City to examine the books and records of the Contractor to determine the correctness and accuracy of any item.
- 12. Should the City decline or fail to approve for payment any items of the Contractor's Fee, the Cost of the Work, or any other item shown on an application for payment, the City shall notify the Contractor in writing, setting forth the reasons for such action. The City shall pay that portion of each payment application which is not disapproved in writing by the City.
- 13. No progress payment or partial or entire use or occupancy of the Project by the City shall constitute an acceptance of Work not in accordance with the Contract Documents.

SC-15 DISCOUNTS, REBATES AND REFUNDS

Cash discounts obtained on payments made by the Contractor shall accrue to the City if (1) before making the payment, the Contractor included them in an Application for Payment and received payment therefore from the City, or (2) the City has deposited funds with the Contractor with which to make payments; otherwise, cash discounts shall accrue to the Contractor. Trade discounts, rebates, refunds and amounts received from sales of surplus materials and equipment shall accrue to the City, and the Contractor shall make provisions so that they can be secured. Amounts which accrue to the City herein shall be credited to the City as a deduction from the Cost of the Work.

SC-16 ADJUSTMENT OF CONTRACT AMOUNT

General Condition 1104, ADJUSTMENT TO CONTRACT AMOUNT, is hereby deleted in its entirety and replaced by the following:

- 1. <u>Contract Amount Adjustments</u>. All adjustments to the Contract Amount shall be determined by using one or more of the following methods:
 - A. <u>A negotiated lump sum</u>. If requested by the City, the Contractor shall promptly provide itemized and sufficient substantiating data, including calculations, measurements, cost records, production rates, equipment types and capacity, labor costs by craft and other information which the City may reasonably require the Contractor to produce in order to permit the City to evaluate any lump sum Contractor Change Request. In pricing such proposals, the Contractor shall include estimates of the type of costs described in G.C. 1104.2.
 - B. <u>Unit prices</u> (as stated in the Contract Documents or subsequently agreed upon) multiplied by final verified quantities of work performed;

- C. <u>Costs as determined in a manner previously agreed</u> upon by the parties, which include markups, that do not exceed those set forth in G.C. 1104.2 below; or
- D. <u>Time and Material costs</u> as determined in the manner described in G.C. 1104.2, Calculation of the Contract Adjustment. These amounts may be reduced where necessary to take into account the cost of Base Contract Work, Work included in approved Change Orders, Work described in other Field Order/Change Directives, idle time for workers and/or equipment when Work could have been performed in other locations or when the number of workers or amount of equipment provided exceeded the number or amount required to perform the Work, unsatisfactory Work, or Work which may be or was performed concurrently with the changed Work and which cannot be easily segregated from the changed Work.
- 2. <u>Calculation of the Contract Adjustment</u>. In no event shall the charge or credit to the City associated with any change exceed the sum of the following:
 - A. <u>Direct Labor</u> The actual net, direct increase or decrease in the cost of the Contractor's labor. Such cost shall include only the cost associated with the workers who actually perform the changed Work. The cost of supervision, management and field or office overhead shall not be included or calculated as a direct labor cost. For shop work, the direct labor cost shall include only those workers who work directly on the item being manufactured or the actual operators of the equipment being used to handle the items being manufactured.
 - B. <u>Labor Burden</u>. Contractor's actual costs for worker's compensation and liability insurance, payroll taxes, social security and employees' fringe benefits (including employer paid health insurance) imposed on the basis of payrolls. This burden must reflect the variability of some burdens, ie social security. The burden shall be itemized and include all small tools and miscellaneous supplies. The total labor burden for such small tools shall not exceed two percent (2%) of the Direct Labor cost.
 - C. <u>Direct Material, Supplies, Installed Equipment</u>. The actual net, direct cost of materials, supplies and equipment incorporated into or consumed by the Work. If actual costs are not available, this cost shall be the lowest commercially available price including all discounts and rebates and all applicable taxes. Such cost shall be based on buying the material, supplies and equipment in the largest practical quantity to receive quantity discounts.
 - D. <u>Equipment Costs</u>. Without markup or operator, the lesser of (i) the actual net cost to the Contractor of owned or rented equipment, other than small tools; or (ii) the rental rate for such equipment as determined by using the following method(s):
 - (1) Equipment rental rates listed in the appropriate rental rate book currently in use by the Colorado Department of Transportation. If

an item of equipment does not appear in the rental rate book currently in use by the Colorado Department of Transportation, the rental rates published by the Associated Equipment Dealers may be used as a basis for negotiating a rental rate for a particular piece of equipment. The Contractor shall provide all information necessary to determine the appropriate rental rate at the time the equipment is brought on the job. This shall include, but not be limited to, type, description, make, year, model, series, serial number, fuel type, transmission, wheel combination, GVW, capacity and equipment owner.

- (2) Rental equipment costs shall be determined using actual invoiced rates, less all discounts for basic equipment rental.
- (3) Mobilization/demobilization costs will be paid if the equipment is mobilized exclusively for Work described in a Change Order. If the equipment is also used on Base Contract Work, no mobilization or demobilization cost will be paid. Mobilization/demobilization costs will be based on using the least expensive means to mobilize or demobilize Equipment shall be obtained from the nearest available source. When the least expensive methods are used, the costs shown in the actual invoice will be the basis for pricing.

E. Mark Up For Overhead And Profit.

- (1) The Contractor's Fee on the calculated change of Cost of Work shall be the only amount added to such calculated cost of Work to as markup and profit to the Contractor, including any fee on applicable Work self-performed by the Contractor.
- (2) A Subcontractor of any tier who actually performs the Work shall be entitled to a markup of twelve percent (12 %) on the actual costs for items A through D in GC 1104.2 above. Bonds and insurance are compensated at direct cost without markup.
- (3) A supervising Subcontractor (if any) shall be entitled to a three percent (3%) markup on the actual price charged to the Subcontractor by a Subcontractor of lower tier.
- (4) All of the Contractor's and Subcontractor's field and office overhead and supervision costs are included in the Fee and markups listed above.
- (5) Neither the Contractor nor Subcontractor of any tier, nor the City in the case of a credit, will apply or attempt to apply these percentage adjustments in a way which would pyramid either the cost or credit because of the involvement of a Subcontractor or sub-subcontractor. Written justification and approval shall be required for any percentages exceeding a total of fifteen percent (15%).

- F. <u>Bonds, Insurance, Permits And Taxes</u>. The actual increases or decreases in the cost of premiums for bonds and insurance, permit fees, and sales, use or similar taxes related to the Work. The Contractor shall not be entitled to a Fee for any such costs.
- 3. <u>Totals as Equitable Adjustment</u>. The Contractor agrees that the total of the above items constitute an equitable adjustment for any and all costs or damages resulting from a change.
- 4. <u>No Equitable Adjustment for Obstruction by Contractor</u>. No equitable adjustment shall be made as a result of costs resulting from any act, hindrance, obstacle, obstruction, interference or omission of the Contractor, its Subcontractors, Suppliers, or surety, or any other entity or individual acting on behalf of the Contractor.
- 5. <u>Calculation of Certain Equitable Adjustments.</u>
 - A. In case of delay in completion of the entire Contract due to drawings, designs or specifications which are defective and for which the City is responsible, the equitable adjustment for delays or costs incurred prior to notification to the City of such defect shall only include the extra cost and time reasonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the Contractor identified, or reasonably should have identified, such defect.
 - B. An equitable adjustment shall not include increased costs for delay resulting from the Contractor's failure to continue performance during determination of any Contractor Change Request or claim.
- 6. <u>Price Reductions for Defective Cost or Pricing Data</u>. If it is later determined that pricing adjustments to the Contract were not correct due to incomplete or inaccurate pricing data by the Contractor or any Subcontractor or Supplier or that lower prices were reasonably available, the price shall be reduced accordingly and the Contract Amount modified by an appropriate Change Order.
- 7. Variation in Quantity of Unit Priced Items. Where the quantity of a unit-priced item in the Contract is an estimated quantity and the actual quantity of the unit-priced item varies more than twenty-five percent (25%) above or below the estimated quantity, and where this difference changes the total original Contract value by more than five percent (5%), an equitable adjustment in the Contract Amount may be made by Change Order. The equitable adjustment shall be based upon any increase or decrease in cost due solely to the variation above one hundred twenty-five percent (125%) or below seventy-five percent (75%) of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completing the Work, the Contractor may request, in writing, an extension of time in accordance with GC 1105.
- 8. Disposition of Excess or Obsolete Property. When the cost of materials, supplies, equipment or other personal property made obsolete or excess as a result of a delay

is included in the equitable adjustment, the Project Manager shall have the right to prescribe the manner of disposition of such property.

SC-17 SURETY BONDS

General Condition 1501, SURETY BONDS, is hereby deleted in its entirety and replaced by the following:

- 1. Payment and performance bonds must be issued by a corporate surety authorized to do business in the State of Colorado and approved by the Mayor, the Manager and the City Attorney.
- 2. Before the Contract is executed, the Contractor shall have furnished such surety bonds and appropriate Powers of Attorney as a guarantee of the faithful performance of the Contract and the payment of bills for labor and materials.
- 3. The Manager may direct, at his sole discretion, that the required payment and performance bonds be combined in a format approved by the City Attorney.
- 4. The Contractor shall provide a Consent of Surety for any duly executed Change Order that increases the Contract Amount, thereby increasing the penal sum of the bonds.
- 5. The form of the Performance and Payment Bond to be used by the Contractor is included in the Contract Documents.

SC-18 CONSTRUCTION INSPECTION BY THE CITY

General Condition 1701, CONSTRUCTION INSPECTION BY THE CITY, is modified as follows:

1. Persons who are employees of the City or who are under contract to the City or the City as lessee will be assigned to inspect and test the Work. These persons may perform any tests and observe the Work to determine whether or not designs, materials used, manufacturing and construction processes and methods applied, and equipment installed satisfy the requirements of the drawings and specifications, accepted Shop Drawings, Product Data and Samples, and the General Contractor's warranties and guarantees. The General Contractor shall permit these inspectors unlimited access to the Work and provide means of safe access to the Work, which cost shall be included as a Cost of the Work without any increase to the Guaranteed Maximum Price. In addition, General Contractor shall provide whatever access and means of access are needed to off-site facilities used to store or manufacture materials and equipment to be incorporated into the Work and shall respond to any other reasonable request to further the inspector's ability to observe or complete any tests. Such inspections shall not relieve the General Contractor of any of its quality control responsibilities or any other obligations under the Contract. All inspections and all tests conducted by the City are for the convenience and benefit of the City. These inspections and tests do not constitute acceptance of the materials or Work tested or inspected, and the City may reject or accept any Work or materials at any time prior to the inspections pursuant to G.C. 2002, whether or not previous inspections or tests were conducted by the inspector or a City representative.

- 2. The Building Inspection Division will perform building code compliance inspections for structures designed for human occupancy. It is the General Contractor's responsibility to schedule and obtain these inspections. If a code compliance inspection results in identification of a condition which will be at variance to the Contract Documents, the General Contractor shall immediately notify the Project Manager and confirm such notification with formal correspondence no later than forty-eight (48) hours after the occurrence.
- 3. When any unit of government or political subdivision, utility or railroad corporation is to pay a portion of the cost of the Work, its respective representatives shall have the right to inspect the Work. This inspection shall not make any unit of government or political subdivision, utility or railroad corporation a party to the Contract, and shall not interfere with the rights of either party.

SC-19 AUTHORITY OF INSPECTORS

General Condition 1702, AUTHORITY OF INSPECTORS, is hereby deleted in its entirety and replaced by the following:

Inspectors assigned to the Work by the Project Manager are authorized to reject any Work, any materials, or any component of the Work which is not as required or specified in the Contract Documents. Such rejection will be confirmed by the Project Manager in writing to the Contractor. Inspections may extend to all or any part of the Work and to the preparation, fabrication or manufacture of the materials to be used. The inspector is not authorized to alter or waive the provisions of the Contract Documents, nor is the inspector authorized to issue instructions contrary to the provisions of the Contract Documents or to act as foreman for the Contractor.

SC-20 TERMINATION OF CONTRACT FOR CONVENIENCE OF THE CITY

General Condition 2202, TERMINATION OF CONTRACT FOR CONVENIENCE OF THE CITY, is hereby deleted in its entirety and replaced by the following:

- 1. The performance of Work under the Contract may be terminated without cause by the City in whole or in part whenever the Manager, in his sole discretion, shall determine that such termination is in the best interest and convenience of the City or whenever the City is prohibited from completing the Work for any reason. Such termination shall be effected by giving not less than three (3) Days' written notice to the Contractor specifying the extent to which performance of the Work is terminated and the date upon which such termination becomes effective.
- 2. Upon receipt of such notice of termination, the Contractor shall:
 - A. Stop work as specified in the notice;
 - B. Terminate all orders and subcontracts except as necessary to complete Work which is not terminated;

- C. If directed in writing by the Manager to do so, assign all right, title, and interest in subcontracts and materials in progress, in which case the City will have the right, in its discretion, to settle or pay any or all Claims arising out of the termination of such subcontracts;
- D. Settle outstanding liabilities and claims with the approval of the Manager;
- E. Complete performance of such part of the Work as has not been terminated; and
- F. Take such other actions as may be necessary, or as may be directed by the City, for the protection and preservation of the property related to the Contract.
- 3. Except as provided herein, any inventory resulting from the termination of the Contract may, with written approval of the Manager, be sold or acquired by the Contractor under the conditions prescribed by and at prices approved by the City.
- 4. Upon receipt of notice of such termination, the Contractor shall submit to the Project Manager a request for final payment, in a form and with certification prescribed by the City. Such request shall be submitted promptly but in no event later than sixty (60) Days from the effective date of termination, unless extended in writing by the Project Manager upon the written request of the Contractor within such sixty (60) Day period.
- 5. The final payment to the Contractor after a termination for convenience shall be calculated by adding the following amounts:
 - (1) Any actual costs incurred by the Contractor since the last approved pay request that are reimbursable as a Cost of the Work plus the proportionate Fee on such costs;
 - (2) The actual costs incurred by the Contractor for terminating the Work and for protecting the Work in the manner, if any, directed by the City, plus the proportionate Fee on such costs; and
 - (3) The amount of retainage withheld by the City to date.
- The acceptance of final payment as calculated above shall constitute a waiver of all Claims by the Contractor except those previously made in accordance with G.C.
 1301 which have been separately identified by the Contractor as unsettled in the final Project Application for Payment.
- 7. The Manager may, from time to time, under such terms and conditions as the Manager may prescribe, authorize partial payments and payments against costs incurred by the Contractor for the terminated portion of the Contract, if it is estimated that the total of such payments will not exceed the amount to which the Contractor will be entitled. If the total of such payments is in excess of the amount to which the Contractor is entitled, the excess shall be payable by the Contractor to the City upon demand, together with interest computed pursuant to statute, for

the period from the date the excess payment is received by the Contractor to the date the excess is repaid to the City.

- 8. The settlement for the Work performed shall not relieve the Contractor or its surety from responsibility for defective Work and/or materials on the completed portion of the Work nor for labor and materials or any other items as guaranteed by the surety bond or bonds.
- 9. The City shall be given full access to all books, correspondence, records, electronic files and data bases, and other materials of the Contractor relating to the Contract in order to determine the amounts to be paid on account of the termination of the Contract under this G.C. 2202. The Contractor shall, as requested by the City, furnish clear copies of any such materials.
- 10. In the event the parties fail to agree in whole or in part on the amount or amounts to be paid to the Contractor in connection with the termination of work pursuant to this G.C. 2202, the Contractor may appeal the Project Manager's determination as to the amount owed in accordance with Title 13, except that, if the Contractor has failed to submit its request for payment within the time provided above and has failed to request an extension of such time, it shall have no such right of appeal.

SC-21 SUBCONTRACTS

In accordance with General Contract Condition 501, SUBCONTRACTS, no limit shall apply to that percentage of the Work, which may be sublet providing that the subcontractors receive prior approval in accordance with General Contract Condition 502, SUBCONTRACTOR ACCEPTANCE.

SC-22 RESERVED

SC-23 DISPOSAL OF NON-HAZARDOUS WASTE AT DADS

In accordance with the Landfill Agreement made between the City and Waste Management of Colorado, Inc., bidders will be required to haul dedicated loads (non-hazardous entire loads of waste) to the Denver-Arapahoe Disposal Site ("DADS") for disposal. DADS is located at Highway 30 and Hampden Avenue in Arapahoe County, Colorado. The City will pay all fees associated with such disposal but the bidder shall be responsible for the costs of transporting the loads. Non-hazardous waste is defined as those substances and materials not defined or classified as hazardous by the Colorado Hazardous Waste Commission pursuant to C.R.S. §25-15-207, as amended from time to time, and includes construction debris, soil and asbestos. Bidders shall not use Gun Club Road between I-70 and Mississippi Avenue as a means of access to DADS.

SC-24 PROHIBITION ON USE OF CCA-TREATED WOOD PRODUCTS

The use of any wood products pressure-treated with chromated copper arsenate (CCA) is prohibited. Examples of CCA-treated wood products include wood used in play structures, decks, picnic tables, landscaping timbers, fencing, patios, walkways and boardwalks.

SC-25 WAIVER OF: PART 8 OF ARTICLE 20 OF TITLE 13, COLORADO REVISED STATUTES.

The Contractor specifically waives all the provisions of Part 8 of Article 20 of Title 13, Colorado Revised Statutes regarding defects in the Work under this Construction Contract.

SC-26 DEBARRED SUBCONTRACTORS PROHIBITED

The Contractor is prohibited from hiring any subcontractor currently debarred by the City in accordance with section 20-77 of the Denver Revised Municipal Code.

SC-27 ATTORNEY'S FEES

Colorado Revised Statute 38-26-107 requires that in the event any person or company files a verified statement of amounts due and unpaid in connection with a claim for labor and materials supplied on this project, the City shall withhold from payments to the Contractor sufficient funds to insure the payment of any such claims. Should the City and County of Denver be made a party to any lawsuit to enforce such unpaid claims or any lawsuit arising out of or relating to such withheld funds, the Contractor agrees to pay to the City its costs and a reasonable attorney's fee which cost shall be included as a Cost of the Work.

Because the City Attorney Staff does not bill the City for legal services on an hourly basis, the Contractor agrees a reasonable fee shall be computed at the rate of one hundred dollars per hour of City Attorney time.

SC-28 INSURANCE

General Condition 1601 is hereby deleted in its entirety and replaced with the following:

General Conditions: Contractor agrees to secure, at or before the time of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Contractor shall keep the required insurance coverage in force at all times during the term of the Agreement, or any extension thereof, during any warranty period, and for eight (8) years after termination of the Agreement. The required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M. Best Company as "A-"VIII or better. Each policy shall contain a valid provision or endorsement requiring notification to the City in the event any of the required policies be canceled or nonrenewed before the expiration date thereof. Such written notice shall be sent to the parties identified in the Notices section of this Agreement. Such notice shall reference the City contract number listed on the signature page of this Agreement. Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal unless due to non-payment of premiums for which notice shall be sent ten (10) days prior. If such written notice is unavailable from the insurer, contractor shall provide written notice of cancellation, non-renewal and any reduction in coverage to the parties identified in the Notices section by certified mail, return receipt requested within three (3) business days of such notice by its insurer(s) and referencing the City's contract number. If any policy is in excess of a deductible or self-insured retention, the City must be notified by the Contractor. Contractor shall be responsible for the payment of any deductible or self-insured retention. The insurance coverages specified in this Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of the Contractor. The Contractor shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement.

- 2. Proof of Insurance: Contractor shall provide a copy of this Agreement to its insurance agent or broker. Contractor may not commence services or work relating to the Agreement prior to placement of coverages required under this Agreement. Contractor certifies that the certificate of insurance attached as Exhibit M, preferably an ACORD certificate, complies with all insurance requirements of this Agreement. The City requests that the City's contract number be referenced on the Certificate. The City's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor's breach of this Agreement or of any of the City's rights or remedies under this Agreement. The City's Risk Management Office may require additional proof of insurance, including but not limited to policies and endorsements.
- **3.** <u>Additional Insureds:</u> For Commercial General Liability, Auto Liability and Contractors Pollution Liability, Contractor and subcontractor's insurer(s) shall name the City and County of Denver, its elected and appointed officials, employees and volunteers as additional insured.
- **4.** <u>Waiver of Subrogation:</u> For all coverages required under this Agreement, Contractor's insurer shall waive subrogation rights against the City.
- **5.** <u>Subcontractors</u> <u>and</u> <u>Subconsultants:</u> All subcontractors and subconsultants (including independent contractors, suppliers or other entities providing goods or services required by this Agreement) shall be subject to all of the requirements herein and shall procure and maintain the same coverages required of the Contractor. Contractor shall include all such subcontractors as additional insured under its policies (with the exception of Workers' Compensation) or shall ensure that all such subcontractors and subconsultants maintain the required coverages. Contractor agrees to provide proof of insurance for all such subcontractors and subconsultants upon request by the City.
- shall maintain the coverage as required by statute for each work location and shall maintain Employer's Liability insurance with limits of \$100,000 per occurrence for each bodily injury claim, \$100,000 per occurrence for each bodily injury caused by disease claim, and \$500,000 aggregate for all bodily injuries caused by disease claims. If an exposure exists, the U.S. Longshore and Harborworkers Compensation Act endorsement shall be attached to the policy. Contractor expressly represents to the City, as a material representation upon which the City is relying in entering into this Agreement, that none of the Contractor's officers or employees who may be eligible under any statute or law to reject Workers' Compensation Insurance shall effect such rejection during any part of the term of this Agreement, and that any such rejections previously effected, have been revoked as of the date Contractor executes this Agreement.
- **7.** Commercial General Liability: Contractor shall maintain a Commercial General Liability insurance policy with limits of \$1,000,000 for each occurrence, \$1,000,000 for each personal and advertising injury claim, \$2,000,000 products and completed operations aggregate, and \$2,000,000 policy aggregate.
- **8.** <u>Business Automobile Liability:</u> Contractor shall maintain Business Automobile Liability, or its equivalent, with minimum limits of \$1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement. If transporting wastes, hazardous material, or regulated substances, Contractor shall carry a pollution coverage endorsement and an MCS 90 endorsement on their policy.

Transportation coverage under the Contractors Pollution Liability policy shall be an acceptable replacement for a pollution endorsement to the Business Automobile Liability policy.

- **9.** Excess/Umbrella Liability: Contractor shall maintain excess liability limits of \$3,000,000. Coverage must be written on a "follow form" basis. Any combination of primary and excess coverage may be used to achieve required limits.
- 10. <u>Builders Risk or Installation Floater</u>: Contractor shall maintain limits equal to the completed value of the project. Coverage shall be written on an all risk, replacement cost basis including coverage for soft costs, flood and earth movement, if in a flood or quake zone, and, if applicable, equipment breakdown including testing. Contractor is responsible for payment of all policy deductibles. The City and County of Denver, Contractor, and sub-contractors shall be named insureds under the policy. Policy shall remain in force until acceptance of the project by the City.
- 11. <u>Contractors Pollution Liability:</u> Contractor shall maintain limits of \$1,000,000 per occurrence and \$2,000,000 policy aggregate. Policy to include bodily injury; property damage including loss of use of damaged property; defense costs including costs and expenses incurred in the investigation, defense or settlement of claims; and clean up costs. Policy shall include a severability of interest or separation of insured provision (no insured vs. insured exclusion) and a provision that coverage is primary and non-contributory with any other coverage or self-insurance maintained by the City.

12. Additional Provisions:

- (a) For Commercial General Liability, Excess Liability and Contractors Pollution Liability the policies must provide the following:
 - (i) That this Agreement is an Insured Contract under the policy;
 - (ii) Defense costs are outside the limits of liability;
 - (iii) A severability of interests or separation of insureds provision (no insured vs. insured exclusion); and
 - (iv) A provision that coverage is primary and non-contributory with other coverage or self-insurance maintained by the City.
 - (b) For claims-made coverage:
 - (i) The retroactive date must be on or before the contract date or the first date when any goods or services were provided to the City, whichever is earlier.
- (c) Contractor shall advise the City in the event any general aggregate or other aggregate limits are reduced below the required per occurrence limits. At their own expense, and where such general aggregate or other aggregate limits have been reduced below the required per occurrence limit, the Contractor will procure such per occurrence limits and furnish a new certificate of insurance showing such coverage is in force.

PRECONSTRUCTION SERVICES AGREEMENT

THIS AGREEMENT is made and entered into, effective as of the date set forth on the City's signature page below ("Effective Date"), by and between the CITY AND COUNTY OF DENVER, a municipal corporation of the State of Colorado ("City"), and Hensel Phelps, Inc., a Colorado corporation, whose address is 420 Sixth Avenue, Greeley, Colorado, 80631("Contractor").

RECITALS

- 1. The Lindsey-Flanigan Courthouse Glass Guardrail Replacement Project consists of providing certain construction related services for the repairs to the Lindsey-Flanigan Courthouse located at 520 West Colfax Avenue, Denver, Colorado 80204.
- 2. In order to complete the Project in a timely, efficient and cost effective manner, the City desires to engage a qualified and experienced contractor to expeditiously perform preconstruction services including and without limitation, scheduling, cost estimating, constructability review, value engineering, construction packaging and sequencing, subcontractor canvassing and all other preconstruction services necessary to complete a satisfactory final design and construction pricing for the Project.
- 3. In addition to performing preconstruction services, the Contractor will deliver to the City a Guaranteed Maximum Price proposal ("GMP Proposal") and fixed Project completion schedule proposal (the "Performance Period" or "Schedule") by which the Contractor will agree to perform all of the construction services and other work required to complete the Project for a guaranteed maximum price.
- 4. In accordance with the requirements of 20-56 of the Denver Revised Municipal Code (the "DRMC"), the City advertised a Request for Qualifications (RFQ) dated August 17, 2017 and a Request for Proposal ("RFP") dated September 20, 2017, seeking qualified contractors to provide preconstruction and construction services for the Project.
- 5. The Contractor was selected as the first ranked proposer to perform such services for the City based on Contractor's Proposal dated January 4, 2018 and attached hereto as **Exhibit A**.
- 6. The City and Contractor now wish to enter into this Agreement to provide for the delivery of the Basic Services (as hereinafter defined) for the Project by the Contractor. The City may, in its sole discretion, elect to enter into a CM/GC Construction Contract with Contractor at a later date.
- 7. The Contractor represents that it has the present capacity and is experienced and qualified to perform the required Basic Services as provided for in this Agreement.
 - 8. The Contractor will perform all such Basic Services as an independent contractor.

NOW, THEREFORE, in consideration of the mutual agreements contained herein, the parties agree as follows:

1.0 PROJECT AND BUDGET:

1.1 The Project.

- 1.1.1 The "Project" includes the construction of Lindsey-Flanigan Courthouse Glass Guardrail Replacement Project.
- 1.1.2 The "Project Site", "Site" and "Limits of Construction for the Project" are: 520 West Colfax Avenue, Denver, Colorado 80204.
- 1.2 **Project Format.** The terms, conditions and obligations for the Contractor's performance on this Project are contained herein or in documents referenced herein or attached hereto and shall be collectively referred to as the "Agreement." In the performance of this Agreement, the Contractor acknowledges and accepts that time is critical for Project delivery. The City has elected to utilize a Construction Manager/General Contractor ("CM/GC") Project delivery method. The Contractor is familiar with this approach and understands that the CM/GC method is a specialized and rigorous delivery approach requiring maximum cooperation between all parties. As a consequence of the delivery approach, the Contractor acknowledges and accepts the following: (1) that the complete services to be rendered by the Contractor, the organizational and process interrelationships governing construction and the cost, schedule and sequencing of construction may not yet have fully been defined; (2) that portions of the Project could have their design completed as separate packages and under construction before other portions of the Project are fully designed; and (3) that the Contractor's continuing performance on this Project is contingent upon the Contractor formulating, as the Project design progresses, and submitting an acceptable GMP (or multiple GMP packages) and Performance Period proposal (the "GMP Proposal") for the complete construction of the Project.
- 1.3 <u>Budget</u>. The Contractor acknowledges that there are limited funds available to design and construct the Project. The City's construction budget for this Project is: **ONE MILLION EIGHT HUNDRED AND TWENTY THOUSAND DOLLARS AND ZERO CENTS (\$1,820,000.00)** (the "Project Budget") and is subject to increase or decrease at the sole discretion of the Manager of Public Works, prior to establishing a GMP for the Construction Services Phase of the Project.

2.0 ENGAGEMENT AND COORDINATION:

- **2.1** Engagement. The City engages the Contractor with respect to the furnishing of preconstruction services in connection with the design and construction of the Project and the Contractor accepts such engagement upon, subject to and in accordance with the terms, conditions and provisions of this Agreement.
- 2.2 Executive Director of Public Works. The City's Executive Director of Public Works ("Manager" or "Executive Director") is the City's representative responsible for authorizing and approving the work performed under this Agreement. The Manager hereby designates the City Engineer as the Manager's authorized representative for the purpose of designating a Project Manager, issuing a written Notice to Proceed and administering, coordinating, reviewing and approving the work performed and services provided by the Contractor under this Agreement. The Project Manager shall be designated by the City Engineer and shall report to the City Engineer or

designee. The Project Manager shall be responsible for the day-to-day administration, coordination and approval of services provided and work performed by the Contractor, except for those approvals identified in this Agreement as requiring Manager or City Engineer approval. The Manager expressly reserves the right to designate another authorized representative to perform on the Manager's behalf by written notice to the Contractor. The Contractor acknowledges and accepts that only the Executive Director of Public Works and the representatives designated herein have the authority to authorize or direct services or work under this Agreement. The Safety Department ("User Agency"), is the City agency responsible for the maintenance of the facility and the City's expending authority for the Project.

- 2.3 Relationship. The Contractor accepts the relationship of trust and confidence established between the Contractor and the City by this Agreement and shall furnish its best skill and judgment and cooperate with the Executive Director and the designees, including the City Engineer and the Project Manager, representatives of the Mayor's Office, User Agency and the other City consultants and contractors in furthering the interests of the City throughout the duration of this Agreement.
- 2.4 <u>Design Consultant</u>. The City has a separate agreement with the Design Consultant Team to design the Project and to provide limited design support during the construction. Both the Contractor and the Design Consultants shall be given direction by the City, or the City's designated and authorized representatives. The relationship between the Contractor and the Design Consultant is intended to be cooperative and proactive, both participating on the same team with the City.
- **2.5** Construction Team. The Contractor, the City and the Design Consultant Team (the "Construction Team") shall cooperate to complete the design and provide preconstruction services. The Contractor shall provide leadership to the Construction Team on matters relating to construction.

2.6 Coordination and Cooperation.

- **2.6.1** The Contractor agrees to cooperate fully with the City and the Designer in the design aspects of the Project to keep within the City monetary and time limitations.
- 2.6.2 With the exception of those notices that must be directed to the Manager, all written communication by the Contractor to or with the City shall be forwarded through the Project Manager. In addition, all communication from the City to or with the Contractor shall be forwarded through the Project Manager. All written communication between the Contractor and the Design Consultant, other City representatives, the User Agency, City consultants or any governmental entity or third party will require that copies or notice thereof will be provided by the Contractor to the Project Manager.
- 2.6.3 The Contractor shall, as a continuing work item under this Agreement, facilitate communications regarding its performance hereunder between the City's Department of Public Works, the Project Manager, the User Agency, other City consultants and any affiliated entities. In addition, the Contractor shall conduct its efforts under this Agreement with all involved entities including the Department of Public Works, the User Agency, other City representatives, other involved City agencies and any involved government and regulatory entities. The Contractor shall document all Contractor conducted meetings and work sessions and distribute minutes or notes of such meetings to the Project Manager, in a format approved by the Project Manager.

2.6.4 The City acknowledges that Contractor is providing preconstruction services and with the exception providing final drawings and structural calculations for the glass railing design as described in Southwest Metalsmiths proposal dated March 29, 2018 is not providing design services in connection with the Project. Contractor is not the Design Consultant.

3.0 **REPRESENTATIONS**: The Contractor represents and covenants to the City that:

- 3.1 The Contractor's members shall include adequate personnel qualified and experienced in the construction of facilities similar to the Project in time constraints, complexity and cost.
- 3.2 The Contractor will thoroughly review and will become fully familiar with the Project scope, requirements and constraints including: (1) the goals and objectives of the Project; (2) User Agency needs and requirements; (3) the Design Consultants' work effort to date, agreement and any referenced documents; (4) the schematic design drawings and specifications and any associated information or materials; (5) the Project site (the "Site"), observable local conditions and all related limitations and constraints; and (6) its budget assumptions and scheduling constraints, as follows:

The Contractor accepts the same and affirmatively states that the Project, as expressed by the Project scope, requirements, and constraints at the time of execution of this Agreement, is a reasonable and constructible conceptual Project, incorporating a reasonable and workable delivery approach and schedule. Further the Contractor will promptly notify the City in the event the Project, as developed during the preconstruction portion of the project, is not reasonable or constructible, given the schedule, budget, and other Project requirements.

3.3 The Contractor agrees that all of the services and work performed by the Contractor under this Agreement shall be performed in accordance with the standards of care, skill and diligence provided by competent professionals who perform services of a similar nature to the services described in this Agreement.

4.0 PERSONNEL:

- 4.1 Those persons listed in Exhibit B are the principals and employees of the Contractor (the "Key Personnel") and the City desires that they be and remain assigned to the Project.
- 4.2 It is the intent of the parties hereto that all Key Personnel be engaged to perform their specialty for all such services required by this Agreement, and that the Contractor's and any subcontractor Key Personnel be retained for the duration of this Agreement to the extent practicable and to the extent that such services maximize the quality of work performed hereunder.
- 4.3 If any of the Key Personnel become unavailable for reasons beyond the control of the Contractor, then the Contractor, subject to the Manager's approval, shall promptly appoint a replacement. The Contractor shall provide the Project Manager with complete information on each replacement, including a current resume, and shall have the opportunity to interview any such replacement.
- 4.4 If during the term of this Agreement, the Manager determines that the performance of approved Key Personnel for the Contractor or a subcontractor is not acceptable, the Project Manager shall notify the Contractor and give the Contractor a reasonable period of time to correct such performance. Thereafter, the Manager may require the Contractor to reassign or replace such Key Personnel. If the Manager notifies the Contractor that certain of its Key Personnel or those of a subcontractor should be replaced, the Contractor will use reasonable efforts to replace and require its subcontractor to replace them within ten (10) days from the date of the Manager's notice.

- 4.5 Neither the Contractor nor any subcontractor shall have interests which are in conflict with interests of the City, including connection with or to the sale or promotion of equipment or material which may be used on the Project, and the Contractor shall make written inquiry of all of its subcontractors concerning the existence of or potential for such conflict. In unusual circumstances, and at the City's sole discretion, the City may grant a written waiver for the particular consultant or subcontractor.
- 5.0 BASIC SERVICES: The Contractor's Basic Services performed under this Agreement shall include all services and work effort required: (1) to assist the Design Consultant by providing preconstruction services so that the Design Consultant can provide a complete and constructible "Project Design;" (2) provide final drawings and structural calculations for the glass railing design as described in Southwest Metalsmiths proposal dated March 29, 2018 to the Design Consultant (3) assist the Design Consultant in maintaining the Budget. Such required Basic Services will include, without limitation, cost estimating, bid schedule refinement and project schedule verification, constructability review, value engineering and development of deductive and additive alternates, scheduling, construction sequencing and bid packaging, bidding, subcontracting, and all other preconstruction services necessary to complete a satisfactory final design and construction pricing for the Project. Contractor's Basic Services under this agreement includes all services and work set forth in Exhibit A. All of the duties, obligations, services and work specified in the terms, provisions and conditions of this Agreement as well as all other preconstruction services normally and customarily performed by a Construction Manager on a Project of this size and nature shall comprise the Contractor's "Basic Services."
- **COMPENSATION:** In accordance with the terms and conditions of this Agreement, the City agrees to pay and the Contractor agrees to accept, as full and complete compensation for all services required by this Agreement to complete the Basic Services, the following compensation:
- 6.1 <u>Basic Services</u>. The Contractor's Basic Services shall consist of all preconstruction and related work and services set forth in Article 5 and Exhibit A. The Contractor shall be compensated for all such services performed on a lump sum basis. The maximum amount payable for all Basic Services shall be the lump sum amount of NINETY-NINE THOUSAND SIX HUNDRED AND THIRTY-SEVEN DOLLARS AND ZERO CENTS (\$99,637.00). Compensation shall be paid to the Contractor monthly, based upon pay applications and progress reports accepted and approved by the Project Manager. Upon successful completion of Pre-Construction Services, the City may in its sole discretion elect to execute a CM/GC Construction Contract with Contractor.
- **6.2** Reimbursable Expenses. All expenses shall be included in the basic services fee and will not be separately reimbursed hereunder.
- 6.3 <u>Maximum Contract Amount</u>. The "Maximum Contract Amount" to be paid by the City to the Contractor under this Agreement shall not exceed the sum of NINETY-NINE THOUSAND SIX HUNDRED AND THIRTY-SEVEN DOLLARS AND ZERO CENTS (\$99,637.00).
- **Funding.** It is expressly understood and agreed by the Contractor that the Contractor is undertaking this performance for a "not to exceed," maximum fee for the Project. It is further understood and agreed by the Contractor that the total obligation of the City for all or any part of its payment obligations hereunder, whether direct or contingent, shall in no event extend beyond payment of the lesser of the amounts duly and lawfully encumbered for the purposes of the

Agreement or the Maximum Contract Amount set forth above. The City has, as of the date first set forth above, duly and lawfully encumbered the sum of NINETY-NINE THOUSAND SIX HUNDRED AND THIRTY-SEVEN DOLLARS AND ZERO CENTS (\$99,637.00) for the purposes of this Agreement. With respect to all such performance and funding, the Contractor understands and agrees that the provision of any services which would cause the total amount payable to Contractor to exceed the amount of previously encumbered funds, is strictly prohibited. In the event the continuation of services by the Contractor would cause the amount payable to Contractor to exceed the amount payable under Sections 6.1 and 6.2, the Contractor agrees to give the Project Manager at least four (4) weeks' written notice of the exhaustion of available funds. In the event additional funds are not made available within such four (4) week period, the Contractor agrees to stop providing services until such time as additional funds are made available and encumbered for the purposes of this Agreement. It shall be the responsibility of the Contractor to verify that the amounts already encumbered are sufficient to cover the entire cost of such work. Work or services performed in excess of the amount encumbered or outside the scope of authorized work or services is undertaken or performed in violation of the terms of this Agreement and, as such, at the Contractor's own risk and sole cost and expense.

- Manager project reports and monthly invoices of all amounts due the Contractor for the preceding period with time records (payment will be made based upon percentage complete) under the provisions of this Article. The Manager or appointed designee will review and either approve or disapprove in whole or in part each properly completed invoice prior to submission for payment by the City. The Manager or appointed designee shall promptly notify the Contractor, in writing, of the basis for any partial or complete disapproval and return any submitted documentation, as required. No charges shall be incurred under this Agreement and no payments shall come due to the Contractor until such time as the City has confirmed to its satisfaction that the work and services have been performed in accordance with the terms and conditions of this Agreement.
- 6.6 Withholdings and Final Payment. The City may withhold, in its sole discretion, payment to the Contractor of any sum or a portion of any sum invoiced for failure or refusal of the Contractor to reasonably satisfy or comply with any material obligation, term, condition or requirement of this Agreement and may deduct, such other amounts as provided for elsewhere in this Agreement. Prior to withholding, however, the City shall provide the Contractor with five (5) days notice of any such failure or refusal and an opportunity to commence to cure and diligently pursue correction. All sums withheld pursuant to this paragraph shall be released only upon a showing, satisfactory to the Manager, that the failure or refusal resulting in the withholding has been removed, resolved, or cured by the Contractor.

7.0 TERM AND TERMINATION:

- 7.1 Term. The Term of this Agreement shall commence on March 1, 2018 and expire on March 1, 2019 unless sooner terminated as provided in this Agreement.
- 7.2 <u>Termination for Default for Nonperformance</u>. Failure or refusal of the Contractor to perform any material obligation under this Agreement shall constitute default. In the event of any default, in addition to any other remedy available to the City, after providing ten (10) days' prior written notice of and opportunity to commence a cure such default and diligently pursue correction, this Agreement may be terminated by the City if such default is not cured to the satisfaction of the City. No new performance under the Agreement will be undertaken after the

date of receipt of any notice of termination (the effective date of termination). In the event of such termination, the Contractor will be paid for those services satisfactorily performed in accordance with the requirements of this Agreement up to the effective date of termination. Such termination shall not waive any other legal remedies available to the City.

- 7.3 Termination for Default for Bankruptcy. In the event that either party shall cease conducting business in the normal course, become insolvent, make a general assignment for the benefit of creditors, suffer or permit the appointment of a receiver for its business or assets or shall avail itself of, or become subject to, any proceeding under the Federal Bankruptcy Act or any other statute of any state relating to insolvency or the protection of rights of creditors then, at the option of the other party, this Agreement shall terminate and be of no further force and effect, and any property or rights of such other party, tangible or intangible, shall forthwith be returned to it.
- 7.4 Termination for Default for Criminal Conduct. The City may, by written Notice of Default to the Contractor, terminate the whole or any part of this Agreement in the event the Contractor or any of its officers are convicted, plead nolo contendere, or enter into a formal agreement for deferred prosecution or sentencing, in which they admit guilt, enter a plea of guilty, or otherwise admit culpability to criminal offenses of bribery, kickbacks, collusive bidding, bidrigging, antitrust, fraud, undue influence, theft, racketeering, extortion, violation of the Racketeer Influenced and Corrupt Organizations Act (R.I.C.O.) or substantially similar state statute or any offense of a similar nature, in connection with the Contractor's business.
- 7.5 Termination for Convenience of City. The City may terminate this Agreement for the City's convenience and without cause at any time by giving the Contractor ten (10) days' written notice of such termination. In the event of such termination, the Contractor shall cease performance under this Agreement upon receipt of such written notice of termination and the Contractor will be paid only for its costs incurred in accordance with the provisions of this Agreement, up to the date of termination specified in the notice of termination.
- 7. 6 Recovery of Termination Costs Strictly Precluded. Except for reasonable, actual termination costs, the City shall not be liable for any costs incurred by the Contractor after the effective date of termination. Such non-recoverable costs shall include, but are not limited to anticipated profits, post-termination employee salaries, post-termination administrative expenses, or any other damages, costs or expenses which are not authorized under this Article. Following such termination, the Contractor will submit a final invoice to the City for the amount which represents the compensation actually due and owing for the Contractor performance prior to the effective date of termination and for which the Contractor has not previously been compensated. Upon approval and payment of this final invoice by the City, the City shall be under no further obligation to the Contractor for payment under this Agreement and all other claims shall be waived.

8.0 **INSURANCE AND INDEMNITY:**

8.1 Insurance.

8.1.1 General Conditions. Contractor agrees to secure, at or before the time of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Contractor shall keep the required insurance coverage in force at all times during the term of the Agreement, or any extension thereof, during any warranty period, and for three (3) years after termination of the Agreement. The required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M.

Best Company as "A-"VIII or better. Each policy shall contain a valid provision or endorsement requiring notification to the City in the event any of the required policies be canceled or nonrenewed before the expiration date thereof. Such written notice shall be sent to the parties identified in the Notices section of this Agreement. Such notice shall reference the City contract number listed on the signature page of this Agreement. Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal unless due to non-payment of premiums for which notice shall be sent ten (10) days prior. If such written notice is unavailable from the insurer, contractor shall provide written notice of cancellation, non-renewal and any reduction in coverage to the parties identified in the Notices section by certified mail, return receipt requested within three (3) business days of such notice by its insurer(s) and referencing the City's contract number. If any policy is in excess of a deductible or self-insured retention, the City must be notified by the Contractor. Contractor shall be responsible for the payment of any deductible or self-insured retention. The insurance coverages specified in this Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of the Contractor. The Contractor shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement.

- 8.1.2 Proof of Insurance. Contractor shall provide a copy of this Agreement to its insurance agent or broker. Contractor may not commence services or work relating to the Agreement prior to placement of coverages required under this Agreement. Contractor certifies that the certificate of insurance attached as Exhibit C, preferably an ACORD certificate, complies with all insurance requirements of this Agreement. The City requests that the City's contract number be referenced on the Certificate. The City's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor's breach of this Agreement or of any of the City's rights or remedies under this Agreement. The City's Risk Management Office may require additional proof of insurance, including but not limited to policies and endorsements.
- **8.1.3** Additional Insureds. For Commercial General Liability and Auto Liability, Contractor and subcontractor's insurer(s) shall name the City and County of Denver, its elected and appointed officials, employees and volunteers as additional insured.
- **8.1.4** <u>Waiver of Subrogation.</u> For all coverages required under this Agreement, Contractor's insurer shall waive subrogation rights against the City.
- 8.1.5 <u>Subcontractors.</u> All subcontractors and subconsultants (including independent contractors, suppliers or other entities providing goods or services required by this Agreement) shall be subject to all of the requirements herein and shall procure and maintain the same coverages required of the Contractor. Contractor shall include all such subcontractors as additional insured under its policies (with the exception of Workers' Compensation) or shall ensure that all such subcontractors and subconsultants maintain the required coverages. Contractor agrees to provide proof of insurance for all such subcontractors and subconsultants upon request by the City.
- 8.1.6 Workers' Compensation/Employer's Liability Insurance. Contractor shall maintain the coverage as required by statute for each work location and shall maintain Employer's Liability insurance with limits of \$100,000 per occurrence for each bodily injury claim, \$100,000 per occurrence for each bodily injury caused by disease claim, and \$500,000 aggregate for all bodily injuries caused by disease claims. Contractor expressly represents to the City, as a

material representation upon which the City is relying in entering into this Agreement, that none of the Contractor's officers or employees who may be eligible under any statute or law to reject Workers' Compensation Insurance shall effect such rejection during any part of the term of this Agreement, and that any such rejections previously effected, have been revoked as of the date Contractor executes this Agreement.

- 8.1.7 <u>Commercial General Liability.</u> Contractor shall maintain a Commercial General Liability insurance policy with limits of \$1,000,000 for each occurrence, \$1,000,000 for each personal and advertising injury claim, \$2,000,000 products and completed operations aggregate, and \$2,000,000 policy aggregate.
- **8.1.8** Business Automobile Liability. Contractor shall maintain Business Automobile Liability with limits of \$1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement.

8.1.9 Additional Provisions.

- **8.1.9.1** For Commercial General Liability and Excess Liability, the policies must provide the following:
- a. That this Agreement is an Insured Contract under the policy;
- b. Defense costs are outside the limits of liability;
- c. A severability of interests or separation of insureds provision (no insured vs. insured exclusion); and;
- d. A provision that coverage is non-contributory with other coverage or self-insurance provided by the City.
- **8.1.9.2** For claims-made coverage: The retroactive date must be on or before the contract date or the first date when any goods or services were provided to the City, whichever is earlier.
- **8.1.9.3** Contractor shall advise the City in the event any general aggregate or other aggregate limits are reduced below the required per occurrence limits. At their own expense, and where such general aggregate or other aggregate limits have been reduced below the required per occurrence limit, the Contractor will procure such per occurrence limits and furnish a new certificate of insurance showing such coverage is in force.

8.2 Indemnification.

- **8.2.1** To the fullest extent permitted by law, the Contractor hereby agrees to defend, indemnify, reimburse and hold harmless City, its appointed and elected officials, agents and employees for, from and against all liabilities, claims, judgments, suits or demands for damages to persons or property arising out of, resulting from, or related to the work performed under this Agreement that are due to the negligence or fault of the Contractor or the Contractor's agents, representatives, subcontractors, or suppliers ("Claims"). This indemnity shall be interpreted in the broadest possible manner consistent with the applicable law to indemnify the City.
- **8.2.2** Contractor's duty to defend and indemnify City shall arise at the time written notice of the Claim is first provided to City regardless of whether suit has been filed and even if Contractor is not named as a Defendant.

- **8.2.3** Contractor will defend any and all Claims which may be brought or threatened against City and will pay on behalf of City any expenses incurred by reason of such Claims including, but not limited to, court costs and attorney fees incurred in defending and investigating such Claims or seeking to enforce this indemnity obligation. Such payments on behalf of City shall be in addition to any other legal remedies available to City and shall not be considered City's exclusive remedy.
- **8.2.4** Insurance coverage requirements specified in this Agreement shall in no way lessen or limit the liability of the Contractor under the terms of this indemnification obligation. The Contractor shall obtain, at its own expense, any additional insurance that it deems necessary for the City's protection.
- **8.2.5** This defense and indemnification obligation shall survive the expiration or termination of this Agreement.
- 9.0 STANDARD OF CARE: The Contractor agrees that all of the work performed and services rendered by the Contractor and its subconsultants under this Agreement shall be performed in accordance with the standards of care, skill and diligence provided by competent professionals who perform work or render services of a similar nature to the work or services described in this Agreement.

10.0 <u>COMPLIANCE WITH LAWS AND REGULATIONS:</u>

- 10.1 <u>Laws and Regulations</u>. The Contractor shall be responsible for the compliance of all activities undertaken by it pursuant to this Agreement with all applicable laws and regulations, including without limitation the Americans with Disabilities Act, 42 U.S.C. §§ 12101 et seq. In the performance of its services, the Contractor shall assist the Design Consultant(s) as may be necessary to obtain required building permits. The Contractor further agrees to perform all services for the Project in strict compliance with all applicable laws, statutes, codes, ordinances, rules and regulations, and industry standards in effect at the time of the execution of this Agreement until all services called for under this Agreement have been completed and accepted by the City. Notwithstanding the foregoing, the City agrees that it is not the Contractor's responsibility to assure that the drawings and specifications are in accordance with applicable laws, statutes, ordinances, building codes, rules and regulations.
- 10.2 Governmental Authorities. The Contractor shall perform all of its duties, obligations and services, hereunder in a manner that complies with the City's directions to the Contractor and/or the City's obligations under law to consult with, solicit advice from and involve in the City's decision-making process, all applicable governmental or quasi-governmental authorities having jurisdiction over the Project and the surrounding area, including, but not limited to, the State of Colorado and any agency or department thereof, and the City and County of Denver, and any agency or department thereof.
- 10.3 No Discrimination In Employment. In connection with the performance of work under this Agreement, the Contractor may not refuse to hire, discharge, promote or demote, or discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender identity or gender expression, marital status, or physical or mental disability. The Contractor shall insert the foregoing provision in all subcontracts.

10.4 <u>Licensing Requirements</u>. The Contractor shall comply, at its own expense, with all laws and regulations, including, but not limited to, licensing requirements pertaining to its professional status and that of its employees, partners, associates, consultants under subcontract and others employed to render the services called for by this Agreement.

10.5 Certification under § 8-17.5-102, C.R.S.

10.5.1 This Agreement is subject to Division 5 of Article IV of Chapter 20 of the Denver Revised Municipal Code, and any amendments (the "Certification Ordinance").

10.5.2 The Contractor certifies that:

- 10.5.2.1 At the time of its execution of this Agreement, it does not knowingly employ or contract with an illegal alien who will perform work under this Agreement.
- 10.5.2.2 It will participate in the E-Verify Program, as defined in § 8-17.5-101(3.7), C.R.S., to confirm the employment eligibility of all employees who are newly hired for employment to perform work under this Agreement.
 - 10.5.3 The Contractor also agrees and represents that:
- 10.5.3.1 It shall not knowingly employ or contract with an illegal alien to perform work under the Agreement.
- 10.5.3.2 It shall not enter into a contract with a subcontractor that fails to certify to the Contractor that it shall not knowingly employ or contract with an illegal alien to perform work under the Agreement.
- 10.5.3.3 It has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this Agreement, through participation in either the E-Verify Program.
- 10.5.3.4 It is prohibited from using the E-Verify Program procedures to undertake pre-employment screening of job applicants while performing its obligations under the Agreement, and that otherwise requires the Contractor to comply with any and all federal requirements related to use of the E-Verify Program including, by way of example, all program requirements related to employee notification and preservation of employee rights.
- 10.5.3.5 If it obtains actual knowledge that a subconsultant or subcontractor performing work under the Agreement knowingly employs or contracts with an illegal alien, it will notify such subconsultant or subcontractor and the City within three (3) days. The Contractor will also then terminate such subconsultant or subcontractor if within three (3) days after such notice the subconsultant or subcontractor does not stop employing or contracting with the illegal alien, unless during such three-day period the subconsultant or subcontractor provides information to establish that the subconsultant or subcontractor has not knowingly employed or contracted with an illegal alien.
- 10.5.3.6 It will comply with any reasonable request made in the course of an investigation by the Colorado Department of Labor and Employment under authority of § 8-17.5-102(5), C.R.S, or the City Auditor, under authority of D.R.M.C. 20-90.3.

11.0 OWNERSHIP OF DOCUMENTS; CONFIDENTIAL INFORMATION:

- 11.1 Ownership of Documents. The data used in compiling, and the results of, any tests, surveys or inspections at the Site, as well as all photographs, drawings, specifications, studies, audits, reports, models and other items of like kind prepared by the Contractor, its employees and consultants, excluding proprietary systems such as estimating programs, shall be the property of the City whether the Project for which they are made is executed or not, but the Contractor shall be permitted to retain reproducible copies of all of the foregoing documents for the information and reference, and the originals of all of the foregoing documents including all electronic format copies shall be delivered to the City promptly upon completion thereof. All work products prepared by the Contractor under this Agreement, when delivered to and accepted by the Manager, shall become the property of the City and the City shall have unlimited ownership rights. Further, the Contractor agrees to allow the City to review any of the procedures used in performing the work and services hereunder, and to make available for inspection the field notes and other documents used in the preparation for and performance of any of the services and work performed hereunder. With respect thereto, the Contractor agrees to and does hereby grant to the City an exclusive royalty-free license to all data which the Contractor may cover by copyright.
- 11.2 <u>City Information</u>. The Contractor understands and agrees that, in performance of this Agreement, the Contractor may have access to private or confidential information which may be owned or controlled by the City and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to the City. The Contractor agrees that all information disclosed by the City to the Contractor shall be held in confidence and used only in performance of the Agreement. The Contractor shall exercise the same standard of care to protect such information as a reasonably prudent Contractor would to protect its own proprietary data.
- 11.3 Contractor Information. The parties understand that all the material provided or produced under this Agreement may be subject to the Colorado Open Records Act, C.R.S. 24-72-201, et seq., and that in the event of a request to the City for disclosure of such information, the City shall advise the Contractor of such request in order to give the Contractor the opportunity to object to the disclosure of any of its proprietary or confidential material. In the event of the filing of a lawsuit to compel such disclosure, the City will tender all such material to the court for judicial determination of the issue of disclosure and the Contractor agrees to intervene in such lawsuit to protect and assert its claims of privilege against disclosure of such material. The Contractor further agrees to defend, indemnify and save and hold harmless the City, its officers, agents and employees, from any claim, damages, expense, loss or costs arising out of the Contractor's intervention to protect and assert its claims of privilege against disclosure under this Section including, but not limited to, prompt reimbursement to the City of all reasonable attorney fees, costs and damages that the City may incur directly or may be ordered to pay by such court.
- 11.4 <u>Patent, Copyright and Trade Secret Indemnity</u>. Notwithstanding any other provision hereof, the Contractor shall save, defend and hold harmless the City from all loss, damage, or liability for, or by reason of, any actual or alleged infringement of any United States Patent, Copyright, or Trade Secret disclosure arising out of the Contractor's performance under this Agreement.
- 12.0 <u>CONTRACTOR'S ACCOUNTING RECORDS</u>: Records of the Contractor's direct personnel, consultant and reimbursable expenses pertaining to this Project and records of accounts between the City and the Contractor shall be kept on a generally accepted accounting basis and shall be available to the representatives of the City, including the Auditor of the City, or his

authorized representative within the City, at mutually convenient times for three (3) years after the final payment under this Agreement.

13.0 <u>SUPPLEMENTAL DOCUMENTS</u>: The following documents are attached hereto and/or incorporated herein and made a part of this Agreement:

Exhibit A – Proposal/Scope of Work.

Exhibit B – Key Personnel.

Exhibit C - ACORD Certificate of Insurance.

- 14.0 <u>TIME IS OF THE ESSENCE</u>: The parties agree that in the performance of the terms, conditions and requirements of this Agreement by the Contractor, time is of the essence.
- 15.0 <u>DISPUTES</u>: All disputes of any nature whatsoever regarding the Agreement, including but not limited to those involving damages or time extensions for delay, equitable adjustments, or other claims for compensation by the Contractor, including but not limited to disputes going to the breach or default of this Agreement, shall be exclusively resolved by administrative hearing pursuant to the provisions of D.R.M.C. Section 56-106, or, with respect to appropriate issues involving minority and women business enterprise contracting, by D.R.M.C. Section 28-33. For the purposes of this Agreement, the Manager, with respect to Section 56-106, DRMC disputes, and the Director of the Division of Small Business Opportunity, with respect to Section 28-33, DRMC disputes, have independently determined that the City's best interests are served by designating as the hearing officer a person retained for that purpose by contract under Charter Section A2.3-10. The Contractor expressly agrees that this dispute resolution process is the only dispute resolution mechanism that will be recognized by the parties for any claims put forward by the Contractor, notwithstanding any other claimed theory of entitlement on the part of the Contractor or its subcontractors or other consultants.

16.0 MISCELLANEOUS PROVISIONS:

- 16.1 <u>Taxes and Licenses</u>. The Contractor shall promptly pay, when they are due, all taxes, excises, license fees and permit fees of whatever nature applicable to the work and services which it performs under this Agreement, and shall take out and keep current all required municipal, county, state or federal licenses required to perform its services under this Agreement. The Contractor shall furnish the Manager, upon request, duplicate receipts or other satisfactory evidence showing or certifying to the proper payment of all required licenses and/or registrations and taxes. The Contractor shall promptly pay all owed bills, debts and obligations it incurs performing work under this Agreement and shall not allow any lien, verified claim, mortgage, judgment or execution to be filed against land, facilities or improvements owned or beneficially owned by the City as a result of such bills, debts or obligations.
- 16.2 <u>Status of Contractor</u>. The status of the Contractor shall be that of an independent contractor retained on a contractual basis to perform preconstruction services for limited periods of time as described in Section 9.1.1.E(x) of the Charter of the City and it is not intended, nor shall it be construed, that the Contractor, or any member of its staff or any consultant, is an employee, officer or agent of the City under Chapter 18 of the Denver Revised Municipal Code or for any purpose whatsoever.

- 16.3 <u>Rights and Remedies Not Waived.</u> Payment by the City shall not constitute a waiver of any breach of covenant or default which may then exist on the part of the Contractor. No assent, expressed or implied, to any breach of the Agreement shall be held to be a waiver of any later or other breach.
- 16.4 <u>Subject to Local Laws, Jurisdiction, Venue</u>. Each and every term, provision or condition in this Agreement is subject to and shall be construed in accordance with the provisions of Colorado law, the Charter of the City and County of Denver and the ordinances, regulations, Executive Orders, and/or fiscal rules, enacted and/or promulgated pursuant thereto. The Charter and Revised Municipal Code of the City and County of Denver, as the same may be amended from time to time, are hereby expressly incorporated into this Agreement as if fully set forth herein by this reference. Venue for any action or proceeding arising out of, or relating in any way to this Agreement, or the breach thereof, shall be in the City and County of Denver, Colorado.
- 16.5 <u>Conflict of Interest.</u> The Contractor agrees that no official, officer or employee of the City shall have any personal or beneficial interest whatsoever in the services or property described herein and the Contractor further agrees not to hire or contract for services any official, officer, or employee of the City or any other person which would be in violation of the Denver Revised Municipal Code Chapter 2, Article IV, Code of Ethics, or Denver City Charter provisions 1.2.9 and 1.2.12.
- 16.6 <u>Waiver of C.R.S. 13-20-802 et. seq.</u>: With respect solely to the City, the Contractor specifically waives all the provisions of Chapter 8 of Article 20 of Title 13, Colorado Revised Statutes (also designated C.R.S. 13-2-802 et seq.) relating to design defects in the Project under this Agreement.
- 16.7 No Third Party Relationship. Nothing Contained in this Agreement shall create a contractual relationship with, an obligation to, or a cause of action in favor of any third party as against either the City or the Contractor.
- 16.8 <u>Taxes, Charges and Penalties</u>. The City and County of Denver shall not be liable for the payment of taxes, late charges, or penalties of any nature.
- 16.9 <u>Use, Possession or Sale of Alcohol or Drugs</u>. The Contractor, its officers, agents, and employees shall cooperate and comply with the provisions of Executive Order 94 and Attachment A thereto concerning the use, possession or sale of alcohol or drugs. Violation of these provisions or refusal to cooperate with implementation of the policy can result in the City's barring the Contractor from City facilities or participating in City operations.
- 16.10 Notices. Any notices, demands, or other communications required or permitted to be given by any provision of this Agreement shall be given in writing, delivered personally or sent by registered mail, postage prepaid and return receipt requested, addressed to the parties at the addresses set forth herein or at such other address as either party may hereafter or from time to time designate by written notice to the other party given in accordance herewith. Notice shall be considered received on the day on which such notice is actually received by the party to whom it is addressed, or the third (3rd) day after such notice is mailed, whichever is earlier. Unless changed in writing, such notices shall be mailed to:

To the Contractor:

Hensel Phelps, Inc. 420 Sixth Avenue Greeley, Colorado 80631 To the City:

Executive Director of Public Works 201 West Colfax Avenue, Dept. 608

Denver, Colorado 80202

with a copy to:

Project Manager

Department of Public Works

201 West Colfax Avenue, Dept. 506

Denver, Colorado 80202

- Agreement, together with the exhibits and attachments hereto, which, by reasonable implication, contemplate continued performance or compliance beyond the termination of this Agreement (by expiration of the term or otherwise), shall survive such termination and shall continue to be enforceable as provided herein. Without limiting the general applicability of the foregoing, the Contractor's obligations for the provision of insurance and to indemnify the City shall survive for a period equal to any and all relevant statutes of limitation, plus the time necessary to fully resolve any claims, matters, or actions begun within that period.
- 16.12 <u>Paragraph Headings</u>. The captions and headings set forth herein are for convenience of reference only and shall not be construed so as to define or limit the terms and provisions hereof.
- 16.13 Severability. If any provision, term, or part of this Agreement, except for the provisions of this Agreement requiring prior appropriation and limiting the total amount to be paid by the City, is held to be invalid, illegal, unenforceable, or in conflict with any law of the State of Colorado, the validity, legality, and enforceability of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term or provision held to be invalid.
- 16.14 <u>Construction of Terms</u>. The language in this Agreement shall be construed according to its customary meaning within the building industry in the Denver metropolitan area. Whenever used, the singular numbers shall include the plural, and the plural the singular, and the use of any gender shall be applicable to all genders.
- 16.15 Agreement as Complete Integration; Amendments. This Agreement is intended as the complete integration of all understandings between the parties. No prior or contemporaneous addition, deletion or other amendment shall have any force or effect, unless embodied herein in writing. No subsequent novation, renewal, addition, deletion or other amendment hereto shall have any force or effect unless embodied in a written amendatory or other agreement executed by the parties and signed by the signatories to the original Agreement. This Agreement and any amendments shall be binding upon the parties, their successors and permitted assigns.
- 16.17 <u>Electronic Signatures and Electronic Records.</u> Contractor consents to the use of electronic signatures by the City. The Agreement, and any other documents requiring a signature hereunder, may be signed electronically by the City in the manner specified by the City. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy

of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

[SIGNATURE PAGES FOLLOW]

Contract Control Number:

PWADM-201842270-00

Contractor Name:

HENSEL PHELPS CONSTRUCTION COMPANY

IN WITNESS WHEREOF, the parties have set their hands and affixed their seals at Denver, Colorado as of August 09, 2018.

SEAL



CITY AND COUNTY OF DENVER

ATTEST:

Debra Johnson, Clerk and Recorder, Ex-Officio Clerk of the City and

County of Denver

APPROVED AS TO FORM:

REGISTERED AND COUNTERSIGNED:

Attorney for the City and County of

Denver

Beth Machann, City Controller

Robert Wheeler, Assistant City Attorney



HENSEL PHELPS CONSTRUCTION COMPANY By: Digitally signed by Edwin Glen Miller	Contract Control Number:	PWADM-201842270-00	
By: Digitally signed by Edwin Glen Miller Glen Miller (please print)	Contractor Name:	HENSEL PHELPS CONSTRUCTION COMPAN	Υ
By: Compared Date: 2018 07 28 Date: 2018 07 28			212
(please print) Title: Vice President (please print) ATTEST: [if required] By:		Glen Miller Glen Miller Deta: 2019 07 29	
(please print) Title: Vice President (please print) ATTEST: [if required] By:			
Title: Vice President (please print) ATTEST: [if required] By:		Name: Edwin Glen Miller	
ATTEST: [if required] By:		(please print)	
ATTEST: [if required] By:			
ATTEST: [if required] By:		1100.	
Ву:		(please print)	
Ву:			
		ATTEST: [if required]	
		1.	
		Ву:	
Name: Lisa Gray		Name: Lisa Gray	
(please print)		(please print)	
Title: Proposal Manager			





EXHIBIT A

LFC - Glass Guardrail Replacement

Owner: City of Denver

Architect: gkkworks

Estimate Type: Preconstruction Proposal

Current Date: 11-Jun-2018

Plains District Office

420 Sixth Avenue (80631) P.O. Box O Greeley, CO, 80632-0710 Phone: 970.352.6565

Fax: 970.352.9311 Estimator: RBS

LFC - Glass Guardrail Replacement **Preconstruction Proposal**

Owner: City of Denver Architect: gkkworks

Drawing Date: 28-Aug-2015 Revision No: 00

	PROJECT SECTOR:	Precon	tor A struction nit Costs	GSF U		
	GROSS FLOOR AREA:		00 GSF	1,000,0		
	SECONDARY UNIT OF MEASURE:	100	EACH		EACH	
SEC.	PARAMETER	\$/GSF	AMOUNT	\$/GSF	AMOUNT	%
A10	PRECONSTRUCTION COSTS	{ 0.09 }	88,914	0.09 }	88,914	89.24%
A1010	Preconstruction Staff	0.06	55,560	0.08	55,560	
A1020	Preconstruction Materials	0.03	25,338	0.03	25,338	
A1030	Subcontract Preconstruction Costs	0.01	8,016	0.01	8,016	
	Subtotal - Building and Site GENERAL CONDITIONS	0.09	88,914	0.09	88,914	89.24%
Z1010	General Conditions	0.00	o	0.00	0	0.00%
Z1015	Vertical Hoisting	0.00	o	0.00	0	0.00%
	Subtotal - GENERAL CONDITIONS INDIRECTS & RESERVES	0.00	0	0.00	0	0.00%
Z1020	Contractor's Bonds	0.00	None	0.00	None	0
Z1025	Subcontractor & Supplier Bonds	0.00	ol	0.00	0	0.00%
Z1030	Builder's Risk Insurance	0.00	By Owner	0.00	By Owner	
Z1040	General Liability Insurance	0.00	540	0.00	540	0.54%
Z1050	Permits	0.00	0	0.00	0	0.00%
Z1070	A & E Design Costs	0.00	By Owner	0.00	By Owner	
Z1080	Professional Liability Insurance	0.00	By A/E	0.00	By A/E	
Z1090	Gross Receipts Tax	0.00	Not Regd.	0.00	Not Regd.	
Z1100	Utility Development & Tap Fees	0.00	By Owner	0.00	By Owner	
Z1110	Hazardous Material Abatement	0.00	By Owner	0.00	By Owner	
Z1120	Testing & Inspections	0.00	By Owner	0.00	By Owner	
Z1130	Escalation	0.00	None	0.00	None	
Z1140	Bidding & Construction Reserves	0.00	0	0.00	0	0.00%
Z1150	Preconstruction Costs	0.00	0	0.00	0	0.00%
Z1160	Textura	0.00	219	0.00	219	0.22%
Z1190	G & A - Corporate	0.00	2,491	0.00	2,491	2.50%
	Subtotal - INDIRECTS & RESERVES FEES	0.00	3,250	0.00	3,250	3.26%
Z1060	Contractor's Fee	0.01	7,473	0.01	7,473	7.50%
	Subtotal - FEES	0.01	7,473	0.01	7,473	7.50%
	TOTAL PRECONSTRUCTION COST	0.10	99,637	0.10	99,637	
	SECONDARY UNIT COST	996	EACH	996	EACH	-

The information contained in this estimate is the proprietary property of Hensel Phelps and may be used only by the authorized recipient. Any reproduction or other reuse of this estimate or portions thereof without the express consent of Hensel Phelps is strictly prohibited.



Estimator: RBS, Estimate Checker: CC Current Date: 11-Jun-2018 Workbook: DJC Preconstruction Proposal w Scaffold Cost 20180611.xsm Boeckh's Data: City, State / Usage / Construction Type / 2000 / May - Jun 2018

LFC - Glass Guardrail Replacement Back-Up Estimate Detail

Owner: City of Denver Architect: gkkworks Drawing Date: N/A

Revision No: 00

PARAMETER / ITEM OF	WORK	FSR	USER 1	USER 2	USER 3	USER 4	QUANTITY	UNIT	\$/UNIT	TOTAL
A - Preconstruction	NO.25						1,000,000	GSF)		
A10 - PRECONSTRUCTION COSTS	127									
A1010 - Preconstruction Staff	d									
Project Executive - Chad Carlson							0	HOUR	150.00	
Preconstruction / Project Manager - Robert Sa	ucerman					_	240	HOUR	103.00	24,7
Estimator / Project Engineer - Patrick McInem	ву						240	HOUR	81.00	19,4
Superintendent - Kim Slusher							120	HOUR	95.00	11,4
								-		
							A1010 Subtotal		0.06	55,
A1020 - Preconstruction Materials										•
Misc Materials	· ·						1	LSUM	5,000.00	5,
Safway Scaffold Rental (February thru Septen	iber)						8	мо	2,542.31	20,
						_	-	-	-	
								-	-	
							-	-		
W =	<u>.</u>						A1020 Subtotal		0.03	25,
A1030 - Subcontract Preconstruction Costs (E	alance of SWM Precon \	/alue)								•
CD Documents - SW Metalsmiths		-					1	LSUM	7.016.00	7,0
Final Design Structural Calculations - SW Met	alsmiths						1	LSUM	Incl Above	
U Channel Mock Up SW Metalsmiths, Manufa	ctured Off Site & Delivered	to Site					1	LSUM	1,000.00	1,
				TC T		-	-	-	-	
X = 4	111.7						-	-	-	
								-	- 1	
							A1030 Subtotal		0.01	8,

Exhibit B



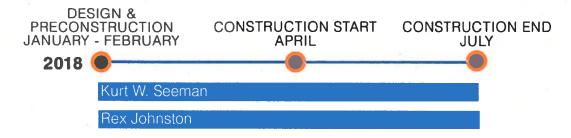


Hensel Phelps' organizational structure for the LFC is based on providing people who possess a positive attitude and a commitment to creating a long-term relationship with the client.

Kurt W. Seeman, LEED AP - Project Executive. Mr. Seeman is the senior executive who is ultimately responsible for the success of the Project. His primary role will be to assure that the Hensel Phelps team provides the highest quality services for the Project.

Rex Johnston, LEED AP - Project Manager. Mr. Johnston will be involved from preconstruction through Project Completion. He has worked closely with a variety of corporate clients on a wide range of project types under various contracting methods including design-assist, design-build, CM/GC, and fixed price.

Time Commitment



Experience Working Together

One of the unique characteristics of Hensel Phelps' workforce is the longevity of its employees. Hensel Phelps' retention rate is one of the highest in the industry wherein many of our employees stay with Hensel Phelps for the entirety of their working lives (please note the *Years of Experience* and *Years with Hensel Phelps* on the resumes of our proposed team).

How Does the Longevity of the Key Staff Effect Your Project?

The longevity of Hensel Phelps' staff tenure means that the proposed personnel have worked together on previous

projects, and in some instances this includes more than a decade of working together. Therefore there is no learning curve in terms of personalities, working style, and group cohesion. Additionally, the proposed personnel have extensive experience working with the Hensel Phelps proprietary processes that make us a market leader.







Education

B.S., Kansas State University; Construction Science and Management

Certifications

LEED AP

Years of Experience

20

Years with Hensel Phelps

20

Kurt W. Seeman, LEED AP

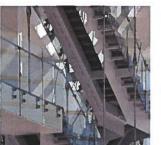
Project Executive

As Project Executive, Mr. Kurt Seeman is responsible to Hensel Phelps clients for providing the leadership and vision crucial to the success of each project assigned. Mr. Seeman assures that all client budgetary and quality goals are met through thorough financial planning and cost evaluations, aggressive schedule management, comprehensive resource planning, and employment of quality assurance monitoring systems. He is fully versed in all areas of estimating, purchasing, engineering, superintendency, and project management on both new construction programs and renovation projects.

RELEVANT EXPERIENCE

1144 15th Street Office Building, Denver, CO

\$193,594,527 | 1,185,000 SF | 01.11.2018 | Commercial | Owner: 1144 Fifteenth Partners LLC (Hines) | Architect: Pickard and Chilton Architects, Inc. | CM at Risk (CM/GC)



Denver Justice Center, Denver, CO

\$296,789,114 | 758,000 SF | 06.01.2010 | Public | Owner: City and County of Denver | Architect: Klipp Architecture | CM at Risk (CM/GC)

BATC AMC Expansion, Westminster, CO

\$55,500,000 | 145,000 SF | 12.01.2018 | Advanced Technology | Owner: Ball Aerospace & Technologies Corporation | Architect: RNL Design | CM at Risk (CM/GC)

Mountainview Operations Facility, Aurora, CO

\$131,954,362 | 230,000 SF | 07.28.2015 | Public | Owner: US Army Corps of Engineers | Architect: Black & Veatch | Design-Bid-Build (Hard Bid)

Lockheed GPS-3 Processing Facility Phase III, Littleton, CO

\$30,201,945 | 149,718 SF | 10.24.2011 | Aerospace | Owner: Lockheed Martin Space Systems | Architect: Oz Architecture | Design-Bid-Build (Hard Bid)











Education

B.S., Colorado State University; Construction Management

Certifications

LEED AP

Years of Experience

11

Years with Hensel Phelps

11

Rex Johnston, LEED Green Associate, DBIA Project Manager

Mr. Rex Johnston will act as Hensel Phelps' Project Management Representative who responds to all requirements and concerns of the client. He has extensive experience in developing and monitoring project master schedules, estimating, job cost reports, and establishing and implementing effective communication procedures for all team components and working in a downtown and operational building.

RELEVANT EXPERIENCE

1144 15th Street Office Building, Denver, CO

\$193,594,527 | 1,185,000 SF | 01.11.2018 | Commercial | Owner: 1144 Fifteenth Partners LLC (Hines) | Architect: Pickard and Chilton Architects, Inc. | CM at Risk (CM/GC)

Lockheed GPS-3 Processing Facility Phase III, Littleton, Co

\$30,201,945 | 149.718 SF | 10.24.2011 | Aerospace | Owner: Lockheed Martin Space Systems | Architect: Oz Architecture | Design-Bid-Build (Hard Bid)

Fort Carson 13th Combat Aviation Brigade ASB Hangar, Fort Carson, CO

\$54,685,332 | 136,158 SF | 10.31.2014 | Public | Owner: US Army Corps of Engineers | Architect: JACOBS | Design-Build

Hilton San Diego Bayfront, San Diego, CA

\$241,937,222 | 1,007,118 SF | 11.24.2008 | Private | Owner: Hilton Hotel Corporation, ING Clarion Partners | Architect: JWDA | CM at Risk (CM/GC)

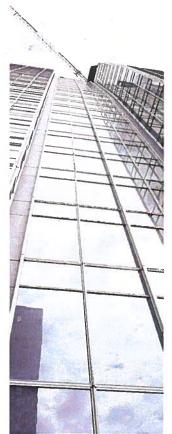










Exhibit C CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 5/4/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(les) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER		· · · · · · · · · · · · · · · · · · ·	CONTACT Rebekkah McGuire				
Flood and Peterson			PHONE (A/C, No, Ext): (970) 356-0123 FAX (A/C, No): (970) 3	30-1867			
PO Box 578			E-MAIL ADDRESS: RMcGuire@FloodPeterson.com				
			INSURER(S) AFFORDING COVERAGE	NAIC #			
Greeley	CO	80632	INSURER A : Zurich American Insurance Company	16535			
INSURED			INSURER B American Guarantee and Liability	26247			
Hensel Phelps Constru	ctic	on Co.	INSURER C: Steadfast Insurance Company 26387				
420 Sixth Avenue			INSURERD XL Insurance America, Inc.	24554			
			INSURER E :				
Greeley	CO	80631	INSURER F:				
COVERAGES		CERTIFICATE NUMBER:CL1841922	908 REVISION NUMBER:				

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR			ADDL		POLICY NUMBER	POLICY EFF	POLICY EXP	LIMITS	
LIK	X	COMMERCIAL GENERAL LIABILITY	INSU	WVD	FOLICT NUMBER	(MM/DD/YYYY)	(MM/DD/YYYY)		
A	-	CLAIMS-MADE X OCCUR			·			EACH OCCURRENCE \$ 5,000,0 DAMAGE TO RENTED \$ 300,0	
A	Н	CLAIMS-MADE A OCCOR						T TELEVISEO (ES COCCITOTOCO)	200
					GL0369726413	1/1/2018	1/1/2019	MED EXP (Any one person) \$	
	Ш	<u> </u>						PERSONAL & ADV INJURY \$ 5,000,0	000
	GEN	L'L AGGREGATE LIMIT APPLIES PER	`					GENERAL AGGREGATE \$ 10,000,0	000
	Щ	POLICY X PRO- JECT LOC						PRODUCTS - COMP/OP AGG \$ 10,000,0	000
		OTHER:						\$	
	АИТ	OMOBILE LIABILITY				-		COMBINED SINGLE LIMIT \$ 5,000,0	000
A	X	ANY AUTO			×.	·		BODILY INJURY (Per person) \$	
		ALL OWNED SCHEDULED AUTOS			BAP369726113	1/1/2018	1/1/2019	BODILY INJURY (Per accident) \$	
	X	HIRED AUTOS X NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident)		
								\$	
В	Х	UMBRELLA LIAB X OCCUR			AUC928038416	1/1/2018	1/1/2019	EACH OCCURRENCE \$ 50,000,0	000
D		EXCESS LIAB CLAIMS-MADE						AGGREGATE \$ 50,000,0	000
		DED RETENTION \$			US00068961LI18A	1/1/2018	1/1/2019	\$	
		EXERS COMPENSATION EMPLOYERS' LIABILITY		Ü				X PER OTH- STATUTE ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE		N/A					E.L. EACH ACCIDENT \$ 1,000,0	000
	(Man	datory in NH)	N/A		WC369726514	1/1/2018	1/1/2019	EL DISEASE - EA EMPLOYEE \$ 1,000,0	
	If yes, describe under DESCRIPTION OF OPERATIONS below					. 19		EL DISEASE - POLICY LIMIT \$ 1,000,0	
С	Pro	ofessional and Pollution			E0C937461714	1/1/2018	1/1/2019	Each Occurrence \$50,000,0	000
		Liability						Aggregate \$50,000,0	
		· 120							

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) RE: Lindsey-Flanigan Courthouse - Glass Guardrail Replacement Project

The City and County of Denver, its elected and appointed officials, employees and volunteers are included as Additional Insured as respects General Liability and Auto Liability. Waiver of subrogation applies.

CERTIFICATE HOLDER	CANCELLATION
City and County of Denver Department of Public Works 201 West Colfax Avenue	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
Denver, CO 80202	AUTHORIZED REPRESENTATIVE
2	Kelly Urwiller/KURWIL Katty T. Kanilles

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

APPENDIX A

CITY AND COUNTY OF DENVER EQUAL OPPORTUNITY CLAUSE - ALL CONTRACTS

- 1. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, age, national origin, religion, marital status, political opinion or affiliation, or mental or physical handicap. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, color, sex, age, national origin, religion, marital status, political opinion or affiliation, or mental or physical handicap. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, age, national origin, religion, marital status, political opinion or affiliation, or mental or physical handicap.
- 3. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided, advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. Each Contractor will comply with all provisions of Article III, Division 2 of Chapter 28 of the Revised Municipal Code, and the rules, regulations, and relevant orders of the Manager and the Director.
- 5. The Contractor will furnish all information and reports required by Article III, Division 2 of Chapter 28 of the Revised Municipal Code, and by rules, regulations and orders of the Manager and Director or pursuant thereto, and will permit access to his books, records, and accounts by the Manager, Director, or their designee for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- 6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further City contracts in accordance with procedures authorized in Article III, Division 2, Chapter 28 of the Revised Municipal Code, or by rules, regulations, or order of the Manager.
- 7. The Contractor will include Regulation 12, Paragraph 2 and the provisions of paragraphs (1) through (6) in every subcontract of purchase order unless exempted by rules, regulations, or orders of the Manager issued pursuant to Article III, Division 2, Chapter 28 of the Revised Municipal Code, so that such provisions will be binding on each subcontractor or supplier. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance.

The applicant further agrees to be bound by the above equal opportunity clauses with respect to its own employment practices when it participates in City contracts. The Contractor agrees to assist and cooperate actively with the Manager and the Director in obtaining compliance of subcontractors and suppliers with the equal opportunity clause and the rules, regulations and relevant orders of the Manager, and will furnish the Manager and the Director such information as they may require for the supervision of compliance, and will otherwise assist the Manager and Director in the discharge of the City's primary responsibility for securing compliance. The Contractor further agrees to refrain from entering into any contract or contract modification subject to Article III, Division 2

EXHIBIT D

of Chapter 28 of the Revised Municipal Code with a contractor debarred from, or who has not demonstrated eligibility for, City contracts.

The Contractor will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the Manager and Director. In addition, the Contractor agrees that failure or refusal to comply with these undertakings the Manager may take any or all of the following actions:

- A. Cancellation, termination, or suspension in whole or in part of this contract.
- B. Refrain from extending any further assistance to the applicant under the program with respect to which the failure occurred until satisfactory assurance of future compliance has been received from such applicant.
- C. Refer the case to the City Attorney for appropriate legal proceedings.

SUBCONTRACTS: Each prime Contractor or Subcontractor shall include the equal opportunity clause in each of its subcontracts.

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

APPENDIX F

AFFIRMATIVE ACTION REQUIREMENTS

EQUAL EMPLOYMENT OPPORTUNITY

For All Non-Exempt Construction Contracts to Be Awarded by the City and County of Denver, Department of Public Works.

NOTICE

EACH BIDDER, CONTRACTOR OR SUBCONTRACTOR (HEREINAFTER THE CONTRACTOR) MUST FULLY COMPLY WITH THE REQUIREMENTS OF THESE BID CONDITIONS AS TO EACH CONSTRUCTION TRADE IT INTENDS TO USE ON THIS CONSTRUCTION CONTRACT, AND ALL OTHER CONSTRUCTION WORK (BOTH CITY AND NON-CITY) IN THE DENVER AREA DURING THE PERFORMANCE OF THIS CONTRACT OR SUBCONTRACT. THE CONTRACTOR COMMITS ITSELF TO THE GOALS FOR MINORITY MANPOWER UTILIZATION, AS APPLICABLE, AND ALL OTHER REQUIREMENTS, TERMS AND CONDITION OF THESE BID CONDITIONS BY SUBMITTING A PROPERLY SIGNED BID.

THE CONTRACTOR SHALL APPOINT A COMPANY EXECUTIVE TO ASSUME THE RESPONSIBILITY FOR THE IMPLEMENTATION OF THE REQUIREMENTS, TERMS AND CONDITIONS OF THESE BID CONDITIONS.

/s/

Manager of Public Works City and County of Denver

A. REQUIREMENTS - AN AFFIRMATIVE ACTION PLAN:

Contractors shall be subject to the provisions and requirements of these bid conditions including the goals and timetables for minority* and female utilization, and specific affirmative action steps set forth by the Office of Contract Compliance. The contractor's commitment to the goals for minority, and female utilization as required constitutes a commitment that it will make every good faith effort to meet such goals.

1. GOALS AND TIMETABLES:

The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade are as follows:

GOALS FOR MINORITY PARTICIPATION FOR EACH TRADE FEMALE PARTICIPATION FOR EACH TRADE

From January 1, 1982 to Until Further Notice From January 1, 1982 to Until Further Notice

21.7% - 23.5% GOALS FOR 6.9%

The goals for minority and female utilization above are expressed in terms of hours of training and employment as a proportion of the total number of hours to be worked by the contractor's aggregate workforce, which includes all supervisory personnel, in each trade, on all projects for the City and County of Denver during the performance of its contract (i.e., The period beginning with the first day of work on the City and County of Denver funded construction contract and ending with the last day of work).

The hours of minority and female employment and training must be substantially uniform throughout the length of the contract in each trade and minorities and females must be employed evenly on each of a contractor's projects. Therefore, the transfer of minority or female employees from contractor to contractor or from project to project for the purpose of meeting the contractor's goals shall be a violation of these Bid Conditions.

If the Contractor counts the nonworking hours of apprentices they must be employed by the Contractor during the training period; the Contractor must have made a commitment to employ apprentices at the completion of their training subject to the availability of employment opportunities; and the apprentices must be trained pursuant to training programs approved by the Bureau of Apprenticeship and Training.

* "Minority" is defined as including, Blacks, Spanish Surname Americans, Asian-Americans, and American Indians, and includes both men and minority women.

2. SPECIFIC AFFIRMATIVE ACTION STEPS:

No contractor shall be found to be in noncompliance solely on account of its failure to meet its goals, but will be given an opportunity to demonstrate that the contractor has instituted all the specific affirmative action steps specified and has made every good faith effort to make these steps work toward the attainment of its goals within the timetables, all to the purpose of expanding minority and female utilization in its aggregate workforce. A contractor, who fails to comply with its obligation under the Equal Opportunity Clause of its contract and fails to achieve its commitments to the goals for minority and female utilization has the burden of proving that it has engaged in an Affirmative Action Program directed at increasing minority and female utilization and that such efforts were at least as extensive and as specific as the following:

- a. The Contractor should have notified minority and female organizations when employment opportunities were available and should have maintained records of the organization's response.
- b. The Contractor should have maintained a file of the names and addresses of each minority and female referred to it by any individual or organization and what action was taken with respect to each such referred individual, and if the individual was not employed by the Contractor, the reasons. If such individual was sent to the union hiring hall for referral and

- not referred back by the union or if referred, not employed by the Contractor, the file should have documented this and their reasons.
- c. The Contractor should have promptly notified the Department of Public Works, and the Division of Small Business Opportunity when the union or unions with which the Contractor has collective bargaining agreements did not refer to the contractor a minority or female sent by the contractor, or when the Contractor has other information that the union referral process has impeded efforts to meet its goals.
- d. The Contractor should have disseminated its EEO policy within its organization by including it in any employee handbook or policy manual; by publicizing it in company newspapers and annual reports and by advertising such policy at reasonable intervals in union publications. The EEO policy should be further disseminated by conducting staff meetings to explain and discuss the policy; by posting of the policy; and by review of the policy with minority and female employees.
- e. The Contractor should have disseminated its EEO policy externally by informing and discussing it with all recruitment sources; by advertising in news media, specifically including minority and female news media; and by notifying and discussing it with all subcontractors.
- f. The Contractor should have made both specific and reasonably recurrent written and oral recruitment efforts. Such efforts should have been directed at minority and female organizations, schools with substantial minority and female enrollment, and minority and female recruitment and training organizations within the Contractor's recruitment area.
- g. The Contractor should have evidence available for inspection that all tests and other selection techniques used to select from among candidates for hire, transfer, promotion, training, or retention are being used in a manner that does not violate the OFCCP Testing Guidelines in 41 CFR Part 60-3.
- h. The Contractor should have made sure that seniority practices and job classifications do not have a discriminatory effect.
- i. The Contractor should have made certain that all facilities are not segregated by race.
- j. The Contractor should have continually monitored all personnel activities to ensure that its EEO policy was being carried out including the evaluation of minority and female employees for promotional opportunities on a quarterly basis and the encouragement of such employees to seek those opportunities.
- k. The Contractor should have solicited bids for subcontracts from available minority and female subcontractors engaged in the trades covered by these Bid Conditions, including circulation of minority and female contractor associations.

NOTE: The Director and the Division of Small Business Opportunity will provide technical assistance on questions pertaining to minority and female recruitment sources, minority and female community organizations, and minority and female news media upon receipt of a request for assistance from a contractor.

3. NON - DISCRIMINATION:

In no event may a contractor utilize the goals and affirmative action steps required in such a manner as to cause or result in discrimination against any person on account of race, color, religion, sex, marital status, national origin, age, mental or physical handicap, political opinion or affiliation.

4. COMPLIANCE AND ENFORCEMENT:

In all cases, the compliance of a contractor will be determined in accordance with its obligations under the terms of these Bid Conditions. All contractors performing or to perform work on projects subject to these Bid Conditions hereby agree to inform their subcontractors in writing of their respective obligations under the terms and requirements of these Bid Conditions, including the provisions relating to goals of minority and female employment and training.

B. CONTRACTORS SUBJECT TO THESE BID CONDITIONS:

In regard to these Bid Conditions, if the Contractor meets the goals set forth therein or can demonstrate that it has made every good faith effort to meet these goals, the Contractor shall be presumed to be in compliance with Article III, Division 2 of Chapter 28 of the Revised Municipal Code, the implementing regulations and its obligations under these Bid Conditions. In the event, no formal sanctions or proceedings leading toward sanctions shall be instituted unless the contracting or administering agency otherwise determines that the contractor is violating the Equal Opportunity Clause.

- 1. Where the Office of Contract Compliance finds that a contractor failed to comply with the requirements of Article III, Division 2 of Chapter 28 of the Revised Municipal Code or the implementing regulations and the obligations under these Bid Conditions, and so informs the Manager, the Manager shall take such action and impose such sanctions, which include suspension, termination, cancellation, and debarment, as may be appropriate under the Ordinance and its regulations. When the Manager proceeds with such formal action it has the burden of proving that the Contractor has not met the goals contained in these Bid Conditions. The Contractor's failure to meet its goals shall shift to it the requirement to come forward with evidence to show that it has met the good faith requirements of these Bid Conditions.
- 2. The pendency of such proceedings shall be taken into consideration by the Department of Public Works in determining whether such contractor can comply with the requirements of Article III, Division 2 of Chapter 28 of the Revised Municipal Code, and is therefore a "responsible prospective contractor".
- 3. The Division of Small Business Opportunity shall review the Contractor's employment practices during the performance of the contract. If the Division of Small Business Opportunity determines that the Contractor's Affirmative Action Plan is no longer an acceptable program, the Director shall notify the Manager.

C. OBLIGATIONS APPLICABLE TO CONTRACTORS:

It shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority or female employees. Discrimination in referral for employment, even if pursuant to provisions of a collective bargaining agreement, is prohibited by the National Labor Relations Act, as amended, Title VI of the Civil Rights Act of 1964, as amended, and Article III, Division 2 of Chapter 28 of the Revised Municipal Code. It is the policy of the Department of Public Works that contractors have a responsibility to provide equal employment opportunity, if they wish to participate in City and County of Denver contracts. To the extent they have delegated the responsibility for some of their employment practices to a labor organization and, as a result, are prevented from meeting their obligations pursuant to Article III, Division 2, Chapter 28 of the Revised Municipal Code, such Contractors cannot be considered to be in compliance with Article III, Division 2, Chapter 28 of the Revised Municipal Code, or its implementing rules and regulations.

D. GENERAL REQUIREMENTS:

Contractors are responsible for informing their subcontractors in writing regardless of tier, as to their respective obligations. Whenever a Contractor subcontracts a portion of work in any trade covered by these Bid Conditions, it shall include these Bid Conditions in such subcontracts and each subcontractor shall be bound by these Bid Conditions to the full extent as if it were the prime contractor. The Contractor shall not, however, be held accountable for the failure of its subcontractors to fulfill their obligations under these Bid Conditions. However, the prime contractor shall give notice to the Director of any refusal or failure of any subcontractor to fulfill the obligations under these Bid Conditions. A subcontractor's failure to comply will be treated in the same manner as such failure by a prime contractor.

- 1. Contractors hereby agree to refrain from entering into any contract or contract modification subject to Article III, Division 2, Chapter 28 of the Revised Municipal Code with a contractor debarred from, or who is determined not to be a "responsive" bidder for the City and County of Denver contracts pursuant to the Ordinance.
- 2. The Contractor shall carry out such sanctions and penalties for violation of these Bid Conditions and the Equal Opportunity Clause including suspension, termination and cancellation of existing subcontracts and debarment from future contracts as may be ordered by the Manager pursuant to Article III, Division 2, Chapter 28 of the Revised Municipal Code and its implementing regulations.
- 3. Nothing herein is intended to relieve any contractor during the term of its contract from compliance with Article III, Division 2, Chapter 28 of the Revised Municipal Code, and the Equal Opportunity Clause of its contract with respect to matters not covered in these Bid Conditions.
- 4. Contractors must keep such records and file such reports relating to the provisions of these Bid Conditions as shall be required by the Office of Contract Compliance.
- 5. Requests for exemptions from these Bid Conditions must be made in writing, with justification, to the Manager of Public Works, City and County Building, Room 379, Denver, Colorado 80202, and shall be forwarded through and with the endorsement of the Director.



Office of Human Resources

Denver's Human Resource Agency

201 W. Colfax, Department 412
Denver, CO 80202
p: 720.913.5751
f: 720.913.5720
www.denvergov.org/humanresources

TO: All Users of the City of Denver Prevailing Wage Schedules

FROM: Susan Keller, Human Resources Technician II

DATE: Wednesday, August 30, 2017

SUBJECT: Latest Change to Prevailing Wage Schedules

Please be advised, prevailing wage rates for some building, heavy, and highway construction trades have not been updated by the United States Department of Labor (DOL) since March 1, 2002. The Career Service Board, in their meeting held on April 21, 2011, approved the use of the attached supplemental wage rates until prevailing wage rates for these classifications of work are again published by the United States Department of Labor.

The attached Prevailing Wage Schedule is effective as of **Friday**, **August 18**, **2017** and applies to the City and County of Denver for **BUILDING CONSTRUCTION PROJECTS** (does not include residential construction consisting of single family homes and apartments up to and including 4 stories) in accordance with the Denver Revised Municipal Code, Section 20-76(c).

General Wage Decision No. CO170030 Superseded General Decision No. CO20160030 Modification No. 12 Publication Date: 8/18/17 (4 pages)

Unless otherwise specified in this document, apprentices shall be permitted only if they are employed pursuant to, and individually registered in, a bona fide apprenticeship program registered with the U.S. Department of Labor (DOL). The employer and the individual apprentice must be registered in a program, which has received prior approval, by the DOL. Any employer, who employs an apprentice and is found to be in violation of this provision, shall be required to pay said apprentice the full journeyman scale.

For questions call (720) 913-5726.

Attachments as listed above.



General Decision Number: CO170030 08/18/2017 CO30

Superseded General Decision Number: CO20160030

State: Colorado

Construction Type: Building

County: Denver County in Colorado.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Nu	umber	Publication	Date
0		01/06/2017	
1		01/13/2017	
2		01/27/2017	
3		02/03/2017	
4		04/07/2017	
5		04/21/2017	
6		05/19/2017	
7		05/26/2017	
8		06/02/2017	
9		06/09/2017	
10		07/21/2017	
11		08/04/2017	
12		08/18/2017	

ASBE0028-002 07/01/2016

ASBESTOS WORKER/HEAT & FROST
INSULATOR - MECHANICAL (Duct,
Pipe & Mechanical System
Insulation).....\$ 29.73 13.93

Rates

CARP0055-002 11/01/2016

Rates Fringes

Fringes

CARPENTER (Drywall Hanging

Only)	\$ 26.25	8.64
CARP1607-001 06/01/2016		
	Rates	Fringes
MILLIDIGUE		
MILLWRIGHT		12.70
ELEC0068-012 06/01/2017		
	Rates	Fringes
ELECTRICIAN (Includes Low Voltage Wiring)		14.97
ELEV0025-001 01/01/2017		
	Rates	Fringes
ELEVATOR MECHANIC	\$ 42.35	31.58
<pre>all hours worked. 8%/over 5 rate for all hours worked. b. PAID HOLIDAYS: New Year's</pre>		
Day; Labor Day; Veterans' Day after Thanksgiving Day; and C	; Thanksgivi	ng Day; the Friday
Day; Labor Day; Veterans' Day	r; Thanksgivin	ng Day; the Friday
Day; Labor Day; Veterans' Day after Thanksgiving Day; and C	; Thanksgivi	ng Day; the Friday
Day; Labor Day; Veterans' Day after Thanksgiving Day; and Communication of the Day and Communication of the Day after Thanksgiving Day; and Communication of the Day after Thanksgiving Day after	r; Thanksgivin	ng Day; the Friday
Day; Labor Day; Veterans' Day after Thanksgiving Day; and Communication of the Englossystem of the Engloss	r: Thanksgiving Christmas Day Rates\$ 29.82	ng Day; the Friday Fringes
Day; Labor Day; Veterans' Day after Thanksgiving Day; and Communication of the Communication	Rates\$ 29.82\$ 27.75	ng Day; the Friday Fringes 10.10 10.10
Day; Labor Day; Veterans' Day after Thanksgiving Day; and Communication of the Englossystem of the Engloss	Rates\$ 29.82\$ 27.75	ng Day; the Friday Fringes
Day; Labor Day; Veterans' Day after Thanksgiving Day; and Communication of the Day of th	Rates\$ 29.82\$ 27.75	ng Day; the Friday Fringes 10.10 10.10 10.10
Day; Labor Day; Veterans' Day after Thanksgiving Day; and Comment of the Engloss	Rates\$ 29.82\$ 27.75	ng Day; the Friday Fringes 10.10 10.10 10.10
Day; Labor Day; Veterans' Day after Thanksgiving Day; and Comment of the Engloss	Rates\$ 29.82\$ 27.75\$ 27.92\$ 28.55	ng Day; the Friday Fringes 10.10 10.10 10.10 10.10
Day; Labor Day; Veterans' Day after Thanksgiving Day; and Commended the Thanksgiving Day; and Commende	Rates\$ 29.82\$ 27.75\$ 27.92\$ 28.55	ng Day; the Friday Fringes 10.10 10.10 10.10 10.10 Fringes
Day; Labor Day; Veterans' Day after Thanksgiving Day; and Commended the Thanksgiving Day; and Commende	Rates\$ 29.82\$ 27.75\$ 27.92\$ 28.55	ng Day; the Friday Fringes 10.10 10.10 10.10 10.10 Fringes
Day; Labor Day; Veterans' Day after Thanksgiving Day; and Commended the Thanksgiving Day; and Commende	Rates \$ 29.82\$ 27.75\$ 27.92\$ 28.55 Rates \$ 26.30	fringes 10.10 10.10 10.10 10.10 10.20 10.10 10.20 10.20
Day; Labor Day; Veterans' Day after Thanksgiving Day; and Commended the Indiana of the Indiana o	Rates \$ 29.82\$ 27.75\$ 27.92\$ 28.55 Rates \$ 26.30	fringes Fringes 10.10 10.10 10.10 10.10 10.20 Fringes 12.25 Fringes

PAINTER (Brush, Roller and Spray; Excludes Drywall Finishing/Taping)	\$ 20.50	8.41
* PAIN0079-007 08/01/2017		
	Rates	Fringes
DRYWALL FINISHER/TAPER	\$ 21.20	8.41
PAIN0419-001 07/01/2016		
	Rates	Fringes
SOFT FLOOR LAYER (Vinyl and Carpet)	\$ 20.00	10.83
* PAIN0930-002 07/01/2017		
	Rates	Fringes
GLAZIER	\$ 31.02	9.37
PLUM0003-009 06/01/2017		
	Rates	Fringes
PLUMBER (Excludes HVAC Duct, Pipe and Unit Installation)	\$ 34.53	16.44
PLUM0208-008 06/01/2017		
	Rates	Fringes
PIPEFITTER (Includes HVAC Pipe and Unit Installation; Excludes HVAC Duct Installation)	\$ 33.30	17.65
SFC00669-002 04/01/2017		
	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers)		20.47
SHEE0009-004 07/01/2017		
	Rates	Fringes
SHEET METAL WORKER (Includes HVAC Duct Installation; Excludes HVAC Pipe and Unit Installation)		16.61
SUCO2013-006 07/31/2015		

1	Rates	Fringes
BRICKLAYER\$	21.96	0.00
CARPENTER (Acoustical Ceiling Installation Only)\$	22.40	4.85
CARPENTER (Metal Stud Installation Only)\$	17.68	0.00
CARPENTER, Excludes Acoustical Ceiling Installation, Drywall Hanging, and Metal Stud		
Installation\$	21.09	6.31
CEMENT MASON/CONCRETE FINISHER\$	20.09	7.03
LABORER: Common or General\$	14.49	5.22
LABORER: Mason Tender - Brick\$	15.99	0.00
LABORER: Mason Tender - Cement/Concrete\$	16.00	0.00
LABORER: Pipelayer\$	16.96	3.68
OPERATOR: Backhoe/Excavator/Trackhoe\$	20.78	5.78
OPERATOR: Bobcat/Skid Steer/Skid Loader\$	19.10	3.89
OPERATOR: Grader/Blade\$	21.50	0.00
ROOFER\$	16.56	0.00
TRUCK DRIVER: Dump Truck\$	17.34	0.00
WATERPROOFER\$		0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Office of Human Resources Supplemental rates (Specific to the Denver projects) Supp #101, Date: 11-28-2016

<u>Classification</u>		<u>Base</u>	<u>Fringe</u>
Boilermakers		\$30.97	\$21.45
Iron Worker, Reinforcing		\$18.49	\$3.87
Journeyman Tile Setter		\$26.83	\$8.48
Laborers: Concrete Saw		\$13.89	-
Paper Hanger		\$20.15	\$6.91
Plasters		\$24.60	\$12.11
Plaster Tenders		\$10.79	-
Power Equipment Operators (Concrete Mixers):			
	Less than 1 yd	\$23.67	\$10.67
	1 yd and over	\$23.82	\$10.68
Power Equipment Operators:			
	Loader up to and incl 6 cu		
	yd	\$23.67	\$10.67
	Motor Grader	\$23.97	\$10.70
	Roller	\$23.67	\$10.67
	Drillers	\$23.97	\$10.70
	Loaders over 6 cu yd	\$23.82	\$10.68
	Oilers	\$22.97	\$10.70
	Mechanic	\$18.48	
Tile Finisher-Floor Grinder- Base Grinder		\$20.87	\$8.42
Truck Drivers	Flatbed	\$19.14	\$10.07
	Semi	\$19.48	\$10.11

- Caulkers—Receive rate prescribed for craft performing operation to which caulking is incidental .i.e. glazier, painter, brick layer, cement mason.
- Use the "Carpenters, Excludes Acoustical Ceiling Installation, Drywall Hanging, and Metal Stud Installation" rates published by the Federal Davis-Bacon rates for batt insulation, pre-stress concrete and tilt up concrete walls.
- Use the "Laborer—Common", for General Housekeeping, Demolition, Final Cleanup and Indoor Fence Installer.
- Trade classification workers cannot be classified as common laborers for performing incidental cleanup from the installation of their craft. Common Laborers perform final cleanup of the entire jobsite.
- Go to <u>www.denvergov.org/Auditor</u> to view the Prevailing Wage Clarification Document for a list of complete classifications used.

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned
a corporation organized and existing under and by virtue of the laws of the State of
hereafter referred to as the "Contractor", and
a corporation organized and existing under and by virtue of the laws of the State of
and authorized to transact business in the State of Colorado, as Surety, are held and firmly bound unto the CITY AND
COUNTY OF DENVER, a municipal corporation of the State of Colorado, hereinafter referred to as the "City", in the
penal sum of One Million Seven Hundred Sixty-Four Thousand Dollars and Zero Cents (\$1,764,000.000), lawful
money of the United States of America, for the payment of which sum, well and truly to be made, we bind ourselves and our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents;

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT:

WHEREAS, the above bounden Contractor has entered into a written contract with the aforesaid City for furnishing all labor and tools, supplies, equipment, superintendence, materials and everything necessary for and required to do, perform and complete the construction of **CONTRACT NO. 201845210**, **Lindsey-Flanigan Courthouse—Glass Guardrail Replacement**, Denver, Colorado, and has bound itself to complete the project within the time or times specified or pay liquidated damages, all as designated, defined and described in the said Contract and Conditions thereof, and in accordance with the Plans and Technical Specifications therefore, a copy of said Contract being made a part hereof;

NOW, THEREFORE, if the said Contractor shall and will, in all particulars well and truly and faithfully observe, perform and abide by each and every Covenant, Condition and part of said Contract, and the Conditions, Technical Specifications, Plans, and other Contract Documents thereto attached, or by reference made a part thereof and any alterations in and additions thereto, according to the true intent and meaning in such case, then this obligation shall be and become null and void; otherwise, it shall remain in full force and effect;

PROVIDED FURTHER, that if the said Contractor shall satisfy all claims and demands incurred by the Contractor in the performance of said Contract, and shall fully indemnify and save harmless the City from all damages, claims, demands, expense and charge of every kind (including claims of patent infringement) arising from any act, omission, or neglect of said Contractor, its agents, or employees with relation to said work; and shall fully reimburse and repay to the City all costs, damages, and expenses which it may incur in making good any default based upon the failure of the Contractor to fulfill its obligation to furnish maintenance, repairs or replacements for the full guarantee period provided in the Contract Documents, then this obligation shall be null and void; otherwise it shall remain in full force and effect;

PROVIDED FURTHER, that if said Contractor shall at all times promptly make payments of all amounts lawfully due to all persons supplying or furnishing it or its subcontractors with labor and materials, rental machinery, tools or equipment used or performed in the prosecution of work provided for in the above Contract and that if the Contractor will indemnify and save harmless the City for the extent of any and all payments in connection with the carrying out of such Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect;

PROVIDED FURTHER, that if the said Contractor fails to duly pay for any labor, materials, team hire, sustenance, provisions, provender, gasoline, lubricating oils, fuel oils, grease, coal, or any other supplies or materials used or consumed by said Contractor or its subcontractors in performance of the work contracted to be done, or fails to pay any person who supplies rental machinery, tools or equipment, all amounts due as the result of the use of such machinery, tools or equipment in the prosecution of the work, the Surety will pay the same in any amount not exceeding the amount of this obligation, together with interest as provided by law;

Exhibit F

PROVIDED FURTHER, that the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to contracts with others in connection with this project, or the work to be performed thereunder, or the Technical Specifications and Plans accompanying the same, shall in any way affect its obligation on this bond and it does hereby waive notice of any change, extension of time, alteration or addition to the terms of the Contract, or contracts, or to the work, or to the Technical Specifications and Plans.

IN WITNESS WHEREOF, said Contractor and said Surety had ay of, 20	ave executed these presents as of this
Attest:	Contractor By: President
Secretary	President Surety
	By:Attorney-In-Fact
(Accompany this bond with Attorney-in-Fact's authority from of the bond).	the Surety to execute bond, certified to include the date
APPROVED AS TO FORM: Attorney for the City and County of Denver	APPROVED FOR THE CITY AND COUNTY OF DENVER
By: Assistant City Attorney	By: MAYOR
	By: EXEC. DIR. OF PUBLIC WORKS

DEPARTMENT OF PUBLIC WORKS Engineering Division

FINAL/PARTIAL RELEASE AND CERTIFICATE OF PAYMENT (SUBCONTRACTOR/SUPPLIER)

	Date:	, 20 .
(PROJECT NO. and NAME)	-	
	Subcontract #:	
(NAME OF CONTRACTOR)		
	Subcontract Value: \$	Φ.
(NAME OF SUBCONTRACTOR/SUPPLIER)	Last Progress Payment:	. \$
Check Applicable Box:	Date: Total Paid to Date: \$	·
[] MBE [] WBE	Date of Last Work:	
The Undersigned hereby certifies that all costs, charges or experundersigned for any work, labor or services performed and for a above referenced Project or used in connection with the above reduly paid in full.	ny materials, supplies or equipm	nent provided on the
The Undersigned further certifies that each of the undersigned's to be incurred, on their behalf, costs, charges or expenses in coabove referenced Project have been duly paid in full.		
In consideration of \$ representing the Last Progress Pa of the Total Paid to Date, also referenced above, and other good at the undersigned this day of, 20, the band County of Denver (the "City"), the above referenced City Progreferenced Contractor from all claims, liens, rights, liabilities, desor every nature arising out of or in connection with the performance.	and valuable consideration recei Undersigned hereby releases and oject, the City's premises and pro mands and obligations, whether	ved and accepted by I discharges the City operty and the above
As additional consideration for the payments referenced above, the and hold harmless the City, its officers, employees, agents and as against all costs, losses, damages, causes of action, judgments un connection with any claim or claims against the City or the performance of the Work Effort and which may be asserted by the of any tier or any of their representatives, officers, agents, or employees.	ssigns and the above-referenced order the subcontract and expense Contractor which arise out of Undersigned or any of its supplied	Contractor from and a arising out of or in f the Undersigned's
It is acknowledged that this release is for the benefit of and n Contractor.	nay be relied upon by the City	and the referenced
The foregoing shall not relieve the undersigned of any oblig subcontract, as the subcontract may have been amended, w Undersigned's work effort including, without limitation, wa indemnities.	which by their nature survive	completion of the
STATE OF COLORADO) ss. CITY OF		
	(Name of Subcontractor)	
Signed and sworn before me this day of, 20 By:		
<u> </u>		
Notary Public/Commissioner of Oaths My Commission Expires Title:		



Current Date

NOTICE TO PROCEED (SAMPLE)

Name Company Street City/State/Zip

CONTRACT NO. <u>201845210</u>; <u>LINDSEY FLANAGAN COURTHOUSE GUARDRAIL</u> <u>REPLACEMENT</u>

In accordance with General Contract Condition 302 of the Standard Specifications for Construction General Contract Conditions, 2011 Edition, you are hereby authorized and directed to proceed on with the work of constructing contract number 201845210, as set forth in detail in the contract documents for the City and Country of Danyage
documents for the City and County of Denver.
With a contract time of calendar days, the project must be complete on or before
If you have not already done so, you must submit your construction schedule, in accordance with General Contract Condition 306.2.B, to the Project Manager within 10 days. Additionally, you must submit your tax-exempt certificate, and copies of your subcontractors' certificates, in accordance with General Contract Condition 323.5, to the Project Manager as soon as possible. Failure to submit these certificates will delay processing of payment applications.
Sincerely,
Lesley B. Thomas City Engineer
cc:

Denver Public Works/Office of the Executive Director 201 West Colfax Avenue, Dept 608 | Denver, CO 80202 www.denvergov.org/dpw p. 720.865.8630 | f. 720.865.8795

		City and County of Denver		Office of Economic Development Compliance Unit					
OFFICE OF ECONOMIC DEVELOPMENT		Divi	Division of Small Business Opportunity				201 W. Colfax Ave., Dept. 907		
DEVELOT METER		DIVI	Sion	or Small Dusiness	Oppor	tunity			CO 80202 20.913.1999
		Contractor's/0	Cons	ultant's Certificat	ion of	Payment (CCP)			
Prime Contractor or Consultant:			Phone:			Project Manager:			
Pay Application #:		Pay Period:				Amount Requested: \$			
Project #:		Project Name:							
Current Completion Date:		Percent Complete:				Prepared By:			
(I) - Original Contract Amount: \$					(II) - Curre	ent Contract Amount: \$			
		A	В	C	D	E	F	G	Н
Prime/Subcontractor/Supplier Name	M/W/S/E DBE/ NON	Original Contract Amount	% Bid (A/I)	Current Contract Amount including Amendments	% Revised (C/II)	Requested Amount of this Pay Application	Amount Paid on the Previous Pay Application #	Net Paid To Date	Paid % Achieved (G/II)
1 microadonidadoroappier Haine		ranount	(101)	and during 7 and during	(0/11)	1 ay rippiioacon	/ ipproduction a	To but	(0)
Totals									
The undersigned certifies that the into and listed herein. Please use an add				rue, accurate and that the	payment	ts shown have been made	to all subcontractors a	ind suppliers used on th	nis project
Prepared By (Signature):		<u> </u>				Date:			
				Page	of			COMP-FRM-027	rev 031816
								30	2. 00.010



Date

Certificate of Contract Release (SAMPLE)

Name Company Street City/State/Zip RE: Certificate of Contract R 201845210, LINDSEY-FLANIGAN COURTHOUSE		
Received this date of the City and County of Denver, as full are provided for in the foregoing contract, (\$	dollars and ce unt accruing to the undersigned by virtue of s ent for the cost of all extra work and mate	ents said erial
undersigned hereby releases said City and County of Denver regardless of how denominated, growing out of said contract	from any and all claims or demands whatsoev	
And these presents are to certify that all persons performing improvements under the foregoing contract have been paid in final payment.		
Contractor's Signature	Date Signed	
If there are any questions, please contact me by telephone at	(720) 913-XXXX. Please return this	

Denver Public Works/Office of the Executive Director 201 West Colfax Avenue, Dept 608 | Denver, CO 80202 www.denvergov.org/dpw p. 720.865.8630 | f. 720.865.8795

document via facsimile at (720) 913-1805 and mail to original to the above address.

311 | POCKETGOV.COM | DENVERGOV.ORG | DENVER 8 TV

CANVONDESIGN

September 4, 2018

Michael Young Project Manager Denver Public Works Facilities Capital Projects Management 201 West Colfax Ave, Dept. 506 Denver, CO 80202

Re: Lindsey-Flanigan Courthouse Glass Guardrail Replacement

Mr. Young,

We have reviewed the information submitted for the replacement of the glass guardrail system at the Denver Justice Center. The information included shop drawings from Southwest Metalsmiths, Inc. dated 5/24/2018 and a package of calculations from GLR Engineers, PLLC dated 7/12/2018.

Our review has determined that the information provided is complete, comprehensive, and that the design intent has been maintained as directed by the Client and Owner. Southwest Metalsmiths shall add the required code information to the cover sheet of the drawings as well as the other information as noted per Cannon Design's review. If Southwest Metalsmiths has any questions regarding the markups provided by Cannon Design, Southwest Metalsmiths shall notify Cannon Design prior to issuing the drawings to the City and County of Denver for permit.

A structural review of the drawings has also been completed and a summary of their review has been documented in a formal letter titled "DJCC.Handrail Replacement.ltr.jmk."

If you have any questions or need additional information, please call me at my contact information below.

Sincerely,

Jason Finnegan, AIA Vice President

CANVONDESIGN

201 Broadway Denver, CO 80203 720.644.4024 CANNONDESIGN.COM





August 29, 2018

Jason Finnegan Cannon Design 201 Broadway Denver, Colorado 80203

Denver

Abu Dhabi

RE: GI

Glass Handrail Replacement
Denver Justice Center Courthouse

Civil

Structural
Integrated Services

Jason:

We have reviewed the information submitted for the replacement glass hand rail system at the Denver Justice Center. The information included shop drawings from Southwest Metalsmiths, Inc. dated 5/24/2018 and a package of calculations from GLR Engineers, PLLC dated 7/12/2018.

Our review showed the information to be complete and comprehensive and we have no comments or take no exceptions to the submittals except for the following item.

The new glass railing components are approximately 1/8" thicker than the original railing construction and weigh approximately 25% more. Using this increase we reviewed the capacity of the existing stair superstructure supporting the handrail to determine if the increase in railing weight exceeds the safe capacity of the superstructure.

Our review shows the increase in handrail weight can be safely accommodated by the existing superstructure without reinforcement or other remedial work.

If you have any questions or need additional information please call me at my contact information below.

Sincerely,

S. A. Miro, Inc.

23816 8/29/2018

John M. Karlberg. P.E. Associate Principal

S. A. Miro, Inc.

4582 S. Ulster St. Pkwy, Ste 750 Denver, Colorado 80237-2639

Phone: 303-741-3737 / Fax 303-694-3134 Direct: 720-407-1016 / Fax 720-407-1616 jkarlberg@samiro.com www.samiro.com

JMK/jmk (DJCC.Handrail Replacement.ltr.jmk)

LFC - Glass Guardrail Replacement

Owner: City and County of Denver

Drawing Date: N/A

Architect: GKK

Revision No: 00

Clarifications and Assumptions

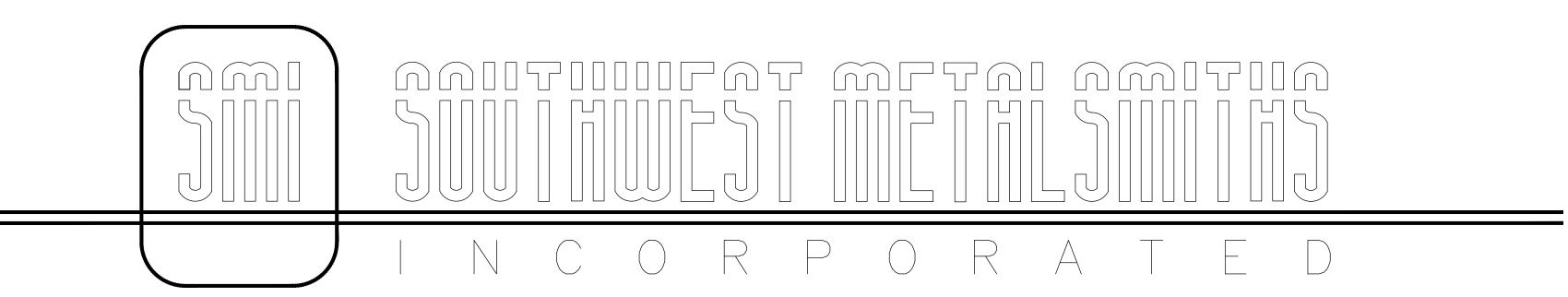
- The following Assumptions and Clarifications are provided to convey the basis of the estimate and general approach taken by Hensel Phelps in the preparation of the estimate. The detailed estimate backup provided for each area of the project shall serve as a reference for all scope of work (work activity, assumed quantity and level of quality) which has been taken into account in this estimate. Work not specifically indicated in this detailed backup should be considered Not Included (NIC).
- 2 The estimate is based on five, eight hour workdays per week. All work will be performed at night.
- 3 The estimate does not include an cost associated with contaminated or hazardous materials, soil or water.
- 4 The estimate is based on Shop Drawings prepared by Southwest Metalsmiths.
- 5 The estimate includes an Allowance of \$5,800 for the replacement of Glass Panels in the Jail.
- 6 The estimate includes the rental of Scaffolding from September through the completion of the project.
- 7 The estimate includes access to the site through the main entrance of the Facility. Owner agrees to provide areas within the facility where materials and tools can be stored.
- 8 It is assumed that all materials will be either staged on site or be stored in an off site location. Owner agrees to payment of materials stored off site in a bonded warehouse.
- 9 The 12'-9" glass requires prepayment prior to fabrication. The value of this material is \$61,901. The cost of the glass is included in the cost of work and the finance charge for 90 days is included as a separate line item.
- 10 The estimate includes replacement of all rubber grommets and washers for the glass reinstallation.
- 11 The estimate includes Re-finishing of damaged stainless steel handrails and providing a "once over" for the like new appearance on all stainless steel handrails, and physically re-tightening of each point supported attachment on all glass.
- 12 The estimate includes temporary partitions to protect the public while the glass handrail has been removed.
- 13 This estimate does not include any special disposal requirements. Subcontractor will dispose of waste per all applicable Federal, State, and Local laws.
- 14 Preconstruction costs are not included in this GMP.
- 15 Contractor Contingency shown in this GMP is for use by the Contractor. It is understood that the Owner is carrying its own contingency for its use.
- 16 Schedule includes 222 calendar days from NTP to Substantial Completion. In order to meet the NTP start date the following activities need to be achieved:

Executed Contract

Building Permit

Final Design Documents submitted for permit to City of Denver from GKK

Date Printed: 05-Aug-2001



DENVER JUSTICE CENTER DENVER, COLORADO

SHEET NO.	DESCRIPTION	DATE	REVISION
000	COVER SHEET — DRAWING INDEX	05/23/18	0
20	OVERALL PLAN VIEW — COURTHOUSE	05/23/18	0
201	ENLARGED PLAN VIEW STAIR 6	05/23/18	0
202	ENLARGED PLAN VIEW STAIR 6	05/23/18	0
203	ELEVATIONS — STAIR SIX	05/23/18	0
S203	ELEVATIONS — STAIR SIX — FAB	05/23/18	0
204	ELEVATIONS — STAIR SIX	05/23/18	0
S204	ELEVATIONS — STAIR SIX — FAB	05/23/18	0
205	ELEVATIONS — STAIR SIX	05/23/18	0
S205	ELEVATIONS — STAIR SIX — FAB	05/23/18	0
206	SECTIONS AND DETAILS - STAIR 6	05/23/18	0
207	DETAILS - STAIR 6	05/23/18	0
208	DETAILS - STAIR 6	05/23/18	0
209	DETAILS — STAIR 6	05/23/18	0
209A	DETAILS - STAIR 6	05/23/18	0
210	DETAILS — STAIR 6	05/23/18	0
211	GUARDRAIL AT STAIR LANDING	05/23/18	0
501	ENLARGED PLAN VIEW / SECTION WEST BRIDGE	05/23/18	0
502	ELEVATIONS — WEST BRIDGE	05/23/18	0
503	DETAILS — WEST BRIDGE	05/23/18	0

GENERAL NOTES:

ABBREVIATION	DESCRIPTION		
AFF	ABOVE FINISHED FLOOR		
ALUM	ALUMINUM		
APPV	APPROVER		
ASSY	ASSEMBLY		
CL	CENTER LINE		
CMU	CONCRETE/BRICK WALL		
CTRD	CENTERED		
ELEV	ELEVATION		
F.F.	FINISHED FLOOR		
F.S.	FAR SIDE		
F.W.E.C.	FLAT WELDED END CAP		
MAT'L	MATERIAL		
N.S.	NEAR SIDE		
N.T.S.	NOT TO SCALE		
O.C.	ON CENTER		
REV	REVISION		
R.F.I.	REQUEST FOR INFORMATION		
S.H.C.S.	SOCKET HEAD CAP SCREW		
S.S.	STAINLESS STEEL		
T.S.	TUBE STEEL		
V.I.F.	VERIFY IN FIELD		
200	DELTA		



NOI	E

MATERIAL:

ALL GLASS TO BE 11/16" TEMPERED CLEAR LAMINATE, WITH SENTRYGLAS INTERLAYER.

FINISH:

MAKE UP:

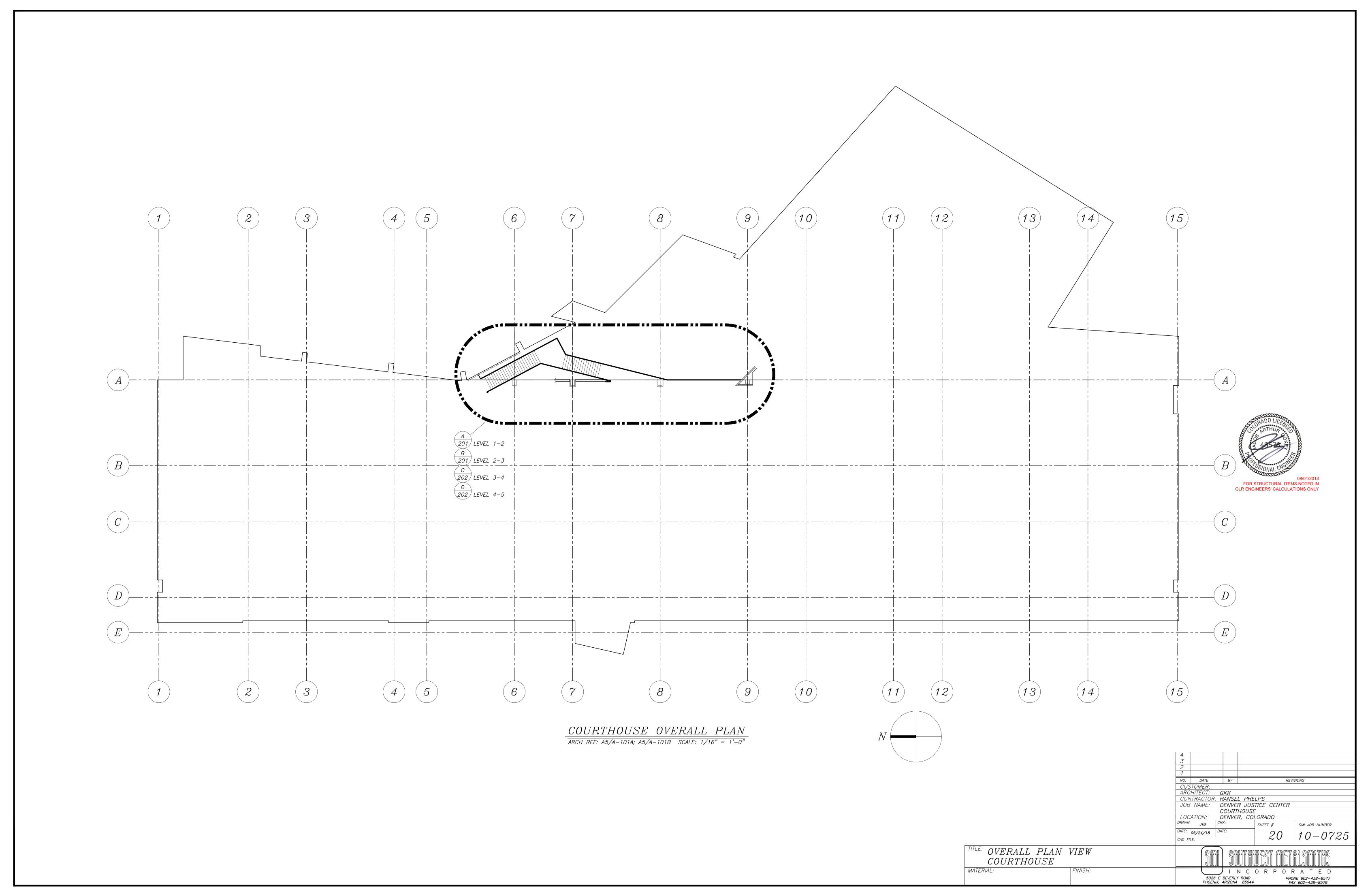
3/8" CLEAR TEMPERED .070 SENTRYGLAS INTERLAYER

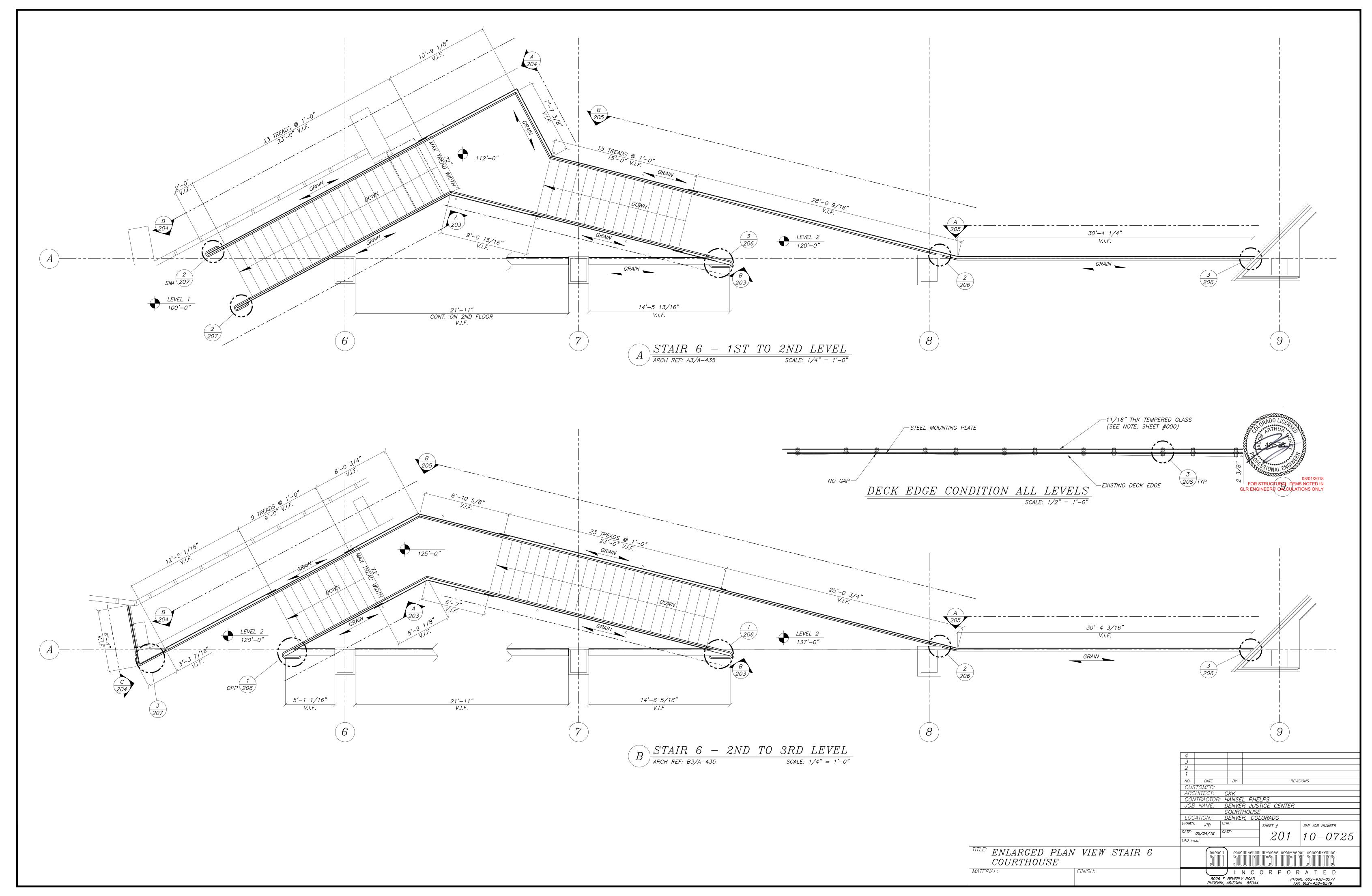
1/4" CLEAR TEMPERED

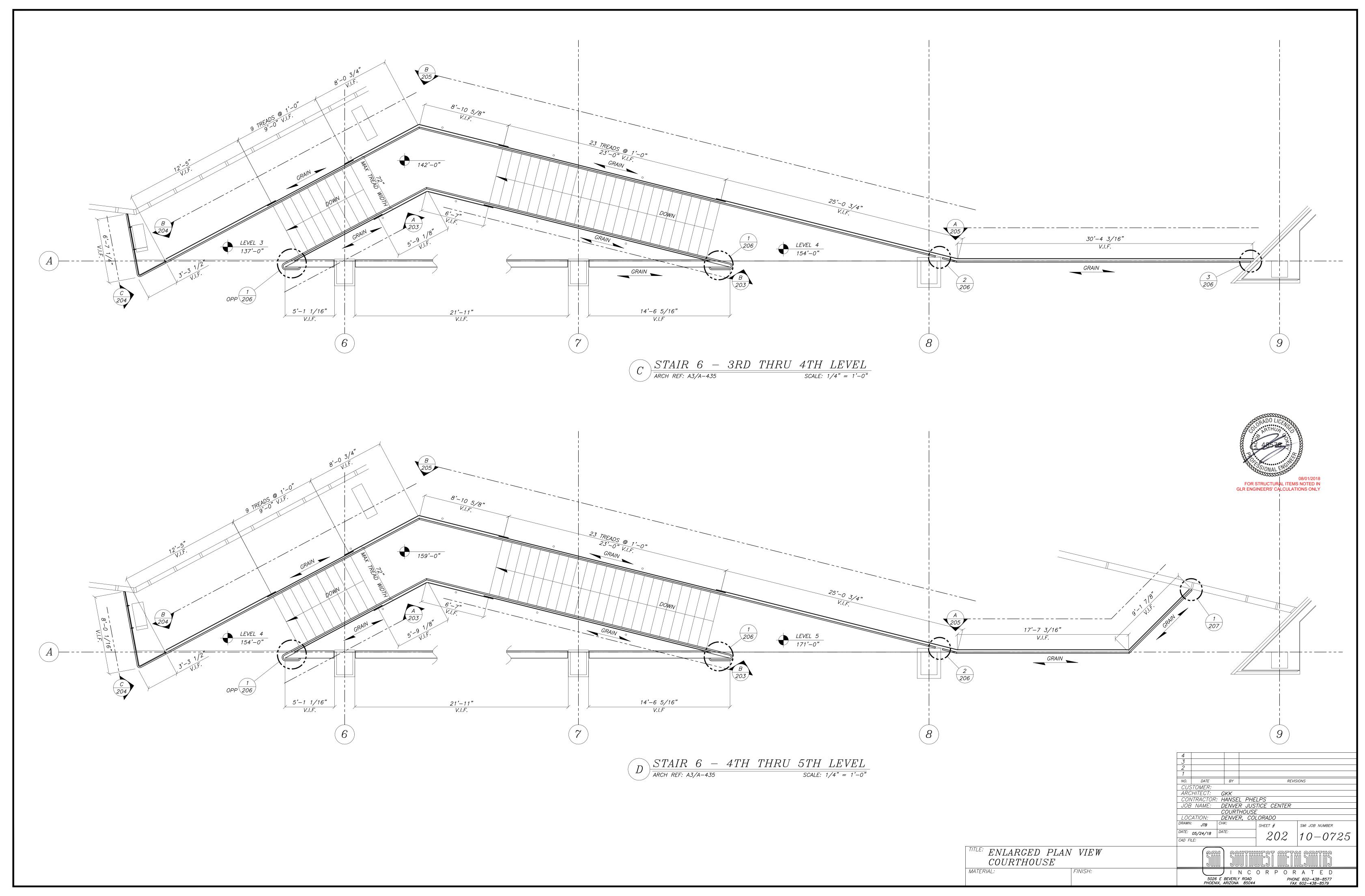
COVER SHEET

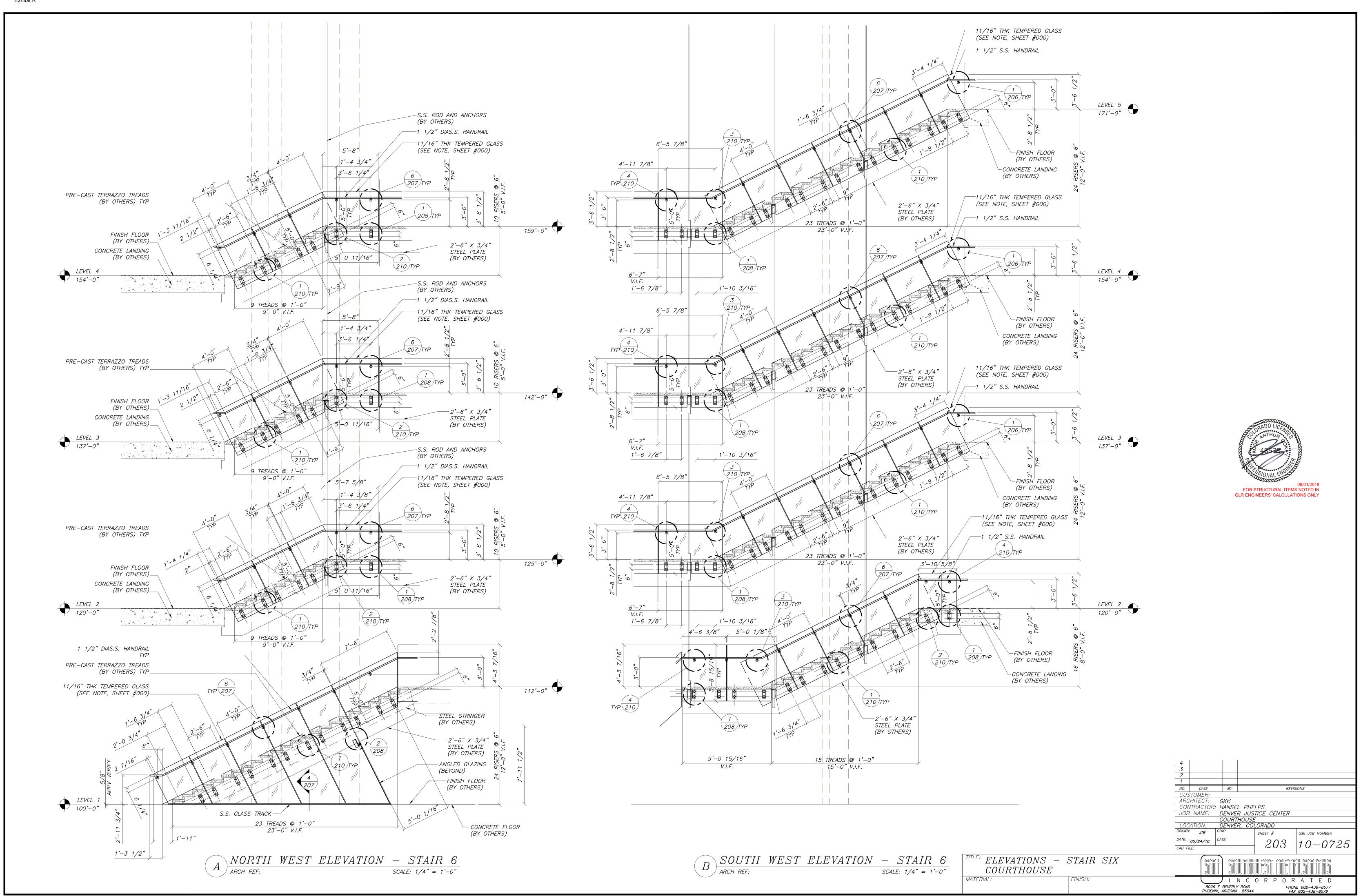
8							
7							
6							
5							
4							
3			-		_		
2			-		_		
1							
NO.	DATE	BY	REVISIONS				
CUSTOMER:							
ARCHITECT: GKK							
CONTRACTOR: HANSEL PHELPS							
JOB NAME: DENVER JUSTICE CENTER							
COURTHOUSE							
	CATION:		ER, CO	OLORADO			
DRAWN	: JTB	CHK:		SHEET #	SMI JOB NUMBER		
DATE:	05/24/18	DATE:		000	10-0725		
CAD FILE: OOO.DWG					10-0725		

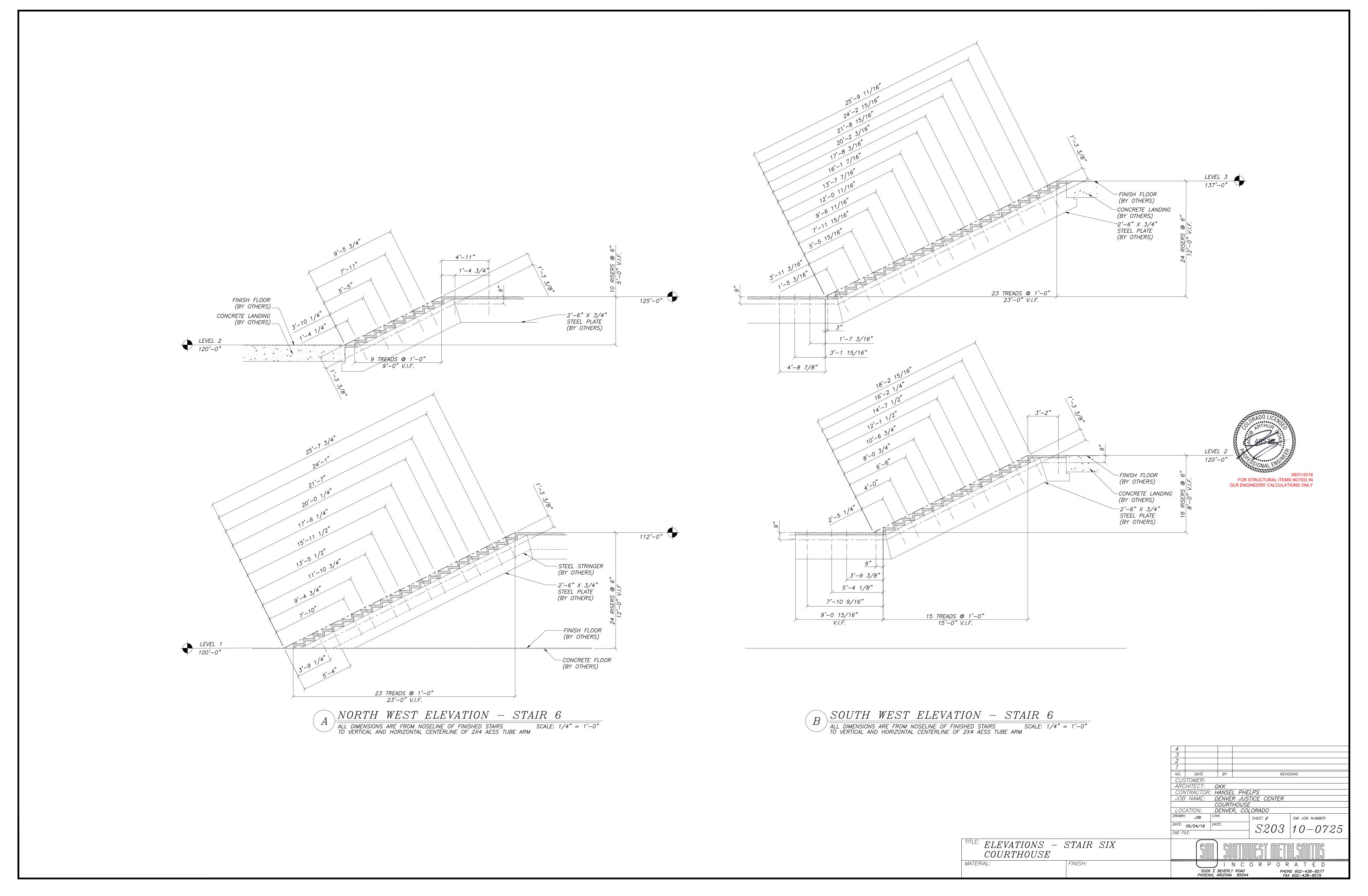
J I N C O R P O R A T E D 5026 E BEVERLY ROAD PHOENIX, ARIZONA 85044 PHONE 602-438-8577 FAX 602-438-8579

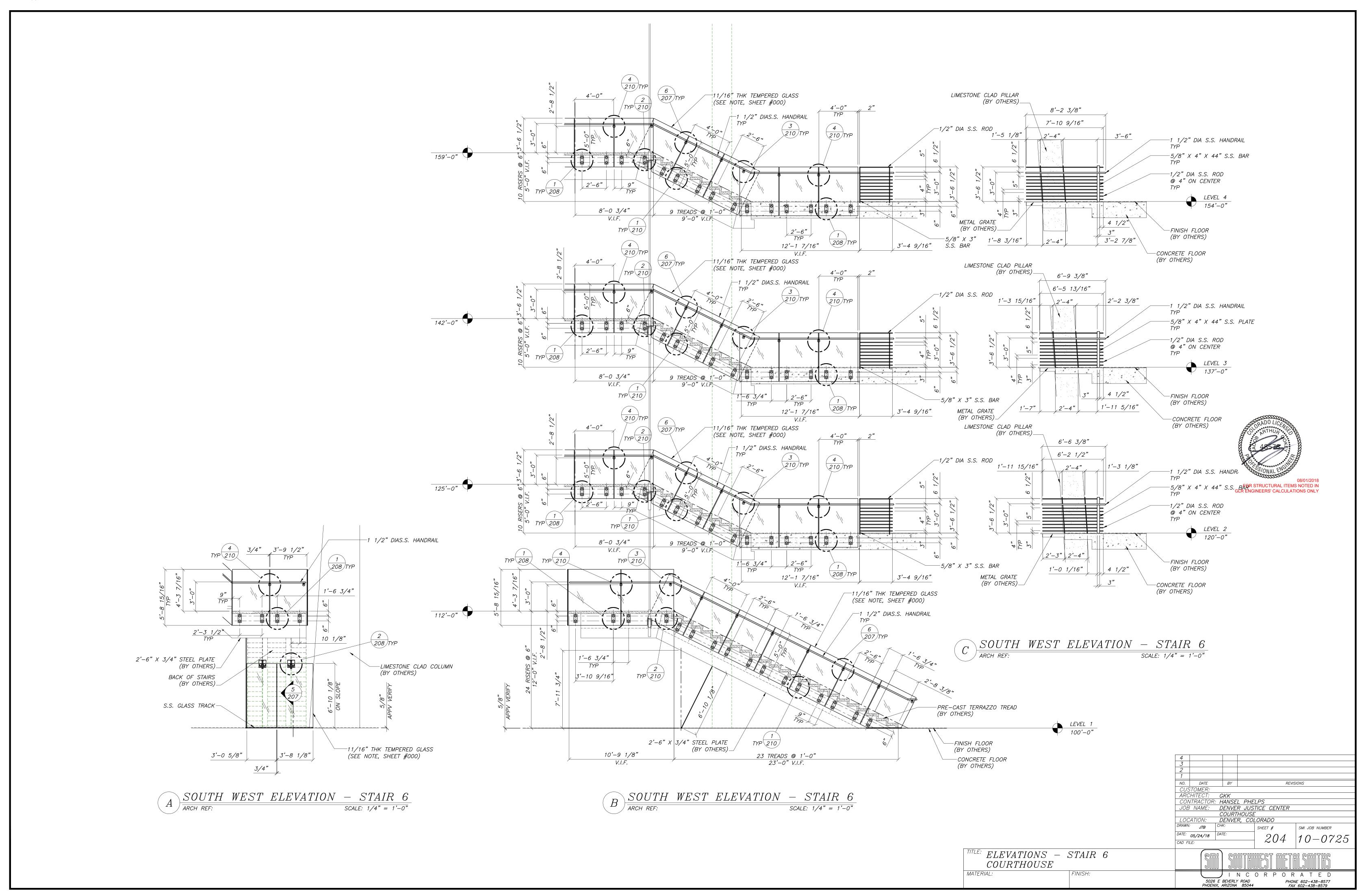


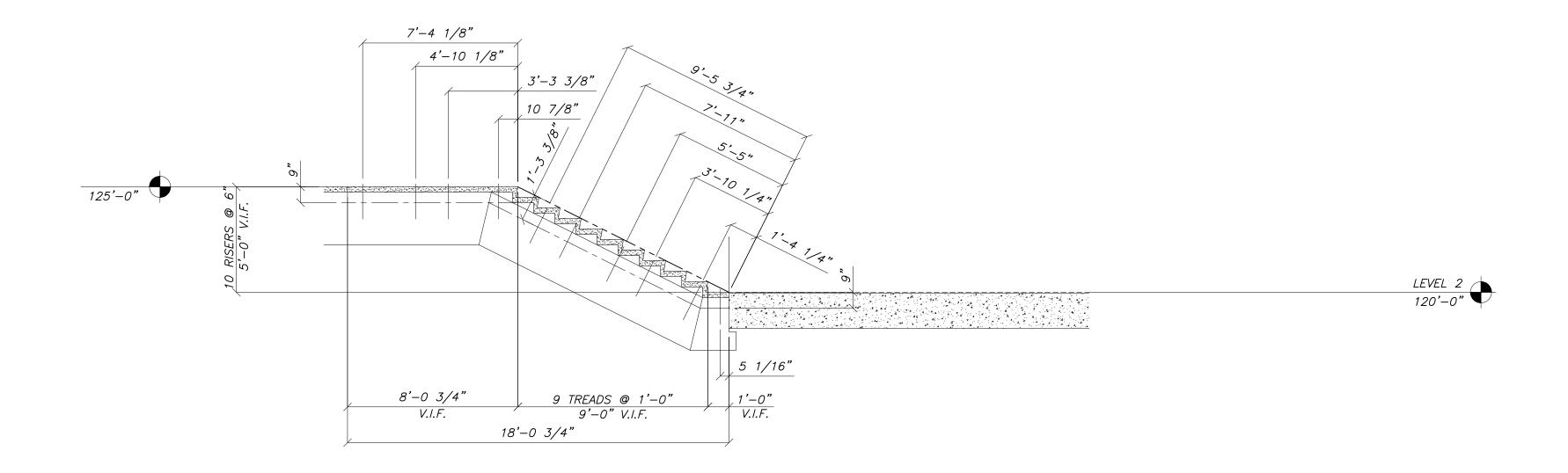


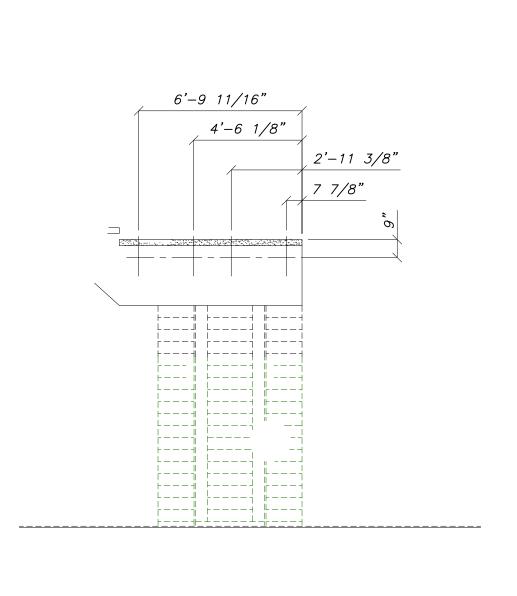


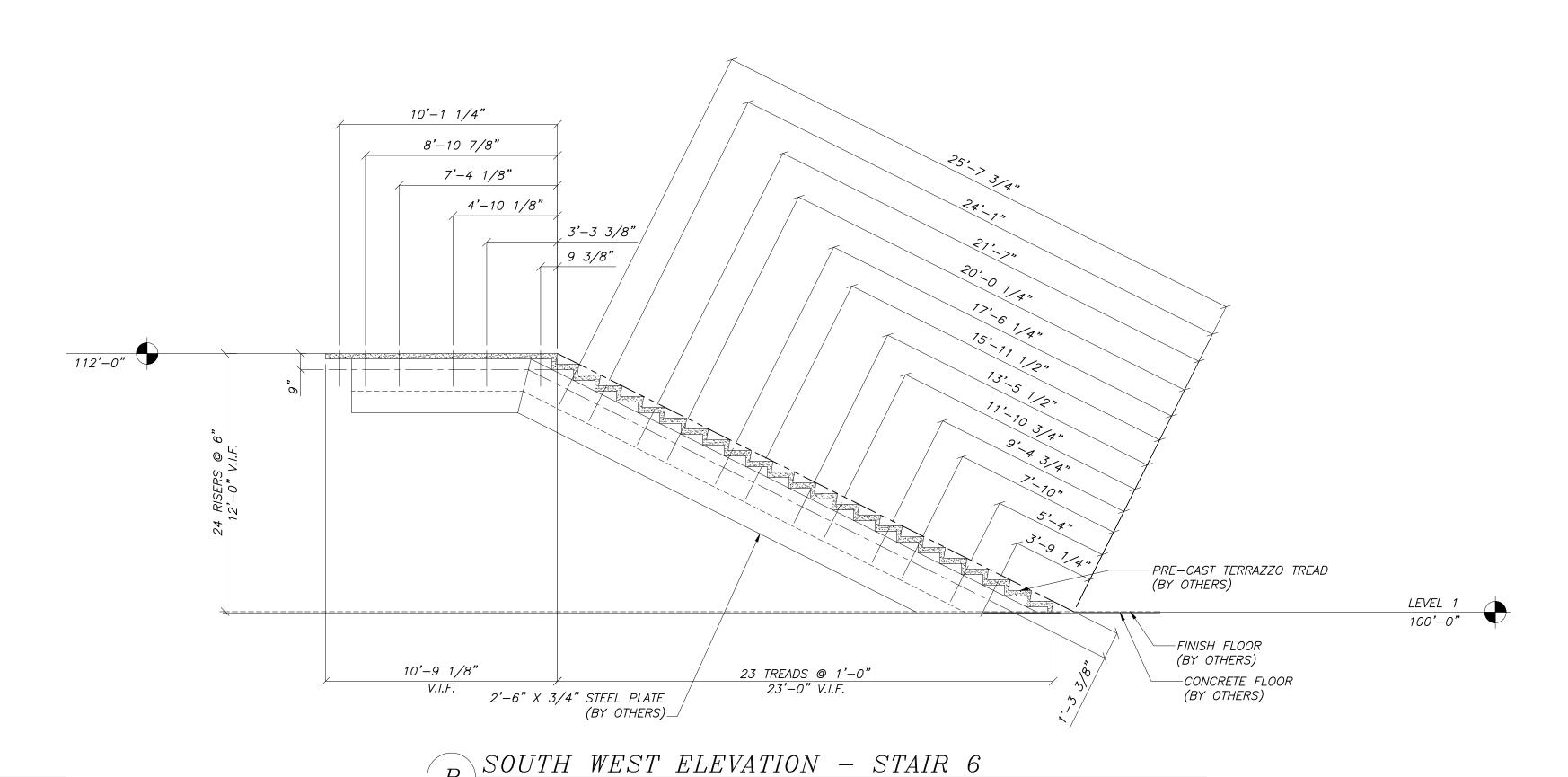












 $B = \frac{SOUIH}{ALL DIMENSIONS ARE FROM NOSELINE OF FINISHED STAIRS TO VERTICAL AND HORIZONTAL CENTERLINE OF AESS TUBE ARM SCALE: <math>1/4" = 1'-0"$

4
3
2
1
NO. DATE BY REVISIONS

CUSTOMER:
ARCHITECT: GKK

CONTRACTOR: HANSEL PHELPS

JOB NAME: DENVER JUSTICE CENTER

COURTHOUSE

LOCATION: DENVER, COLORADO

DRAWN: JTB CHK:
DATE: 05/24/18 DATE:

CAD FILE:

GRAD GABIL GABIL

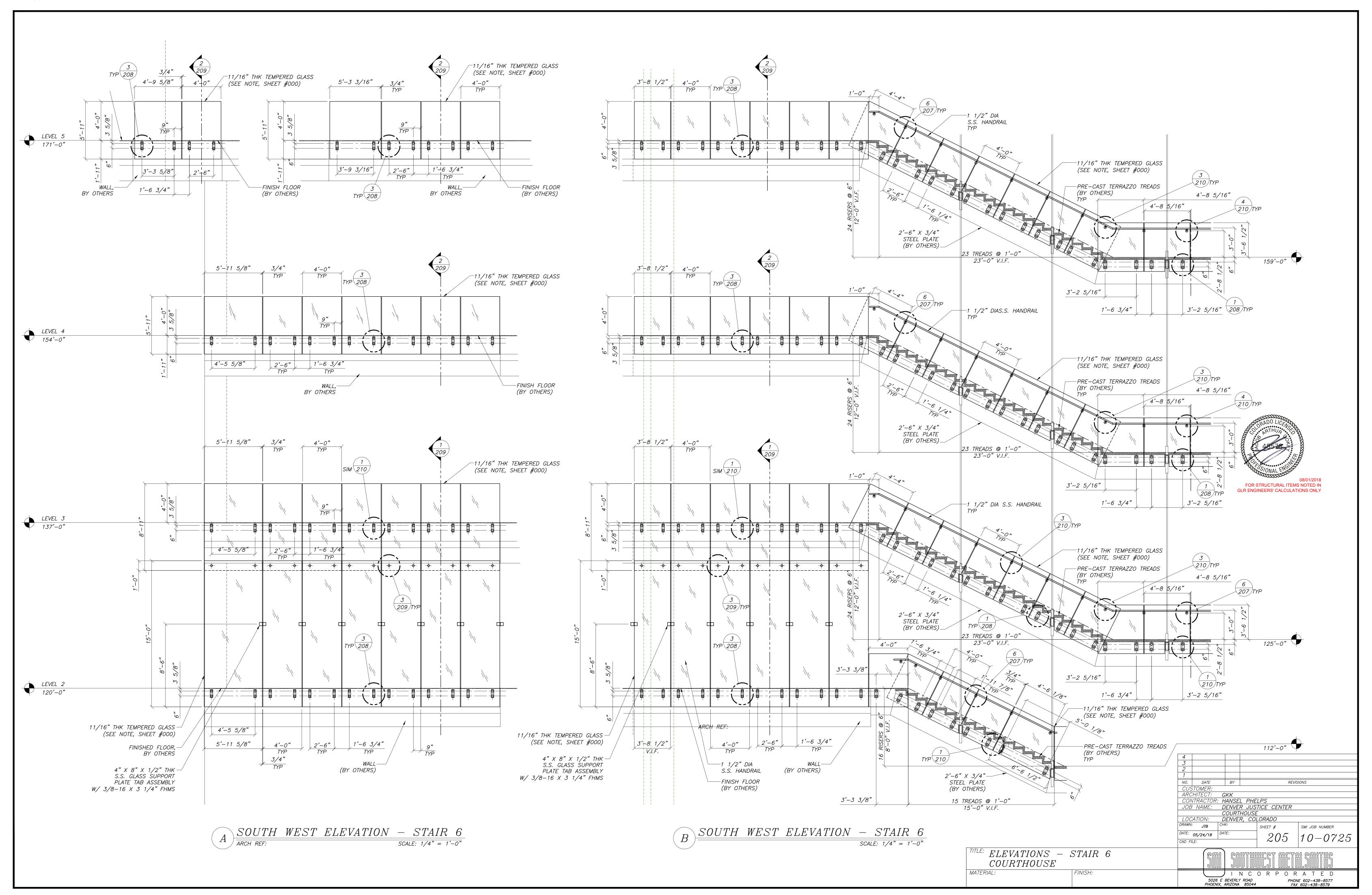
FOR STRUCTURAL ITEMS NOTED IN

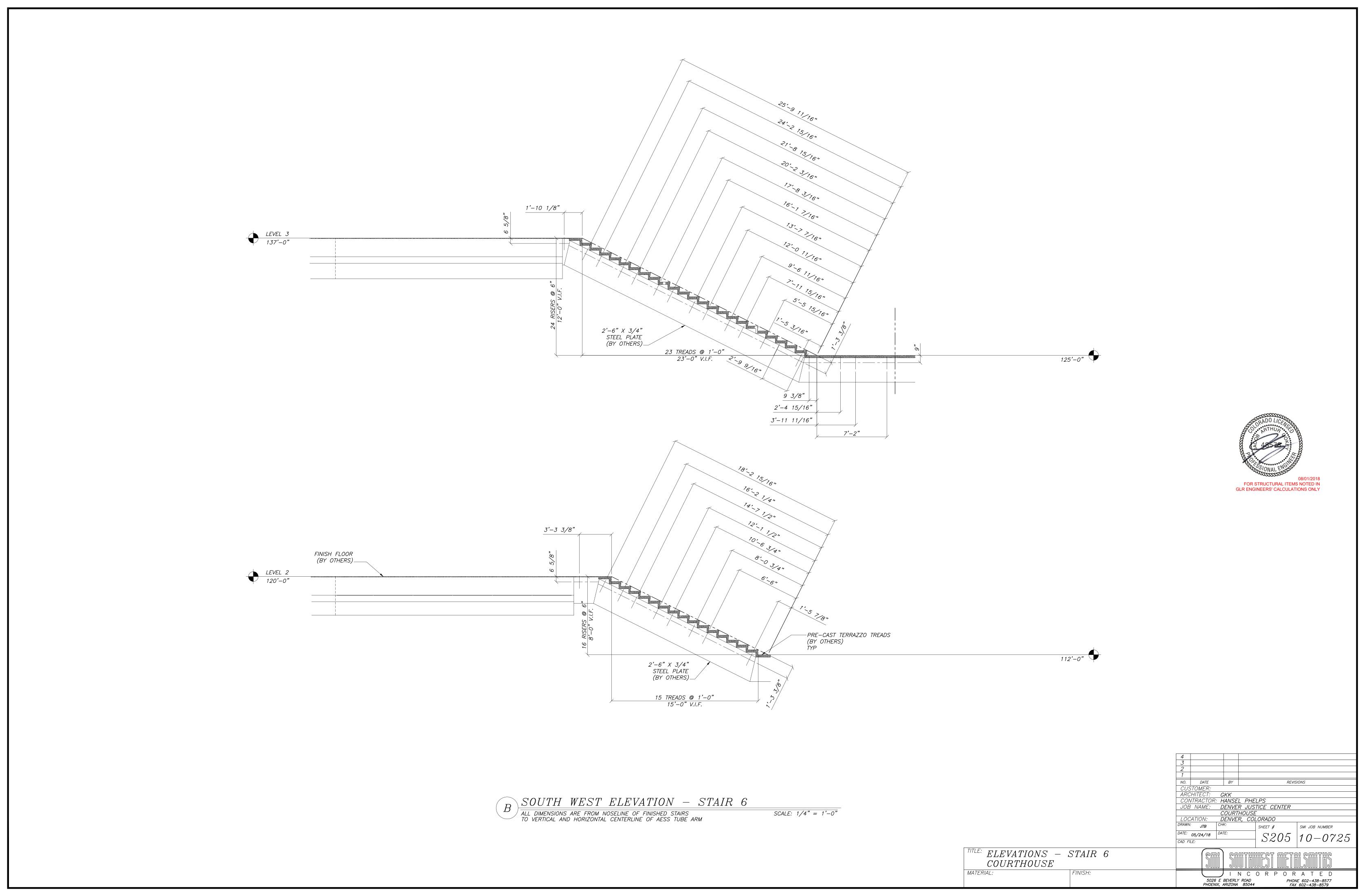
GLR ENGINEERS' CALCULATIONS ONLY

TITLE: ELEVATIONS — STAIR 6
COURTHOUSE

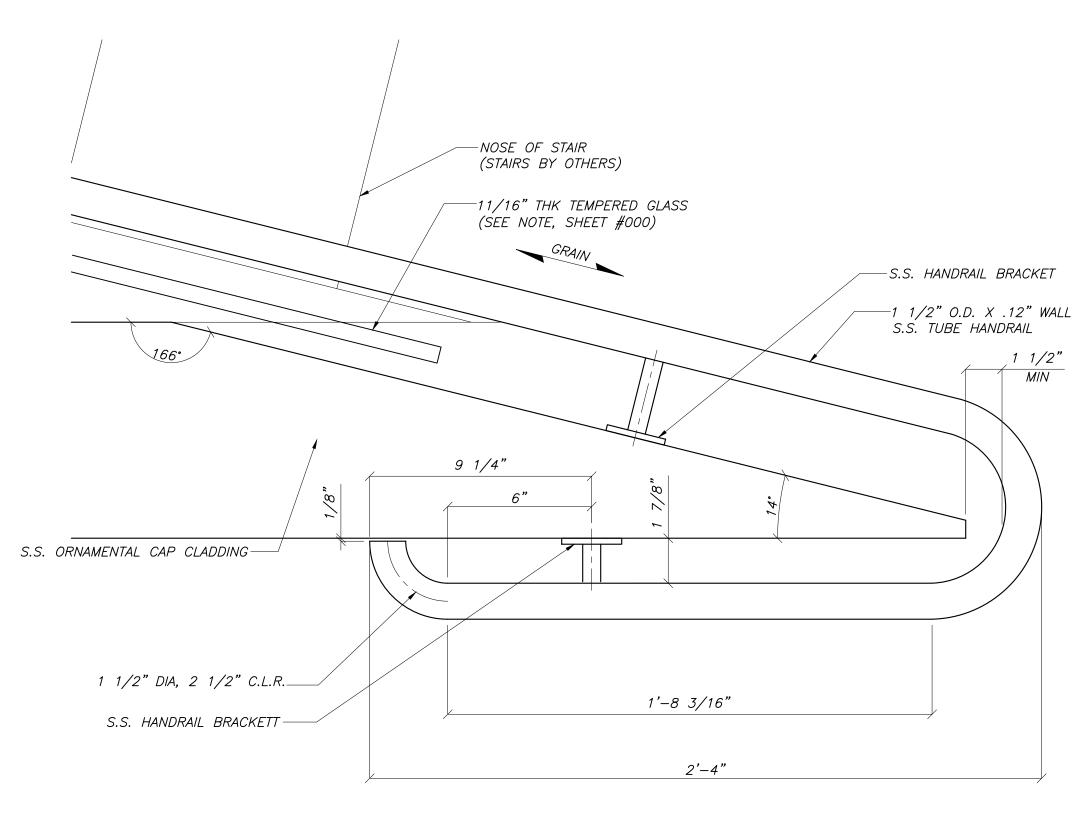
MATERIAL: FINISH:

| ABIITIIIIIFAT AFTAI AMITIIA | SOURCE | ABITIIII | ABIITIIIA | AB

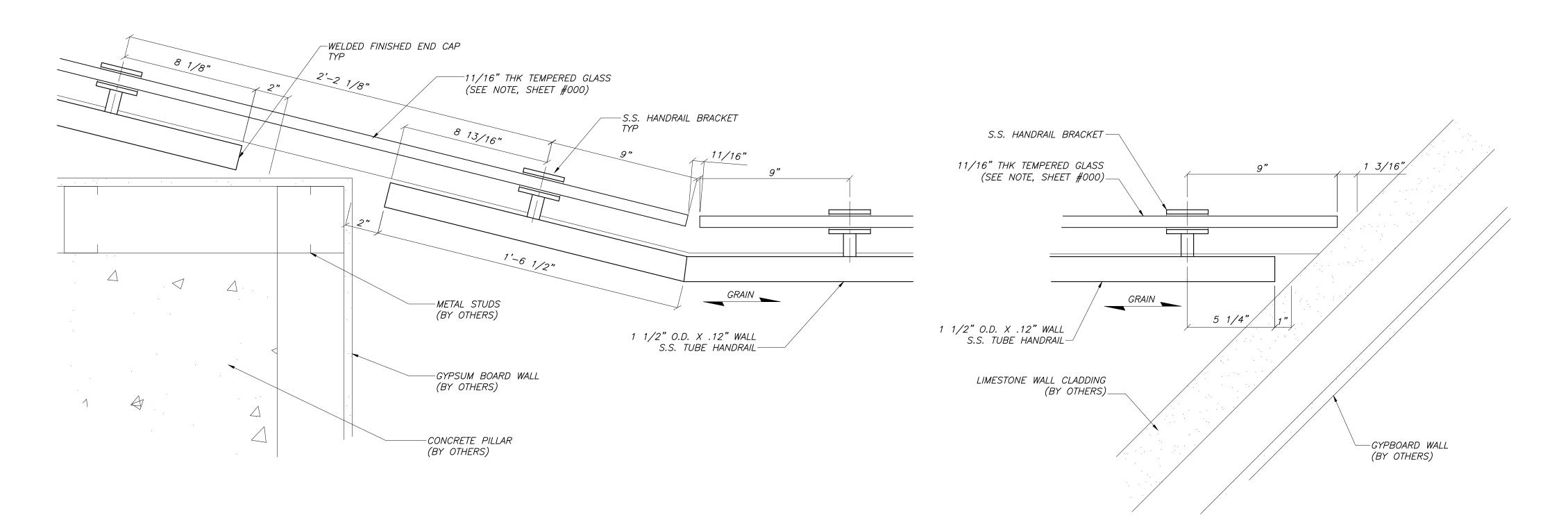








1 HANDRAIL AND WALL @ TOP OF STAIRS ARCH REF: NONE SCALE: 3'' = 1'-0''



 $2 \frac{HANDRAIL \ AND \ GLASS \ WALL @ PILLAR \ (A-8)}{ARCH \ REF: \ A5/A-513}$ SCALE: 3" = 1'-0"

 $3 \frac{HANDRAIL \ AND \ GLASS \ WALL \ @ \ PILLAR \ (A-9)}{ARCH \ REF: \ A3/A-512}$ SCALE: 3" = 1'-0"

NO. DATE BY REVISION

CUSTOMER:

ARCHITECT: GKK

CONTRACTOR: HANSEL PHELPS

JOB NAME: DENVER JUSTICE CENTER

COURTHOUSE

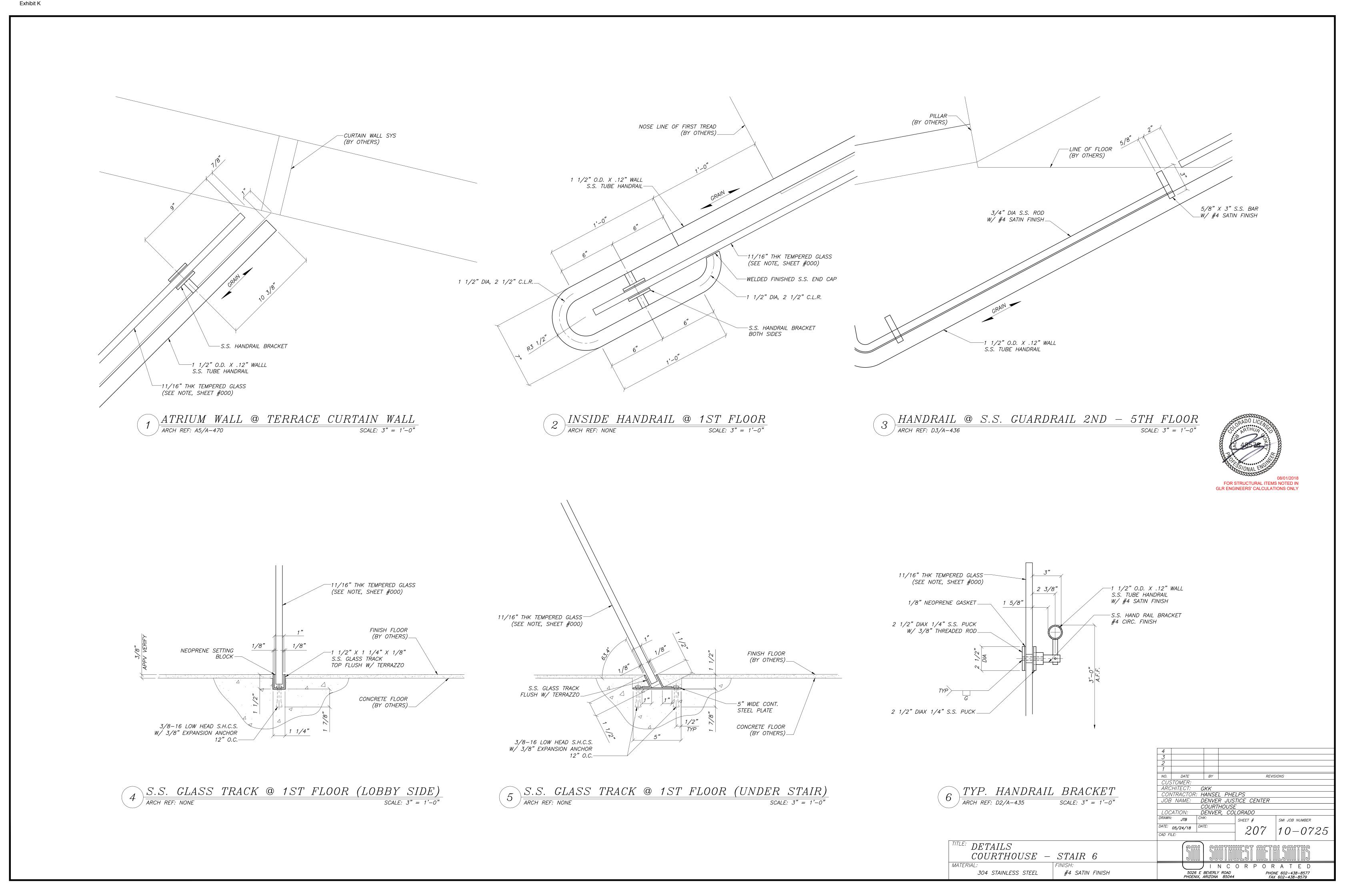
LOCATION: DENVER, COLORADO

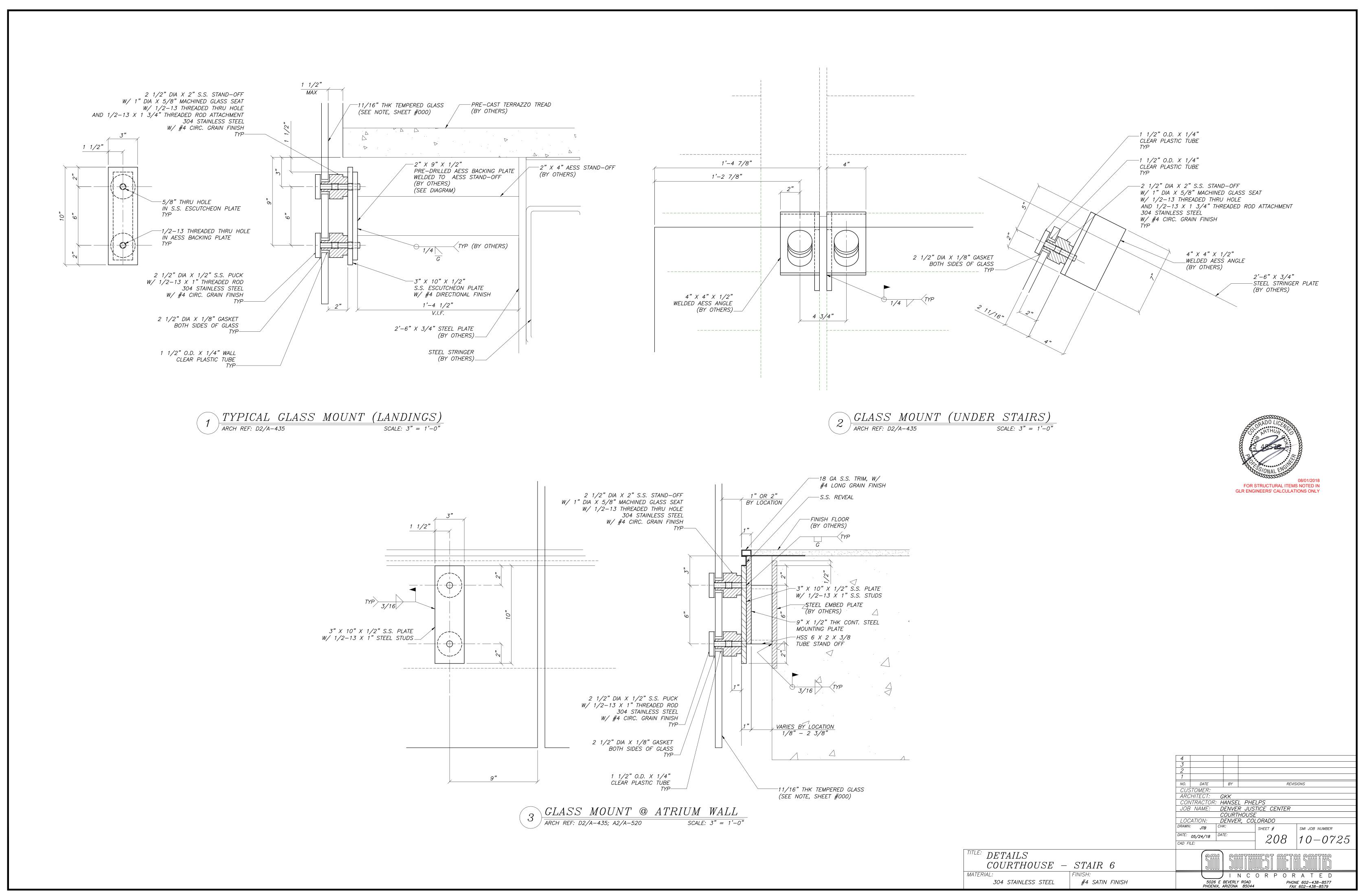
DRAWN: JTB CHK: SHEET # SMI JOB NUMBER DATE: 05/24/18 DATE: 206 | 10-0725

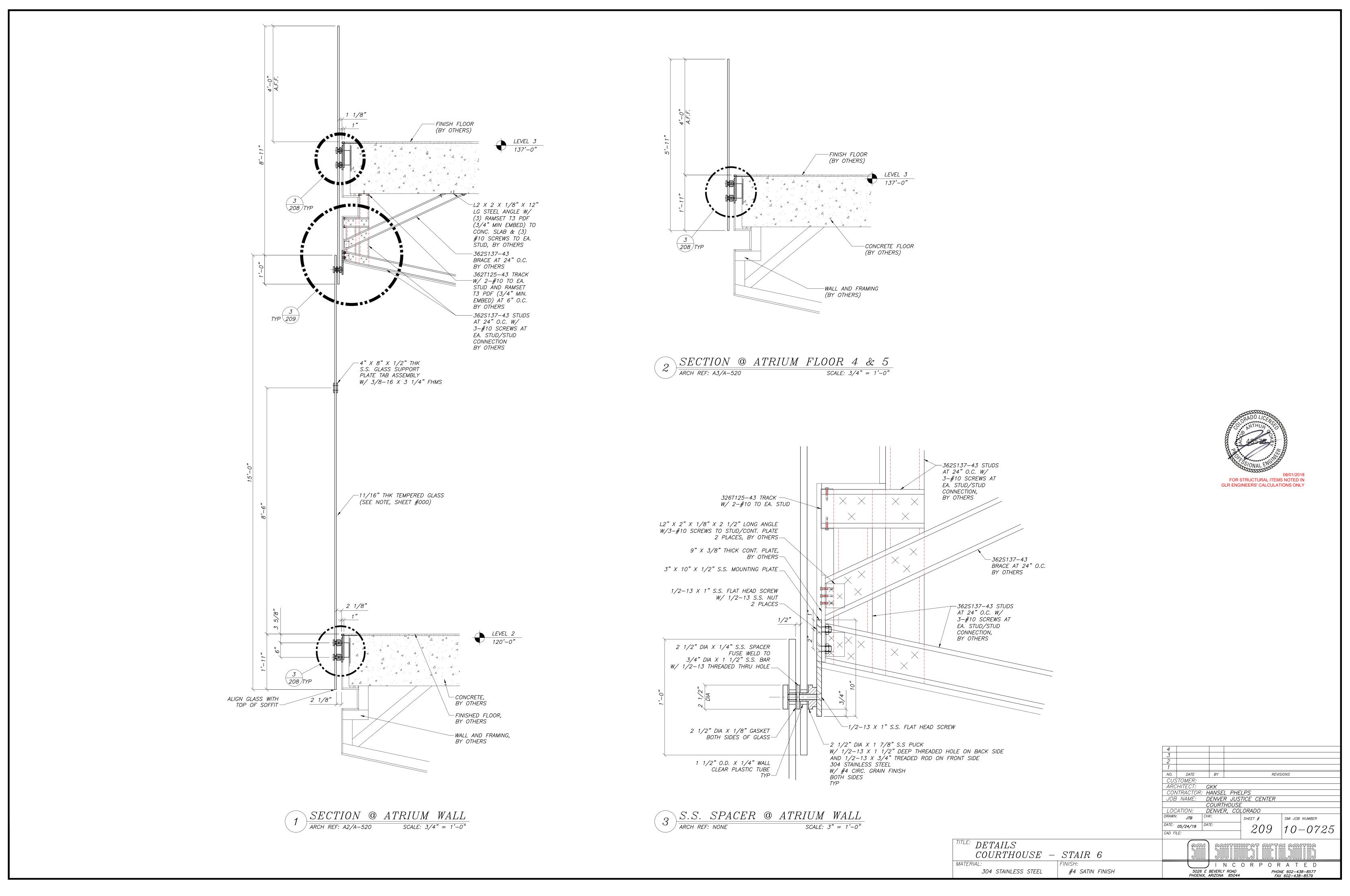
08/01/2018 FOR STRUCTURAL ITEMS NOTED IN GLR ENGINEERS' CALCULATIONS ONLY

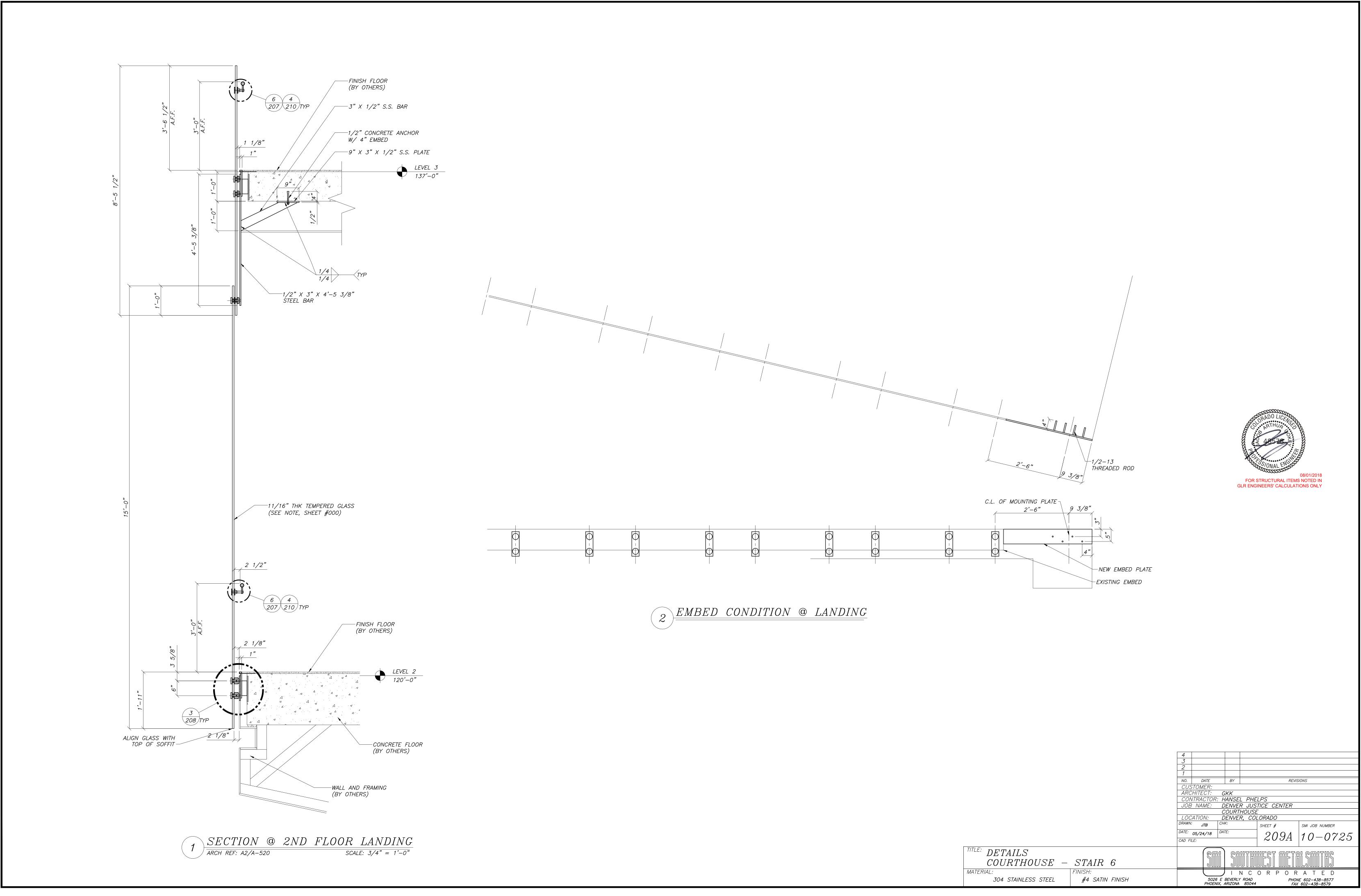
TITLE: SECTIONS AND DETAILS
COURTHOUSE - STAIR 6 #4 SATIN FINISH 304 STAINLESS STEEL

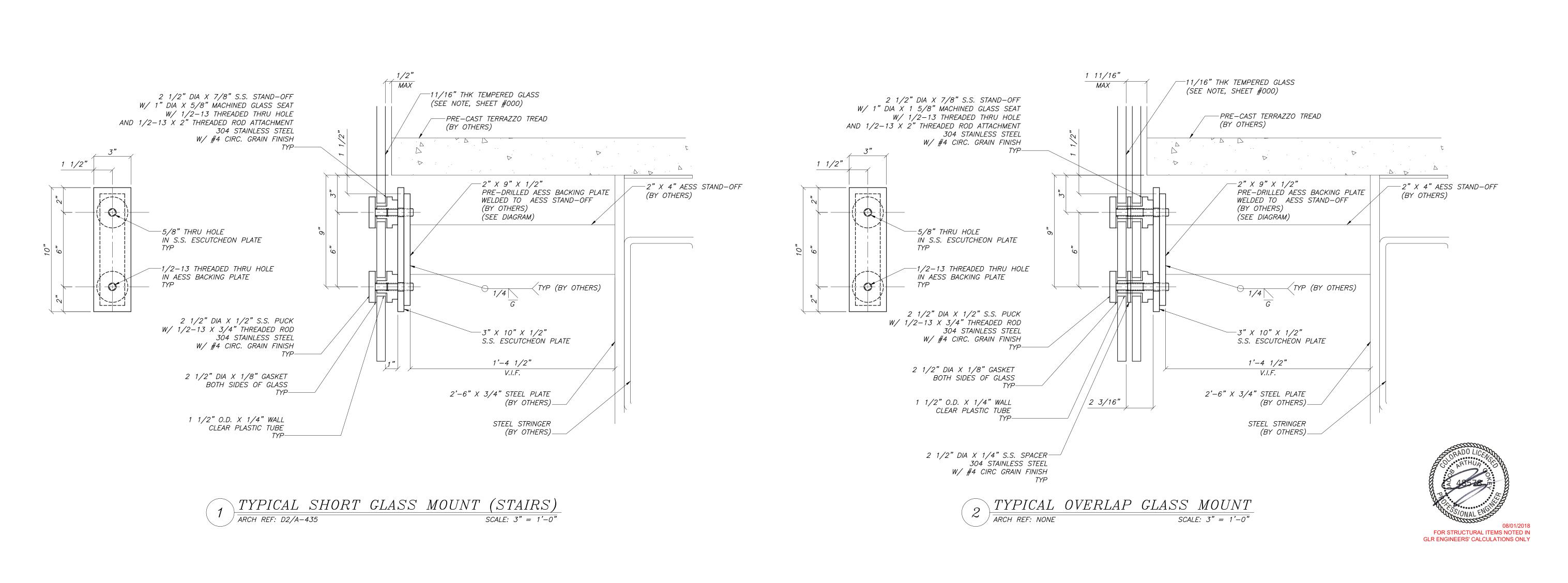
INCORPORATED 5026 E BEVERLY ROAD PHOENIX, ARIZONA 85044 PHONE 602-438-8577 FAX 602-438-8579







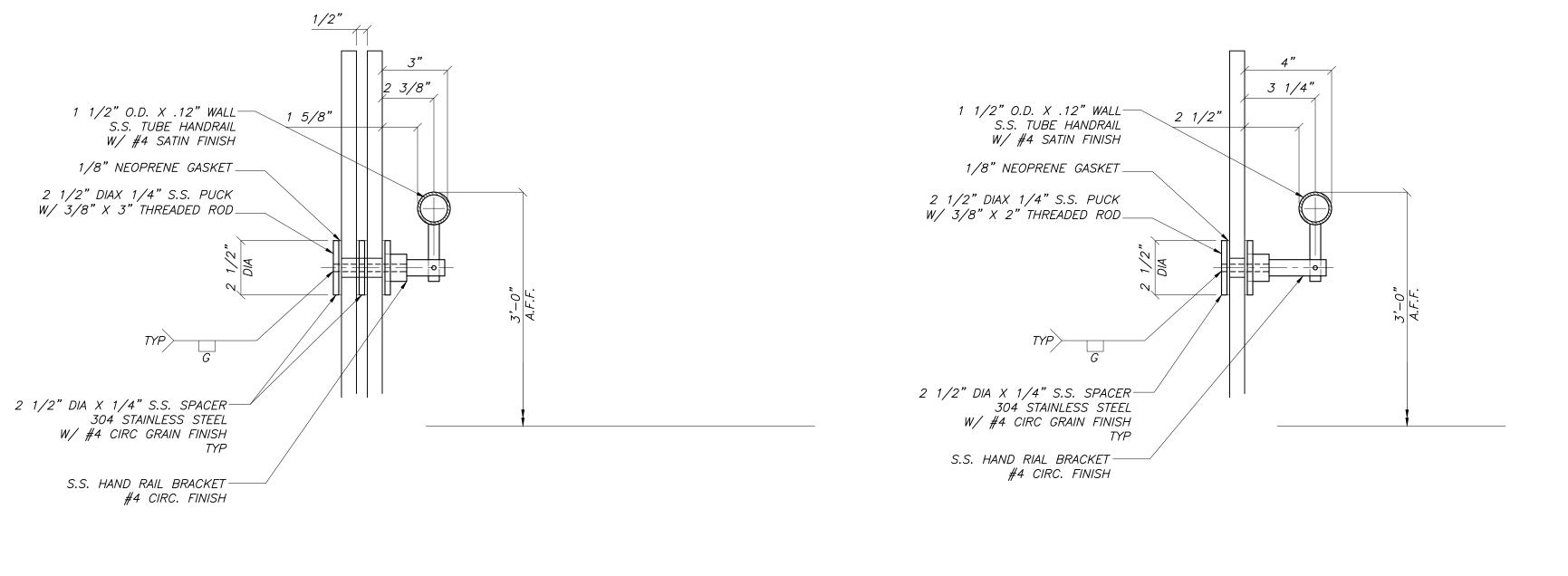




EXTENDED HANDRAIL BRACKET

ARCH REF: D2/A-435

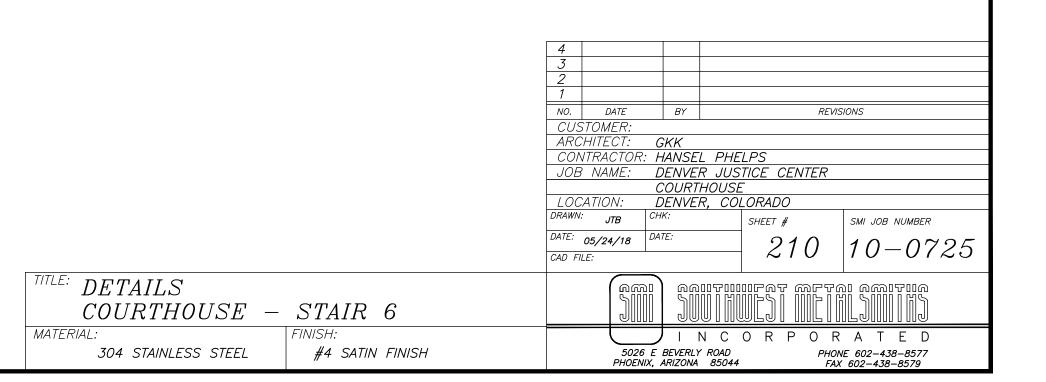
SCALE: 3" = 1'-0"

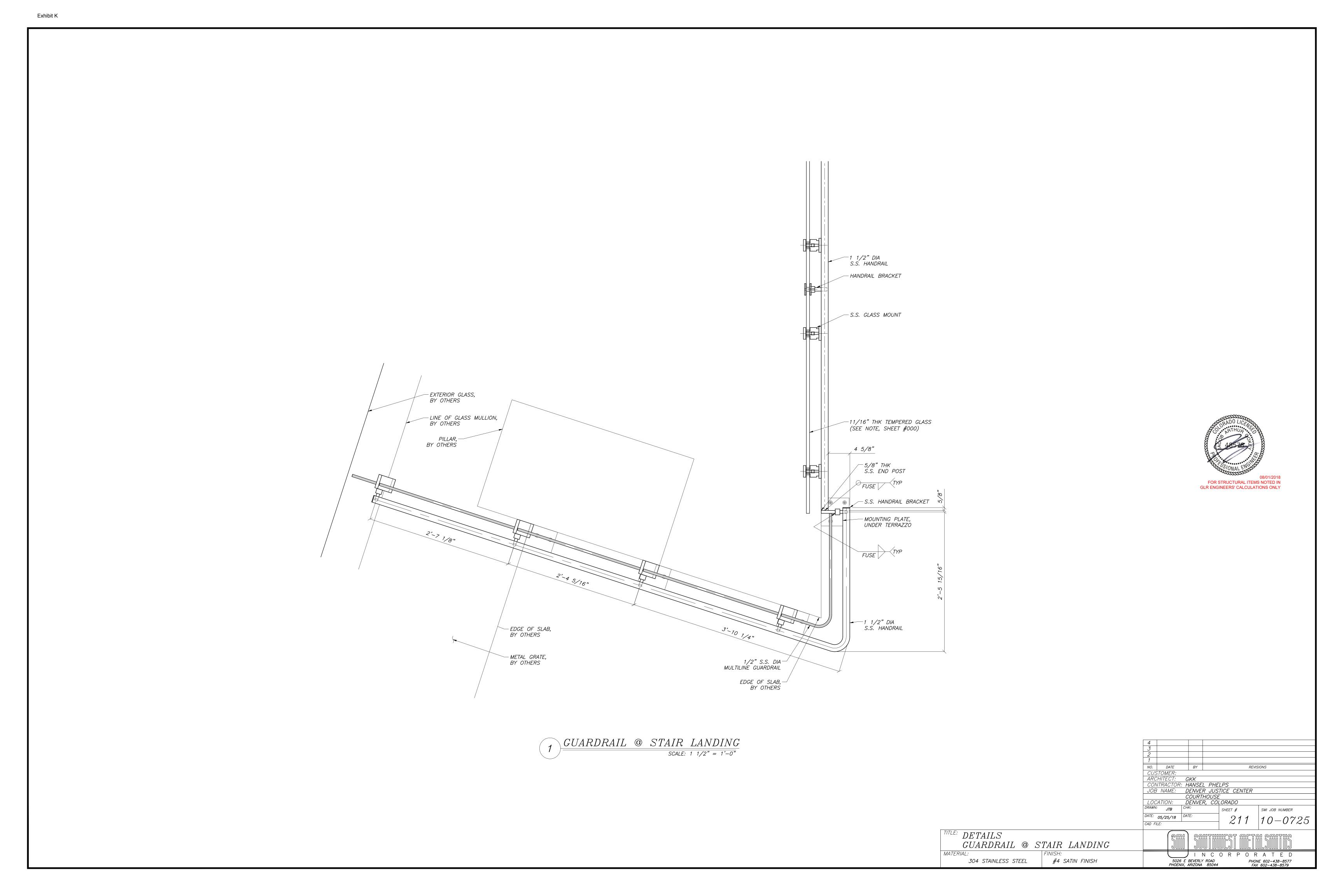


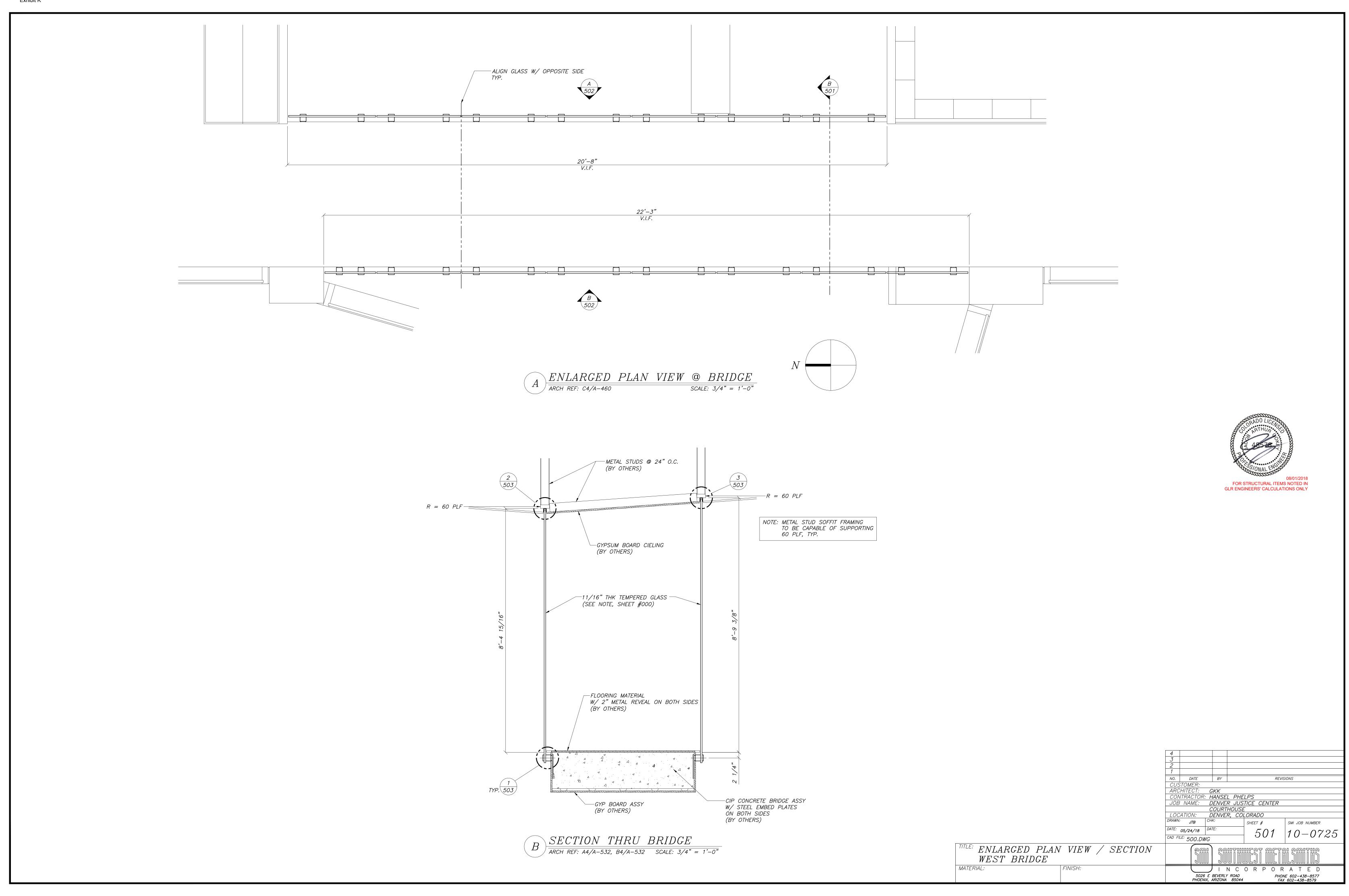
OVERLAP HANDRAIL BRACKET

ARCH REF: D2/A-435

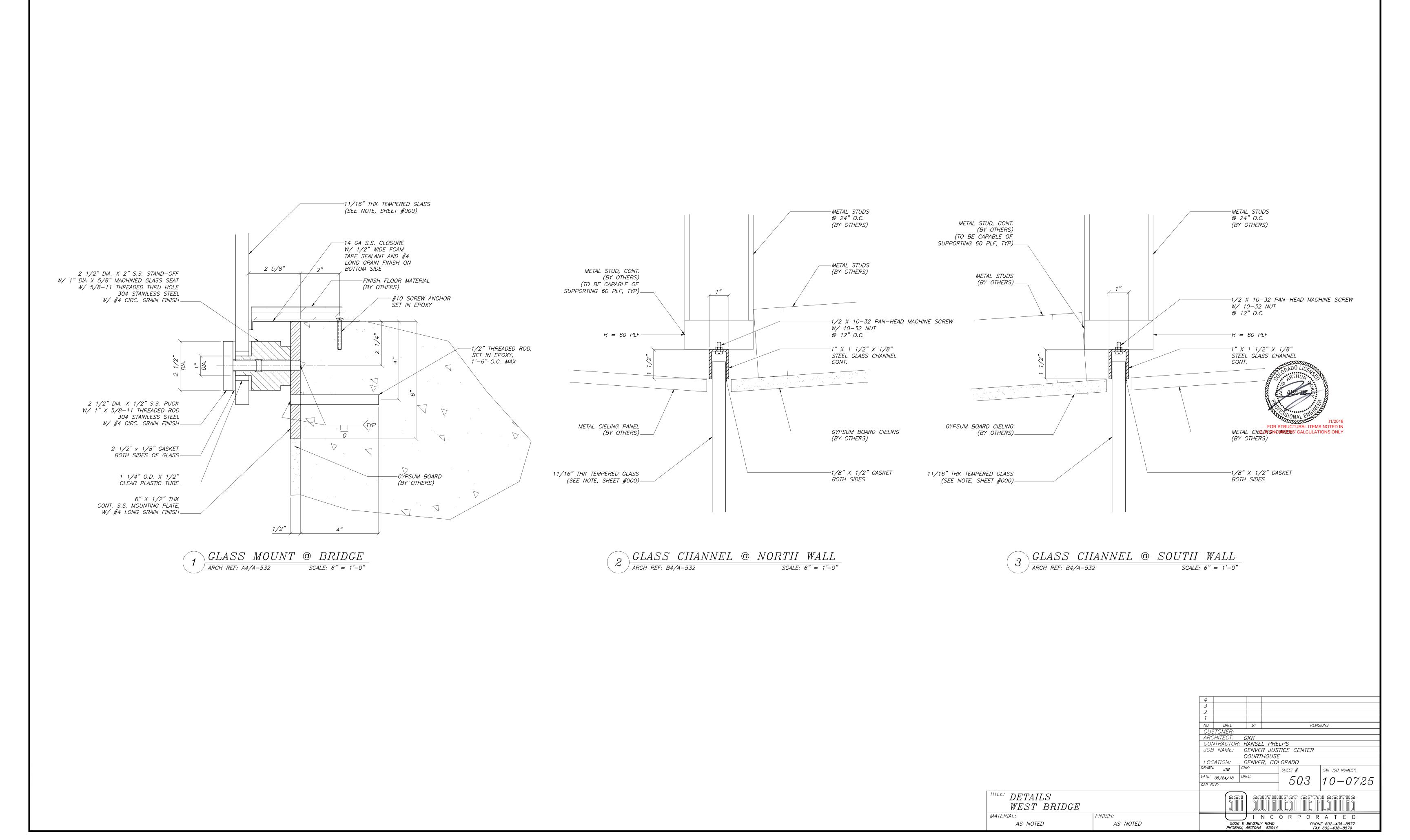
SCALE: 3" = 1'-0"













208-344-2470

Project				Job Ref.	
	SMI	1812			
Section		Sheet no./rev.			
	Glass Ra	iling Design			1
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

Structural Calculations

For

Denver Justice Center

Denver, Colorado



Client:

Southwest Metalsmiths, Inc.

GLR Engineers Job No: SMI1812



208-344-2470

Project				Job Ref.	
	Denver Ju	SMI	1812		
Section		Sheet no./rev.			
	Glass Railing Design				
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

RAILING SYSTEMS

Calculations and shop drawings have been engineered for structural capacities of the railing system only. Appropriate layout and design of railing systems is the responsibility of the Architect of Record. GLR Engineers, PLLC is not responsible for structural elements provided by others, we assume the supporting structure has sufficient strength to support the loads imposed by our guardrail systems. All reactions to the structure shall be checked by the engineer of record.

Loads: w = 50 lb/ft p = 200 lbs on railings

Building Codes

2015 International Building Code (IBC)
SEI/ASCE 7-10 Minimum Design Loads for Buildings & Other Structures

Structural Steel

- Steel plates, shapes and bars shall meet the requirements of ASTM A-36 (Fy = 36 ksi, Fu = 58 ksi).
- 2. Steel rectangular tubes shall be ASTM A500 Gr B (Fy = 46 ksi, Fu = 58 ksi)
- 3. Steel round tubes shall be ASTM A500 Gr B (Fy = 42 ksi, Fu = 58ksi)
- 4. Steel pipe shall be ASTM A53 Gr B (Fy = 35 ksi, Fu = 60 ksi)
- 5. Stainless steel shall be SS304 or SS316, (Fy = 30 ksi, Fu = 75 ksi).
- 6. Steel members are designed per the "Manual of Steel Construction, Allowable Strength Design" and AISC Design Guide 27, "Structural Stainless Steel".

Concrete

1. All concrete strength is assumed to be f'c = 4000 psi, normal weight.

Glass

- 1. All glass shall be fully tempered.
- 2. Glass shall be composed of 2 lites, one ½" and one 3/8" thick FT glass with a 0.07in interlayer.
- 3. Interlayer shall be a SentryGlas PVB with a shear modulus complex G = 60 N/mm² calculated at 30° C for a load duration of 1 hour.

Fasteners, Welds & Anchors:

- 1. Fasteners exposed to weather shall be stainless steel, alloy groups 1, 2, OR 3 (300 Series Only) as shown in calculations (Fy = 65 ksi, Fu = 100 ksi minimum).
- 2. Fasteners not exposed to weather shall be carbon steel, SAE Grade 2 (Fu = 75 ksi minimum) or SAE Grade 5 (Fu = 120ksi minimum) as shown in the calculations.
- Concrete wedge/expansion anchors shall be "Hilti Kwik Bolt TZ" ICC ESR 1917, having diameter and embedment as called for in the calculations. Reference the manufacturer's instructions for installation techniques and additional requirements.
- 4. Filler metal electrodes for steel welding shall be E70XX. Welds shall be in accordance with AWS D1.1 "Structural Welding Code"

Disclaimers:

1. This calculation package is for the final design and installed structural performance of the railing system. GLR Engineers, PLLC is not responsible for manufacturing, the installation process, weather seal design and performance.



208-344-2470

Project				Job Ref.	
	SMI	1812			
Section		Sheet no./rev.			
	Glass Railing Design				
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

- 2. The following calculation package represents GLR Engineers' interpretation of the design intent of the shop drawings and specifications. GLR Engineers is not responsible for verification of dimensions, material take-offs, installation and coordination with other building trades. If as built conditions differ from the conditions shown in this calculation package, Southwest Metalsmiths, Inc. must bring these differences to the attention of GLR Engineers so that the as built conditions can be structurally verified.
- 3. The structural engineer of record (EOR) shall verify that all surrounding structures to which framing is to be anchored are structurally sound and capable of supporting the weights and reactions of the analyzed system(s) under maximum design loads.

Stainless Steel shall be:

SS304 or SS316

F_{yss}=30 ksi

 $Ω_{ss}$ = 1.67

Allowable bending stress $F_{bss} = F_{yss}/\Omega_{ss} = 18.0$ ksi

Steel shall be:

ASTM A36

Fya36=36 ksi

 $\Omega_{a36} = 1.67$

Allowable bending stress $F_{ba36} = F_{ya36}/\Omega_{a36} = 21.6$ ksi

A500 GR B Fya500=46 ksi

 $F_{ua500} = 58 \text{ ksi}$

 $\Omega_{a500} = 1.67$

Allowable bending stress $F_{ba500} = F_{ya500}/\Omega_{a500} = 27.5$ ksi



208-344-2470

Boise, ID 83702

Project				Job Ref.	
	SMI	1812			
Section		Sheet no./rev.			
Glass Railing Design					4
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

<u>ASTM E1300 - 11/16 INCH LAMINATED GLASS EQUIVALENT THICKNESS</u>

Thickness of glass 0.375in glass 0.07in interlayer 0.25in glass

E = 10000 ksi Glass modulus of elasticity PVB Interlayer thickness hv = 0.07 in

G = 60 N/mm² = **8702** psi Sentry Glass Interior Interlayer complex shear modulus

Smallest in-plane dimension of bending of the laminate plate a = 3.35ftGlass ply 1 minimum thickness h1 = 0.355 inGlass ply 2 minimum thickness h2 = 0.219 in

hs = 0.5*(h1+h2)+hv = 0.36 in hs1 = hs*h1/[h1+h2] = 0.22 in hs2 = hs*h2/[h1+h2] = 0.14 in

 $Is = h1*hs2^2+h2*hs1^2 = 0.017 in^3$

Shear transfer coefficient $\Gamma = 1/[1+9.6^*E^*ls^*hv/(G^*hs^2*a^2)] = 0.939$

hefw = $[h1^3 + h2^3 + 12*\Gamma*ls]^{1/3} = 0.630$ in Effective thickness for deflection

Effective thickness for stress h1efs = $sqrt[hefw^3/(h1+2*\Gamma*hs2)] = 0.639$ in

 $h2efs = sqrt[hefw^3/(h2+2*\Gamma*hs1)] = 0.628 in$

Allowable stress Fb = 24ksi/4 = 6.0 ksi

SS HAND RAIL

1-1/2" DIA x 0.12" SS Tube

Max bracket spacing s = 5ft

SW Elevation Stair 6

Outside Diameter d = 1.5in Thickness t = 0.120 in

 $z = (d^3-(d-2^*t)^3)/6 = 0.229 in^3$

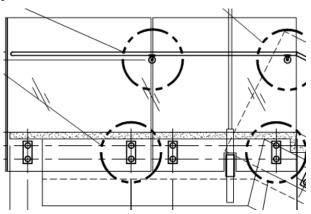
Three span min calc

Max allowable span = $min(sqrt(z^* F_{bss}^*9.5/w), z^* F_{bss}^*5/p) = 8.07 \text{ ft}$ Moment $m = max(w*s^2/9.5,p*s/5) = 180.0 lb_ft$

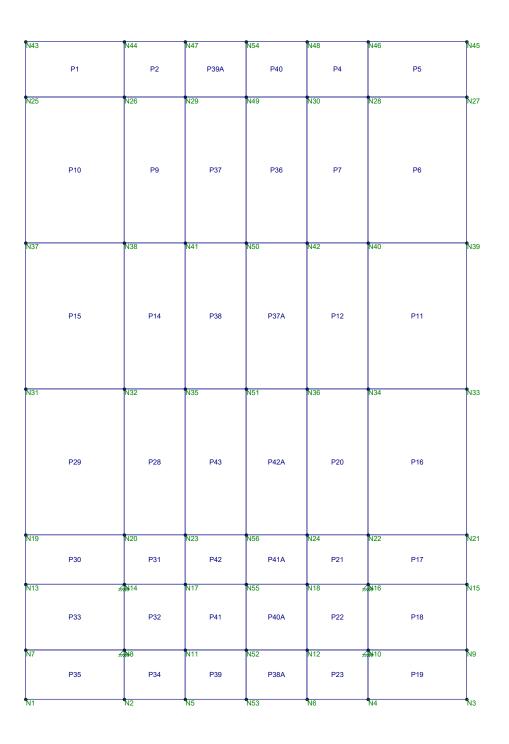
 $f_b = m/z = 9.4 \text{ ksi}$

Therefore, handrail is ok

Therefore, posts are Ok







Loads: BLC 1, D

	SK - 2
	July 3, 2018 at 4:20 PM
Rail #1	GLASS PANELS.r3d



Boise, ID 83702 208-344-2470

Project				Job Ref.	
	SMI	1812			
Section		Sheet no./rev.			
	Glass Railing Design				
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

GLASS PANEL #1 CONNECTION

Reactions from Risa joint N14

Fx = 56lbs

Fy = 289 lbs

Fz = 1.318 kips

1/2-13 x 3/4" threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.5in

Shear $V = \operatorname{sqrt}(Fy^2 + Fx^2) = 294$ lbs

Tension T = Fz = 1318 lbs

Fu = 85ksi

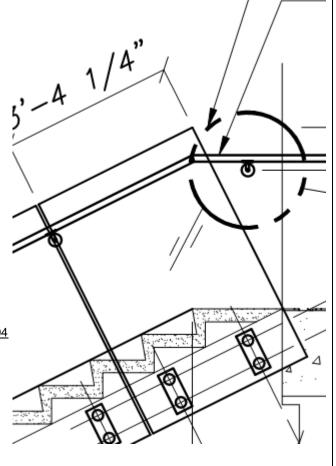
Fnt = 0.75*Fu = 64 ksi

Fnv = 0.45*Fu = **38** ksi

 $\Omega_b = 2$

Ta = Fnt* π *db²/4/ Ω _b = **6.26** kipsVa = Fnv* π *db²/4/ Ω _b = **3.76** kips

Unity equation T/Ta+V/Va = 0.29



,Y z,x														
N64		N72		V80	,	N88		N96		N104		N112		N120
	P76	P75		P74			P71		P70		P63		P58	
N61		N69	Ì	N77	•	N85		N93		N101		N109		N117
	P77	P78		P73			P72		P69		P62		P57	
N63		N71		N79		N87		N95		N103		N111		N119
	P80	P79		P68			P61		P60		P59		P56	
N62		N70		N78	-	N86		N94		N102		N110		N118
	P82	P81		P67			P48		P47		P46		P55	
N60		NICO		N76		NOA		N92		N400		N400		NAAG
NOO	P86	N68 P84		P66		N84	P49	1492		N100	P45	N108	P54	N116
							1 40						1 04	
N59	H) 67		N75	h) 83		N91		N99		<i></i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		N115
	P87	P85		P65			P50				P44		P53	
N58) 66		N74	h) 82		N90		N98		⋌ ¥106		N114
	P88	P83		P64			P51				P43A		P52	
N57		N65		N73	•	N81		N89		N97		N105		N113
Loads: BLC 1	D													
_3440. DEO 1	, =										SK -	- 3		
													18 at 4:2	21 PM
					Pail	#2						SS PANE		



208-344-2470

Project		Job Ref.			
	Denver Ju	SMI1812			
Section		Sheet no./rev.	Sheet no./rev.		
	Glass Railing Design				6
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

GLASS PANEL #2 CONNECTION

Reactions from Risa at joint N67

Fx = 43lbs

Fy = 265 lbs

Fz = 1.057 kips

1/2-13 x 3/4" threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.5in

Shear $V = \operatorname{sqrt}(Fy^2 + Fx^2) = 268$ lbs

Tension T = Fz = 1057 lbs

Fu = 85ksi

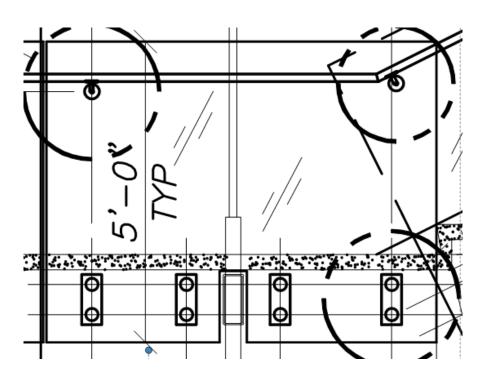
Fnt = 0.75*Fu = 64 ksi

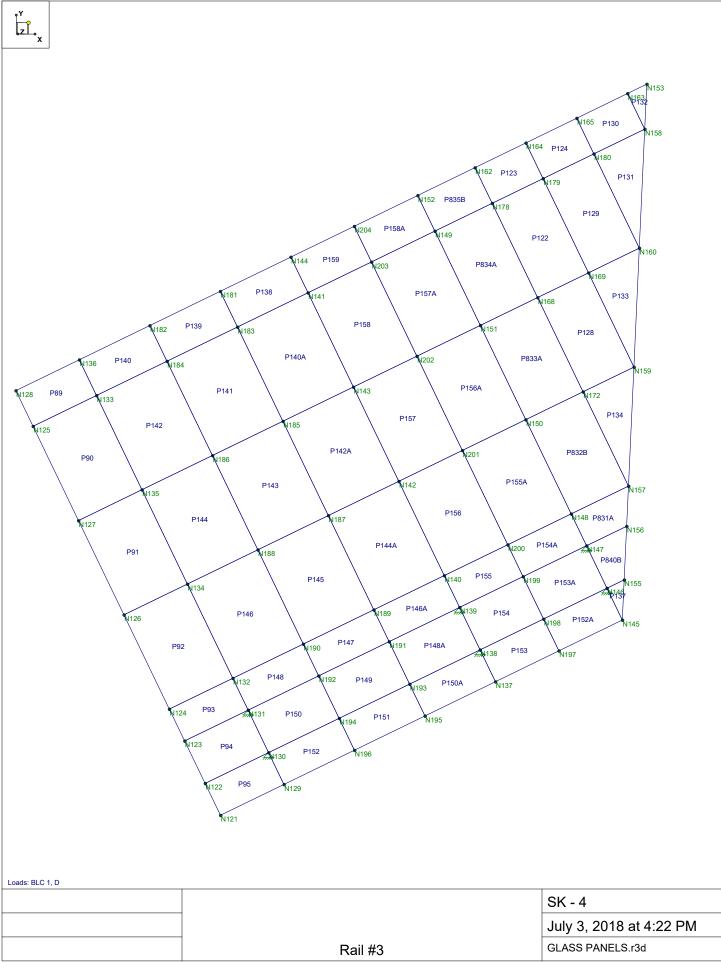
Fnv = 0.45*Fu = 38 ksi

 $\Omega_b = 2$

Ta = Fnt* π *db²/4/ Ω _b = **6.26** kipsVa = Fnv* π *db²/4/ Ω _b = **3.76** kips

Unity equation T/Ta+V/Va = 0.24







Boise, ID 83702 208-344-2470

Project				Job Ref.	
	Denver Ju	SMI	1812		
Section		Sheet no./rev.			
	Glass Railing Design				
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

GLASS PANEL #3 CONNECTION

Reactions from Risa at joint N139

Fx = 24lbs

Fy = 177 lbs

Fz = 1.461 kips

1/2-13 x 3/4" threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.5in

Shear $V = sqrt(Fy^2+Fx^2) = 179$ lbs

Tension T = Fz = 1461 lbs

Fu = 85ksi

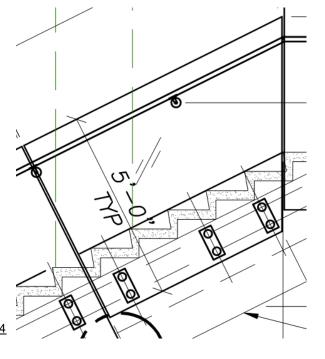
Fnt = 0.75*Fu = 64 ksi

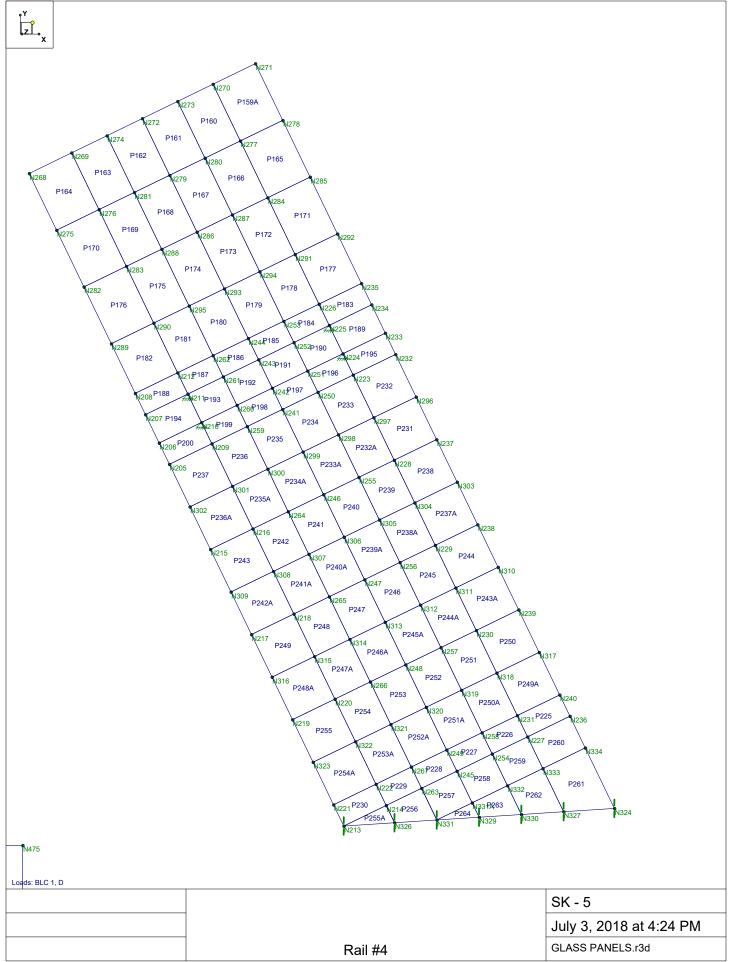
Fnv = 0.45*Fu = **38** ksi

 $\Omega_b = 2$

Ta = Fnt* π *db²/4/ Ω _b = **6.26** kipsVa = Fnv* π *db²/4/ Ω _b = **3.76** kips

Unity equation T/Ta+V/Va = 0.28







PO Box 6406 Boise, ID 83702 208-344-2470

Project				Job Ref.	
	SMI	1812			
Section		Sheet no./rev.			
	Glass Railing Design				
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

GLASS PANEL #4 CONNECTION

Reactions from Risa at joint N225

Fx = 23lbs

Fy = 168 lbs

Fz = 1.374 kips

1/2-13 x 3/4" threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.5in

Shear $V = \operatorname{sqrt}(Fy^2 + Fx^2) = 170$ lbs

Tension T = Fz = 1374 lbs

Fu = 85ksi

Fnt = 0.75*Fu = 64 ksi

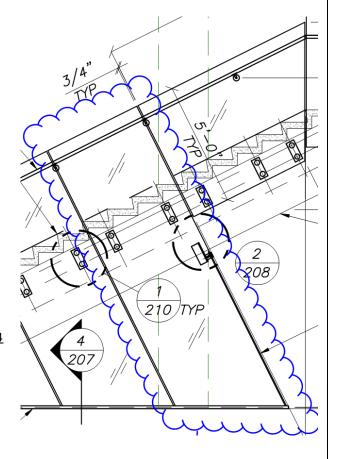
Fnv = 0.45*Fu = **38** ksi

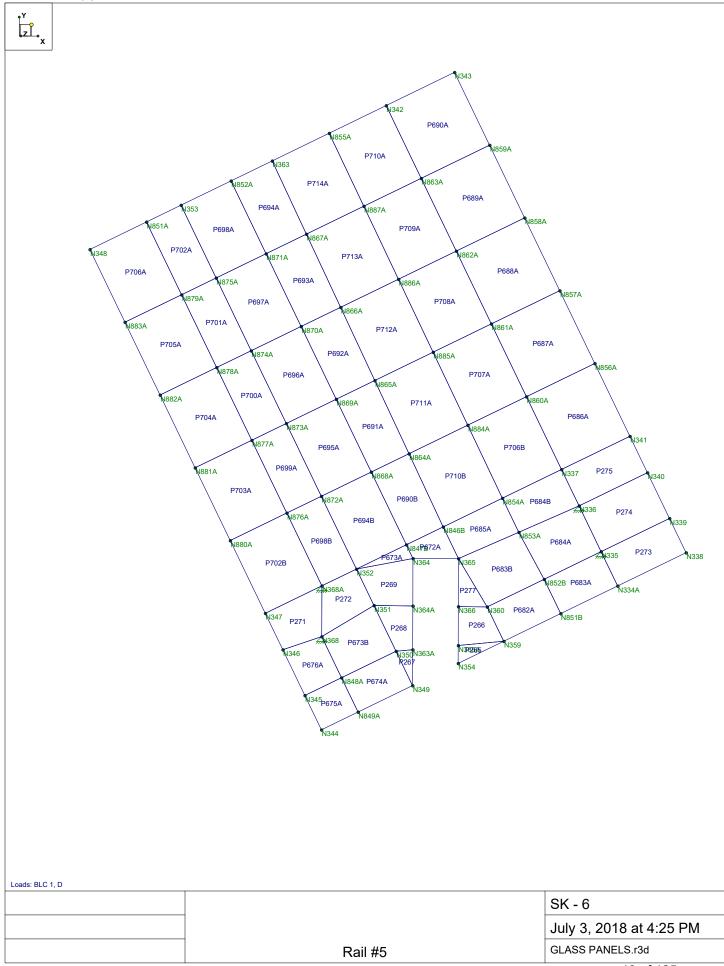
 $\Omega_b = 2$

Ta = Fnt* π *db²/4/ Ω _b = **6.26** kipsVa = Fnv* π *db²/4/ Ω _b = **3.76** kips

Unity equation T/Ta+V/Va = 0.26

Therefore, use $\frac{1}{2}$ -13 x $\frac{3}{4}$ " threaded rod ASTM F593 Group 1 SS304







Boise, ID 83702 208-344-2470

Project		Job Ref.			
	Denver Ju	SMI	1812		
Section		Sheet no./rev.			
	Glass Ra		9		
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

GLASS PANEL #5 CONNECTION

Reactions from Risa at joint N368A

Fx = 26lbs

Fy = 283 lbs

Fz = 1.398 kips

1/2-13 x 3/4" threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.5in

Shear $V = \operatorname{sqrt}(Fy^2 + Fx^2) = 284$ lbs

Tension T = Fz = 1398 lbs

Fu = 85ksi

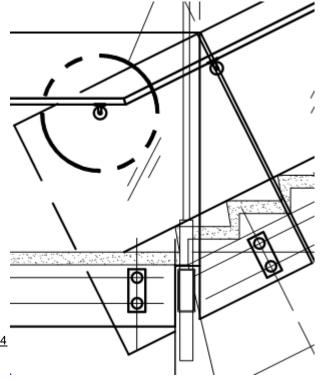
Fnt = 0.75*Fu = 64 ksi

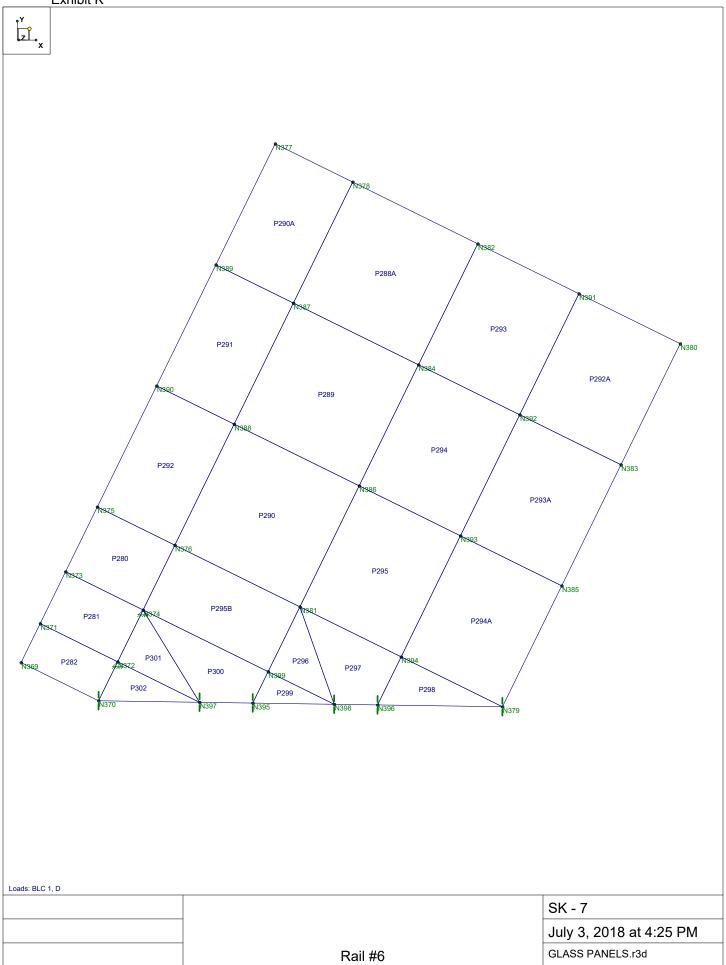
Fnv = 0.45*Fu = **38** ksi

 $\Omega_b = 2$

Ta = Fnt* π *db²/4/ Ω _b = **6.26** kipsVa = Fnv* π *db²/4/ Ω _b = **3.76** kips

Unity equation T/Ta+V/Va = **0.30**







Boise, ID 83702 208-344-2470

Project				Job Ref.	
	Denver Ju	SMI	1812		
Section		Sheet no./rev.			
	Glass Ra		10		
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

GLASS PANEL #6 CONNECTION

Reactions from Risa at joint N372

Fx = 37 lbs

Fy = 27 lbs

Fz = 2.372 kips

1/2-13 x 3/4" threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.5in

Shear $V = sqrt(Fy^2+Fx^2) = 46$ lbs

Tension T = Fz = 2372 lbs

Fu = 85ksi

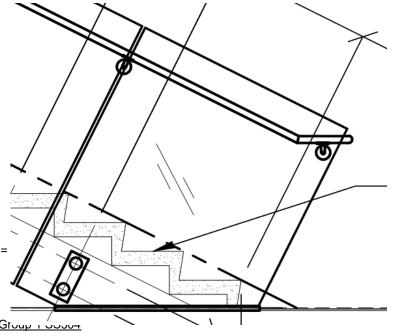
Fnt = 0.75*Fu = 64 ksi

Fnv = 0.45*Fu = **38** ksi

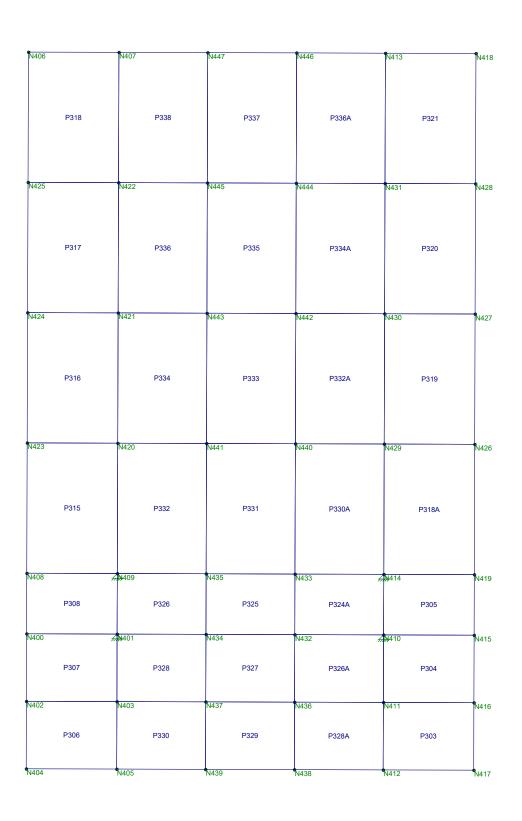
 $\Omega_b = 2$

Ta = $Fnt^*\pi^*db^2/4/\Omega_b$ = **6.26** kipsVa = $Fnv^*\pi^*db^2/4/\Omega_b$ =

Unity equation T/Ta+V/Va = 0.39







Loads: BLC 1, D

	SK - 8
	July 3, 2018 at 4:26 PM
Rail#7	GLASS PANELS.r3d



Boise, ID 83702 208-344-2470

Project		Job Ref.			
	SMI	1812			
Section		Sheet no./rev.			
Glass Railing Design					11
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

GLASS PANEL #7 CONNECTION

Reactions from Risa at joint N409

Fx = 48lbs

Fy = 301 lbs

Fz = 1.379 kips

1/2-13 x 3/4" threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.5in

Shear $V = sqrt(Fy^2+Fx^2) = 305$ lbs

Tension T = Fz = 1379 lbs

Fu = 85ksi

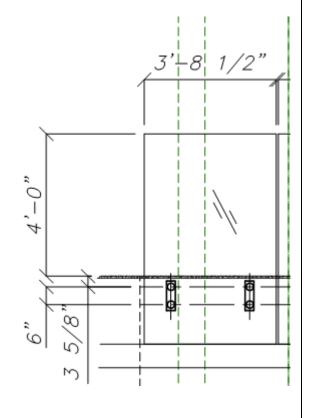
Fnt = 0.75*Fu = **64** ksi

Fnv = 0.45*Fu = **38** ksi

 $\Omega_b = 2$

Ta = $Fnt^*\pi^*db^2/4/\Omega_b$ = **6.26** kipsVa = $Fnv^*\pi^*db^2/4/\Omega_b$ = **3.76** kips

Unity equation T/Ta+V/Va = 0.30





N454		N455	N491	N489	N487	N485	N483	N481	N467	N4
	P344	P365	P364	P363	P362	P361	P360	P359	P345	
163		N460	N490	N488	N486	N484	N482	N480	N471	N4
	P343	P371	P370	P369	P368	P367	P366	P365A	P346	
462		N459	N497	N496	N495	N494	N493	N492	N470	N4
	P342	P377	P376	P375	P374	P373	P372	P371A	P347	
461		N458	N503	N502	N501	N500	N499	N498	N469	N4
	P341	P383	P382	P381	P380	P379	P378	P377A	P348	
156		<i></i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	N509	N508	N507	N506	N505	N504	√√34 68	N4
	P340	P389	P388	P387	P386	P385	P384	P383A	P349	
148		<i></i> ∕√ √ 449	N515	N514	N513	N512	N511	N510	<i>₩</i> 1 464	N4
	P339	P395	P394	P393	P392	P391	P390	P389A	P350	
150		N451	N521	N520	N519	N518	N517	N516	N465	N4
	P338A	P401	P400	P399	P398	P397	P396	DODEA	P351	
	. 000A	1 401	F400	Fogg	P390	P381	P390	P395A	P351	
452		N453	N527	N526	N525	N524	N523	N522	N466	N4

Loads:	BI C	1	п

	SK - 11
	July 3, 2018 at 4:28 PM
Rail #8	GLASS PANELS.r3d
	Rail #8



PO Box 6406 Boise, ID 83702 208-344-2470

Project				Job Ref.	
	SMI	1812			
Section		Sheet no./rev.			
	Glass Ra		12		
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

GLASS PANEL #8 CONNECTION

Reactions from Risa at joint N457

Fx = 11lbs

Fy = 353 lbs

Fz = 1.444 kips

1/2-13 x 3/4" threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.5in

Shear $V = sqrt(Fy^2+Fx^2) = 353$ lbs

Tension T = Fz = 1444 lbs

Fu = 85ksi

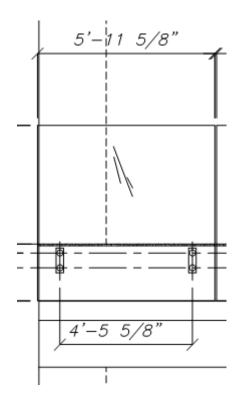
Fnt = 0.75*Fu = 64 ksi

Fnv = 0.45*Fu = **38** ksi

 $\Omega_b = 2$

Ta = $Fnt^*\pi^*db^2/4/\Omega_b$ = **6.26** kipsVa = $Fnv^*\pi^*db^2/4/\Omega_b$ = **3.76** kips

Unity equation T/Ta+V/Va = **0.32**





> Boise, ID 83702 208-344-2470

Project		Job Ref.			
	Denver Ju	SMI	1812		
Section		Sheet no./rev.			
Glass Railing Design					13
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

STEEL PLATE TO CONT. STEEL PLATE WELD

Reactions from Risa at joint N457

Fx = 11lbs

Fy = 353 lbs

Fz = 1.444 kips

Tension T = Fz = 1444 lbs

Shear Vx = 2*Fx

Vy = 2*Fy

 $Mx = Vy*(3in) = 2118 lb_in$

 $Mz = Vx*(3in) = 66 lb_in$

fillet weld

d = 10in

b = 3in

Syweld sy= $d^2/3 = 33.33 \text{ in}^2$

Sxweld = $sx = b*d = 30.00 in^2$

Aweld a = 2*d= 20.00 in

 $f_{bx} = Mx/sy = 64 lbs/in$

 $f_{by} = Mz/sx = 2 lbs/in$

 $f_t = T/a = 72 \text{ lb/in}$

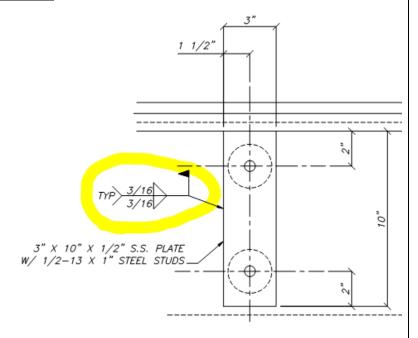
 $f_{vy} = Vy/a = 35 lbs/in$

 $f_{vx} = Vx/a = 1 lbs/in$

 $f_r = sqrt((f_{bx} + f_{by} + f_t)^2 + f_{vy}^2 + f_{vx}^2) = 142 lbs/in$

req'd fillet weld size = $f_r*2/(0.6*0.707*70ksi) = 0.010$ in

Therefore 3/16" fillet weld 2 sides is ok





208-344-2470

Project		Job Ref.			
	SMI	1812			
Section		Sheet no./rev.			
Glass Railing Design					14
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

HSS FOR GLASS MOUNT AT ATRIUM WALL

Reactions from Risa at joint N457

Fx = 11lbs

Fy = 353 lbs

Fz = 1.444 kips

Length of HSS I = 2.375in

Tension T = Fz = 1444 lbs

Shear Vx =2* Fx

Vy = 2* Fy

 $Mx = Vy*(3.25in+I) = 3971 lb_in$

 $Mz = Vx^*(3.25in+I) = 124 lb in$

 $zx = 7.93 in^3$

 $zy = 3.46 in^3$

 $a = 4.78 in^2$

HSS Design wall thickness t = 0.349in

Width resisting shear force h = 6in-3*t = 4.953 in

 $Aw = 2*h*t = 3 in^2$

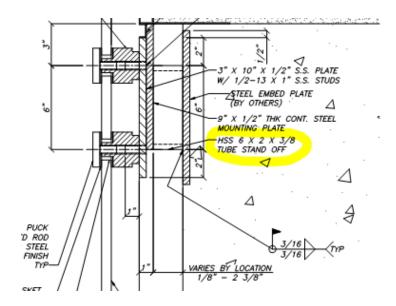
HSS Allowable Shear Vn =0.6* F_{ya500} *Aw $/\Omega_{a500}$ = **57.14** kips

HSS Allowable Tension Tn = min(F_{ya500} *a/ Ω_{a500} , F_{ua500} *a/ Ω_{a500}) = **131.66** kips

HSS Allowable Bending Mn = $F_{ya500}*zy/\Omega_{a500}$ = **95.31** kip_in

HSS Subject to combined Shear, Tension, and Flexure $(T/Tn + Mz/Mn + Mx/Mn) + (Vx/Vn)^2 + (Vy/Vn)^2 = 0.05$

Therefore 6 x 2 x 3/8" HSS Tube is ok





PO Box 6406 Boise, ID 83702 208-344-2470

Project				Job Ref.	
	SMI	1812			
Section		Sheet no./rev.			
Glass Railing Design					15
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

HSS TUBE TO STEEL EMBED PLATE WELD

Reactions from Risa at joint N457

Fx = 11lbs

Fy = 353 lbs

Fz = 1.444 kips

Length of HSS I = 2.375in

Tension T = Fz = 1444 lbs

Shear Vx =2* Fx

Vy = 2*Fy

 $Mx = Vy*(3.25in+I) = 3971 lb_in$

 $Mz = Vx*(3.25in+I) = 124 lb_in$

fillet weld

d = 6in

b = 2in

Sweld s= $b*d+d^2/3 = 24.00 in^2$

Aweld a = 2*d+2*b = 16.00 in

 $f_{bx} = Mx/s = 165 lbs/in$

 $f_{by} = Mz/s = 5 lbs/in$

 $f_t = T/a = 90 lb/in$

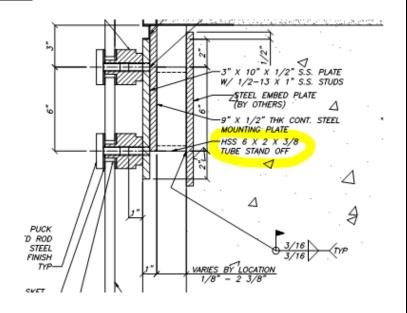
 $f_{vy} = Vy/a = 44 lbs/in$

 $f_{vx} = Vx/a = 1 lbs/in$

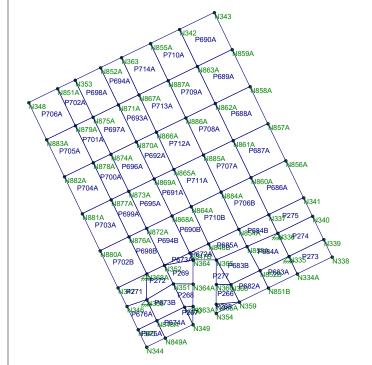
 $f_r = sqrt((f_{bx} + f_{by} + f_t)^2 + f_{vy}^2 + f_{vx}^2) = 265 lbs/in$

req'd fillet weld size = $f_r*2/(0.6*0.707*70ksi) = 0.018$ in

Therefore 3/16" fillet weld all around is ok







N1006	N1015	N1066	N1065	N1064	N1024	N1033 N1
P814	P847	P846	P845	P844A	P804	P803
N1005	N1014	N1063	N1062	N1061	N1023	N1032 N1
P813	P844	P843	P842	P841A	P805	P802
N1004	N1013	N1060	N1059	N1058	N1022	N1031 N1
P812	P841	P840	P839	P838A	P806	P801
N1003	N1012	N1057	N1056	N1055	N1021	N1030 N1
P811	P838	P837	P836	P835A	P800	P799
N1002	N1011	N1054	N1053	N1052	N1020	N1029 N1
P810	P835	P834	P833	P832A	P798	P797
N1001 P809	N1010 P832	N1051 P831	N1050 P830	N1049 P829A	N1019 P796	N1028 N1
N1000 ; P808	/N1009 P829	N1048 P828	N1047 P827	N1046 , P826A	1018 P795	N1027
N999 P807	1008 P826	N1045 P825	N1043 P824	N1041A 7	1017 P794	N1026
N998	N1007	N1044	N1042A	N1040A	N1016	N1025

Loads: BLC 1, D

	SK - 14
	July 3, 2018 at 4:30 PM
Overlapping Panels	GLASS PANELS.r3d



Boise, ID 83702 208-344-2470

Project				Job Ref.	
	SMI	1812			
Section		Sheet no./rev.			
Glass Railing Design					16
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

OVERLAPPING GLASS PANEL CONNECTION

Reactions from Risa at joint N368A & N1018

Fx1 = 26lbs

Fy1 = 283 lbs

Fz1 = 1.398 kips

Fx2 = 49lbs

Fy2 = 474 lbs

Fz2 = 1.635 kips

 $1\!\!/_{\!\!2}\text{-}13$ x $^3\!\!/_{\!\!4}"$ threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.5in

Shear $V = sqrt((Fy1+Fy2)^2+(Fx1+Fx2)^2) = 761$ lbs

Tension T = Fz1+Fz2 = **3033** lbs

Fu = 85ksi

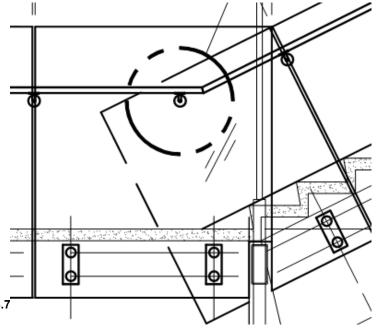
Fnt = 0.75*Fu = **64** ksi

Fnv = 0.45*Fu = **38** ksi

 $\Omega_b = 2$

Ta = $Fnt^*\pi^*db^2/4/\Omega_b$ = **6.26** kipsVa = $Fnv^*\pi^*db^2/4/\Omega_b$ = **3.7**

Unity equation T/Ta+V/Va = 0.69



Y

N988	N989	81007	8,000	81005	81004	91000		•	•
P779	N989 P780	N997 P787	N996 P786	N995 P785	N994 P784	N993 P783	N992 P782	N990 P781	N991
V808	∕√ 809	N817	N816	N815	N814	N813	N812 ;	/ N 810	N811
P653	P667	P681	P695	P709	P723	P737	P751	P765	
V859	N858	N884	N897	N910	N923	N936	N949	N962	N975
P654	P668	P682	P696	P710	P724	P738	P752	P766	14373
N861	N860	N885	N898	N911	N924	N937	N950	N963	N976
P655	P669	P683	P697	P711	P725	P739	P753	P767	
N863	N862	N886	N899	N912	N925	N938	N951	N964	N977
P656	P670	P684	P698	P712	P726	P740	P754	P768	
N865	N864	N887	N900	N913	N926	N939	N952	N965	N978
P657	P671	P685	P699	P713	P727	P741	P755	P769	
N867	N866	N888	N901	N914	N927	N940	N953	N966	N979
P658	P672	P686	P700	P714	P728	P742	P756	P770	
V869	N868	N889	N902	N915	N928	N941	N954	N967	N980
P659	P673	P687	P701	P715	P729	P743	P757	P771	
V871	N870	N890	N903	N916	N929	N942	N955	N968	N981
P660	P674	P688	P702	P716	P730	P744	P758	P772	
N873	N872	N891	N904	N917	N930	N943	N956	N969	N982
P661	P675	P689	P703	P717	P731	P745	P759	P773	
N875	N874	N892	N905	N918	N931	N944	N957	N970	N983
P662	P676	P690	P704	P718	P732	P746	P760	P774	
V877	N876	N893	N906	N919	N932	N945	N958	N971	N984
P663	P677	P691	P705	P719	P733	P747	P761	P775	
N879	N878	N894	N907	N920	N933	N946	N959	N972	N985
P664	P678	P692	P706	P720	P734	P748	P762	P776	
N881	N880	N895	N908	N921	N934	N947	N960	N973	N986
P665	P679	P693	P707	P721	P735	P749	P763	P777	
N883	N882	N896	N909	N922	N935	N948	N961	N974	N987
P666	P680	P694	P708	P722	P736	P750	P764	P778	
N824 ; P628	N825 P638	N839 P637	N838 P636	N837 P635	N836 P634	N835 P633	N834 # P632	N829 P629	N833
	N819	N845	N844	N843	N842	N841		N826	N830
P627 N820	P645	P644	P643	P642	P641	P640	P639	P630	
N820 P626	N821 P652	N851 P651	N850 P650	N849 P649	N848 P648	N847 P647	N846 P646	N827 P631	N831
V822	N823	N857	N856	N855	N854	N853	N852	N828	N832

| SK - 16 | July 3, 2018 at 4:31 PM | GLASS PANELS.r3d



GLR Engineers, PLLC

PO Box 6406 Boise, ID 83702

208-344-2470

Project		Job Ref.			
	Denver Ju	SMI	1812		
Section		Sheet no./rev.			
	Glass Ra		17		
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

TOP OF GLASS WALL CONNECTION

Reactions from Risa at joint N810

Fx = 89lbs

Fv = 405lbs

Fz = 0.019 kips

1/2-13 x 3/4" threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.5in

Shear $V = \operatorname{sqrt}(Fy^2 + Fx^2) = 415$ lbs

Tension T = Fz = 19 lbs

Fu = 85ksi

Fnt = 0.75*Fu = **64** ksi

Fnv = 0.45*Fu = 38 ksi

 $\Omega_b = 2$

Ta = $Fnt^*\pi^*db^2/4/\Omega_b$ = **6.26** kipsVa = $Fnv^*\pi^*db^2/4/\Omega_b$ = **3.76** kips

Unity equation T/Ta+V/Va = 0.11

Therefore, use ½-13 x ¾" threaded rod ASTM F593 Group 1 SS304

MIDDLE OF GLASS WALL MOUNTING PLATE

Reactions from Risa at joint N810

Fx = 89lbs

Fy = 405lbs

Fz = 0.019 kips

3"x10"x1/2" Mounting plate

Bending in plate M =Fy*5.125in=173 lb_ft

Check for required thickness of base plate

Fyss=30 ksi

 $Ω_{ss}$ = 1.67

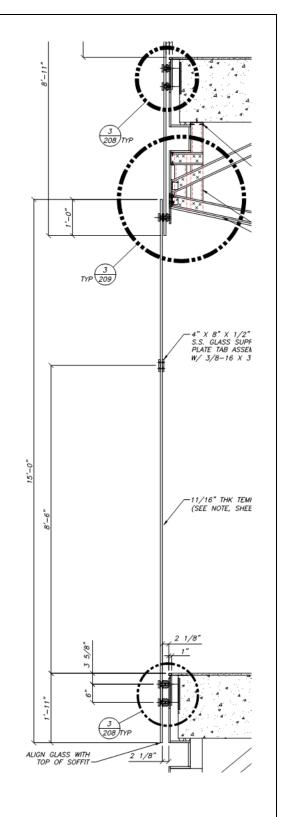
Z of plate $z = 3in*0.5in^2/4 = 0.375 in^3$

Allowable bending stress $F_{bss} = F_{yss}/\Omega_{ss} = 18.0$ ksi

 $zreqd = M/F_{bss} = 0.116 in^3$

unity check zreqd/z = 0.31

1/2" Plate is acceptable





Boise, ID 83702 208-344-2470

Project		Job Ref.			
	Denver Ju	SMI	1812		
Section			Sheet no./rev.		
	Glass Ra		18		
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

MIDDLE OF GLASS WALL SCREWS TO CONT PLATE

Reactions from Risa at joint N810

Fx = 89lbs

Fy = 405lbs

Fz = 0.019 kips

Diameter db = 0.5in

Shear $V = \operatorname{sqrt}(Fy^2 + Fx^2) = 415$ lbs Tension T = Fz*5.125in/((2/3)*3in) = 49 lbs

Fu = 85ksi

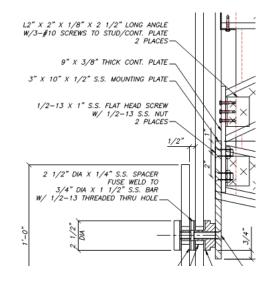
Fnt = 0.75*Fu = 64 ksi

Fnv = 0.45*Fu = 38 ksi

 $\Omega_b = 2$

Ta = $Fnt^*\pi^*db^2/4/\Omega_b$ = **6.26** kipsVa = $Fnv^*\pi^*db^2/4/\Omega_b$ = **3.76** kips

Unity equation T/Ta+V/Va = 0.12





Boise, ID 83702 208-344-2470

Project		Job Ref.			
	Denver Ju	SMI	1812		
Section		Sheet no./rev.			
	Glass Ra	:	20		
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

BOTTOM OF GLASS WALL CONNECTION

Reactions from Risa at joint N829

Fx = 19lbs

Fy = 293 lbs

Fz = 0.746 kips

5/8" threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.625in

Shear $V = \operatorname{sqrt}(Fy^2 + Fx^2) = 294$ lbs

Tension T = Fz = 746 lbs

Fu = 85ksi

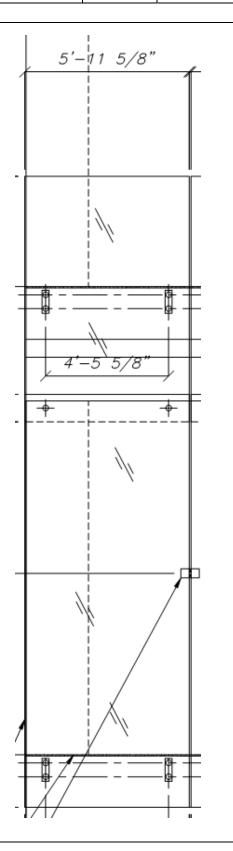
Fnt = 0.75*Fu = **64** ksi

Fnv = 0.45*Fu = **38** ksi

 $\Omega_b = 2$

Ta = Fnt* π *db²/4/ Ω _b = **9.78** kipsVa = Fnv* π *db²/4/ Ω _b = **5.87** kips

Unity equation T/Ta+V/Va = 0.13





N896A	N897A	N899A	N898/	N932A	N933A	N987A	N986A	N960A	N950
P741A	P734A	P727A		P749A	P786B	P785A	P784B	P750A	
N927A	N920A	N913A	N906/	N947A	N940A	N985A	N984A	N967A	N957
P740A	P733A	P726A		P748A	P784A	P783A	P782B	P751A	
N926A	N919A	N912A	N905	N946A	N939A	N983A	N982A	N966A	N956
P739A	P732A	P725A		P747A	P782A	P781A	P780B	P752A	
N925A	N918A	N911A	N904	N945A	N938A	N981A	N980A	N965A	N955/
P738A	P731A	P724A		P746A	P780A	P779A	P778B	P753A	
N924A	N917A	N910A	N903Å	N944A	N937A	N979A	N978A	N964A	N954 <i>i</i>
P783B	P782C	P781B		P793	P792	P791	P790	P789	
N988A P780C	N989A P779B	N991A P778A	N990A	N992A P788	N993A P787A	N997A P786A	N996A P785B	N995A P784C	N994/
1923A	N916A	N909A	N902/	N943A	N936A	N977A	N976A	N963A	N953/
P736A	P729A	P722A		P744A	P776A	P775A	P774B	P755A	
N922A	N915A	N908A	N901A	N942A	N935A	N975A	N974A	N962A	N952/
P735A	P728A	P721A		P743A	P774A	P773A	P772B	P756A	
I921A	N914A	N907A	N900A	N941A	N934A	N973A	N972A	N961A	N951A
P734B	P727B	P720A		P742A	P772A	P771A	P770B	P757A	
1888Aca 4	³ →889 ³ →715A	<i></i>	Nagna	10284	N9294770A	^{N97} 1 /7 69A	N96 9∕7 68A	∕/N 9 584 8A	N948/

Loads: BLC 1, D		
		SK - 17
		July 3, 2018 at 4:32 PM
	Bridge Panels	GLASS PANELS.r3d



PO Box 6406 Boise, ID 83702 208-344-2470

Project		Job Ref.			
	Denver Ju	SMI1812			
Section		Sheet no./rev.			
	Glass Ra	:	21		
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

BOTTOM OF BRIDGE WALL THREADED ROD CONNECTION

Reactions from Risa at joint N889A

Fx = 10lbs

Fy = 472 lbs

Fz = 190 lbs

1/2-13 x 3/4" threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.5in

Shear $V = \operatorname{sqrt}(Fy^2 + Fx^2) = 472$ lbs

Tension T = Fz = 190 lbs

Fu = 85ksi

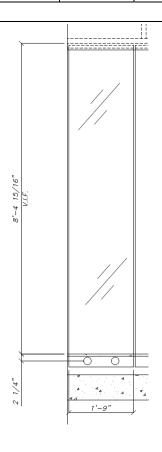
Fnt = 0.75*Fu = 64 ksi

Fnv = 0.45*Fu = 38 ksi

 $\Omega_b = 2$

Ta = Fnt* π *db²/4/ Ω _b = **6.26** kipsVa = Fnv* π *db²/4/ Ω _b = **3.76** kips

Unity equation T/Ta+V/Va = **0.16**





208-344-2470

Project		Job Ref.			
	Denver Ju	SMI	1812		
Section			Sheet no./rev.		
	Glass Ra	;	22		
Calc. by	Date	Chk'd by	Date	App'd by	Date
A. Sandidge	7/12/2018	JLane	7/12/2018		

BOTTOM OF BRIDGE WALL THREADED ROD

Reactions from Risa at joint N889A

Fx = 10lbs

Fy = 472 lbs

Fz = 190 lbs

1/2" threaded rod ASTM F593 Group 1 SS304

Diameter db = 0.5in

T = Fy*2.625in/((2/3)*2in) + Fy*1.75in/((2/3)*2in) =**1549**lbs

V = Fx

Fu = 85ksi

Fnt = 0.75*Fu = **64** ksi

Fnv = 0.45*Fu = **38** ksi

 $\Omega_b = 2$

Ta = Fnt* π *db²/4/ Ω _b = **6.26** kipsVa = Fnv* π *db²/4/ Ω _b = **3.76** kips

Unity equation T/Ta+V/Va = 0.25



GLR Engineers, PLLC PO Box 6406

Boise, ID 83702 208-344-2470

Project			Job Ref.					
	Denver Ju	stice Center		SMI1812				
Section	Section Sheet no./rev.							
	Glass Ra	;	23					
Calc. by	Date	Chk'd by	Date	App'd by	Date			
A. Sandidge	7/12/2018	JLane	7/12/2018					

TOP OF BRIDGE WALL SCREW CONNECTION

Reactions from Risa at joint N932A

Fz = 71 lbs

Diameter db = 0.5in

Shear V = Fz= 71 lbs

Tension T = Fz*1.5in/(0.9*0.5in) = 237 lbs

Fu = 75ksi

Fnt = 0.75*Fu = 56 ksi

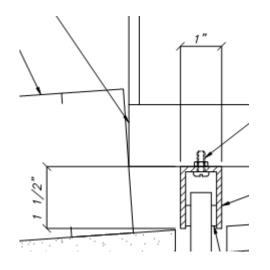
Fnv = 0.45*Fu = 34 ksi

 $\Omega_b = 2$

Ta = Fnt* π *db²/4/ Ω _b = **5.52** kipsVa = Fnv* π *db²/4/ Ω _b = **3.31** kips

Unity equation T/Ta+V/Va = 0.06

Therefore, S30400 SS 1/2" DIA Bolts w/ minimum Tensile Strength Fu=75ksi



; YbYfU'A UhYf]U'DfcdYff]Yg

	Šæè^∣	ÒÆČ•ãã	ÕÆX•ãã	Þř	V@^¦{ ÁÇaFÒÍÁØD	Ö^} ∙ãĉŽİÐcâHá
F	*^}´Ô[}&HÞY	HFÍ Í	FHÏ G	Ħ	È	ÈIÍ
G	*^} ´Ô[} & ÞY	HÎTT	FÍÌ I	È	È	ÈΙÍ
Н	*^}´Ô[}&HŠY	G€ÌÍ	J€Î	ÈÍ	È	ÈF
1	*^} ´Ô[} &l ŠY	Gl€Ì	F€Ï	È	È	ÈΕF
ĺ	* ^} ´OŒ~{	F€F€€	Ι∰Ϊ	È	FÈGI	ÈΪΗ
Î	*^}´Ù&^	GJ€€€	FFFÍ I	Ĥ	Ēĺ	ÈΙ
Ϊ	ÜÕÖÖ	F^ÉÎ		È	€	€
Ì	* æ•	F€ €€	I∰Í	È	Ēĺ	ÈΙ

>c]bh6ci bXUfm7cbX]h]cbg

- U J.C.	O O I DAOI IIII O I	<i></i>					
	R[ãjoÁŠæà∧	ÝÆXEAjá	ŸÁŽĐĄá	ZÁŽ Đặa	ÝÁÜ[dŽŽËdĐæåá	ŸÁÜ[dĚŽËdĐæåá	ZÁÜ[dĚŽË+6Đæåá
F	ÞFI	Ü^æ s æ[]	Ü^æ & æ [}	Ü^æ \$ æ [}			
G	þÌ	Ü^æ \$ æ [}	Ü^æ &cā [}	Ü^æ&aã[}			
Н	ÞFÎ	Ü^æ \$ æ [}	Ü^æ &a [}	Ü^æ&aã[}			
1	ÞF€	Ü^æ&aaaaaa }	Ü^æ &a [}	Ü^æ \$a j }			
ĺ	ÞĞ						
Î	ÞĴĴ	Ü^æ&aaaaaa }	Ü^æ & æ [}	Ü^æ&aã[}			
Ï	ÞÎÏ	Ü^æ &a { }	Ü^æ & æ (a j }	Ü^æ & æ (a j }			
ì	ÞÌH	Ü^æ \$ æ [}	Ü^æ \$a j}	Ü^æ \$ æ []}			
J	ÞÌG	Ü^æ \$ æ 1 }	Ü^æ & æ (ā }	Ü^æ \$ æ 1 }			
F€	ÞJ€						
FF	ÞJF						
FG	ÞJÌ						
FH	ÞJJ						
FI	ÞF€Î	Ü^æ \$ æ [}	Ü^æ &a {}}	Ü^æ \$ æ [}			
FÍ	ÞF€Ï	Ü^æ \$ æ 1 }	Ü^æ & æ (a j }	Ü^æ & æ (a) }			
FÎ	ÞFFI						
FΪ	ÞFFÍ						
FÌ	ÞFGG						
FJ	ÞFGH						
G€	ÞFH€	Ü^æ\$æ 1 }	Ü^æ&dai }	Ü^æ&aãi}			
GF	ÞFHF	Ü^æ \$ æ 1 }	Ü^æ&æai }	Ü^æ&æ1}			
GG	ÞFHÌ	Ü^æ \$ æ 1 }	Ü^æ&æai}	Ü^æ&æ1}			
GH	ÞFHJ	Ü^æ \$a i}	Ü^æ&dai }	Ü^æ & æ 1 }			
G	ÞFIÎ	Ü^æ \$ æ 1 }	Ü^æ&æai}	Ü^æ&æ1}			
GÍ	ÞĦÏ	Ü^æ \$ æ 1 }	Ü^æ&æa }	Ü^æ&æ1}			
GÎ	ÞFÍÍ						
GÏ	ÞFÍÎ						
GÌ	ÞŒ€	Ü^æ \$ æ 1 }	Ü^æ&dai }	Ü^æ&aãi}			
GJ	ÞŒF	Ü^æ \$ æ 1 }	Ü^æ 8 æ 1 }	Ü^æ&æ1}			
H€	ÞŒI		•				
HF	ÞŒI	Ü^æ&aãi}	Ü^æ & æ i }	Ü^æ&æi }			
HG	ÞŒÍ	Ü^æ&æi}	Ü^æ & æ i }	Ü^æ&æi}			
HH	ÞŒÏ		,				
Н	ÞGHH						
HÍ	ÞGH						
HÎ	ÞŒĤ						
HÏ	<u> </u>						
HÌ	ÞŰ€						



>c]bh'6 ci bXUf m'7 cbX]hjcbg ff cbhjbi YXŁ

/ U]UI	10 CT DXUITIT CL	Million II Co	IJDI IAL				
	R[ãjoÁŠæài^	ÝÁŽENjá	ŸÁŽEDjá	ZÁŽ.Ð3já	ÝÁÜ[dĚŽËdĐæåá	ŸÁÜ[dĚŽËdĐæåá	ZÁÜ[dÈŽË-6Dæåá
HJ	ÞĞF				•	•	•
I€	ÞÖÍ						
IF	<u> </u>						
IG	ÞG Ì						
IH							
	ÞĠ H						
11	ÞĠI						
ΙÍ	ÞĠÍ						
lÎ.	ÞGJ€						
ΙÏ	ÞGJF						
ΙÌ	ÞGJG						
IJ	ÞHGI		Ü^æ&æ[i]}				
Í€	ÞHGÎ		Ü^æ \$ æ i }				
ĺF	ÞHGÏ		Ü^æ&ai }				
ÍG	ÞŒH		Ü^æ&æi}				
ÍΗ	ÞHF		Ü^æ s æ i }				
ÍI	ÞHGJ		Ü^æ 8 æ 1 }				
ÍÍ	<u>PIW</u> ÞH€		Ü^æ s æ i }				
ÍÎ	ÞHÍ	Ü^æ&æai }	Ü^æ s æ i }	Ü^æ s æ] }			
ÍÏ	ÞHÍ	Ü^æ s æ[}	Ü^æ\$æ[}	Ü^æ s æ[}			
ĺÌ.	ÞHU						
ĺJ	ÞH€						
΀	ÞHÍ						
ÎF	ÞHÍ						
ÎG	ÞHÍ€						
ÎН	ÞHF						
ÎΙ	ÞĤ€						
ÎÍ	ÞĤÌŒ	Ü^æ&ai }	Ü^æ\$æ1}	Ü^æ&æi }			
ÎÎ	ÞĤÌ	Ü^æ&æi}	Ü^æ s æ i }	Ü^æ&æi} }			
ÌΪ	ÞH G	Ü^æ&æi}	Ü^æ 8 æ 1 }	Ü^æ&ai }			
îì	ÞH I	Ü^æ\$æ i }	Ü^æ s æ i }	Ü^æ\$æ i }			
ÎJ	PHI ÞHI	U assign }	Ü^æ s æ i }	Ü^æ s æ i }			
Ï€				Ü^æ8æ1}			
	ÞHÌ		Ü^æ8æ[] }				
ΪF	ÞН̈́€		Ü^æ&æ{a{} }	Ü^æ&æ{a[} }			
ΪG	ÞHJÍ		Ü^æ\$æ[}	Ü^æ & æ [}			
ΪΗ	ÞIJÎ		Ü^æ s æ[] }	Ü^æ % æ (ā [}			
ΪΙ	ÞHÏJ		Ü^æ&aaaaaaaa }	Ü^æ&caji }			
ΪÍ	ÞI€€						
ΪÎ	ÞI€F	Ü^æ s æ[] }	Ü^æ&aaaaaaaaa }	Ü^æ&aaaaaaaaa }			
ΪΪ	ÞI€G						
ΪÌ	ÞI€H						
ΪJ	ÞI€I						
Ì€	ÞI€Í						
ÌF	<u>PlG</u> ÞI€Î						
ÌG	PI€Ï						
ÌH	PI€i						
_			ا تام میں تا	l'il A a-O -2T l			
11	ÞI€J	Ü^æ&æi }	Ü^æ8æ[}	Ü^æ\$æ[}			
ÌÍ	ÞIF€	Ü^æ&aã[}	Ü^æ\$æ[}	Ü^æ \$ æ] }			
ÌÎ	ÞIFF						
ÌÏ	ÞIFG						
ÌÌ	ÞIFH						
ÌJ	ÞIFI	Ü^æ s æ []	Ü^æ % æ [}	Ü^æ&aji }			
J€	ÞIFÍ						

>c]bh'6 ci bXUf m'7 cbX]hjcbg'ff' cbhjbi YXŁ

<i>></i> 0]DIT	OCI DAGITIII CL	oxjnjedg tir edi	JUI TAL				
	R[ãjoÁŠæàn^	ÝÃŽÐajá	ŸÃŽEDjá	ZÁŽEZjá	ÝÁÜ[dŠŽËdĐæåá	ŸÁÜ[dÈŽËdĐæåá	ZÁÜ[dÈŽË-6Dæåá
JF	ÞIFÎ	1722 234 04	1722, 229, 02		1701 022 202000	1701 021 2030000	2,0[02,20,000
JG	ÞIFÏ						
JH	ÞIFÌ						
JI	ÞIFJ						
JÍ	<u>PIFJ</u>						
		ÜA - O.T.)	ÜA - O.T.)	iin - o at a			
JÎ	ÞIIJ	Ü^æ&æaj }	Ü^æ&cā[}	Ü^æ\$æ []			
JΪ	ÞIÍ€						
JÌ	ÞIÍF						
JJ	ÞIÍG						
F€	ÞIÍH						
F€F	ÞIÍI						
F€G	ÞIÍÍ						
F€H	ÞIÍÎ						
F€	ÞIÍÏ	Ü^æ&aaaaa }	Ü^æ & æ [}	Ü^æ&æ[i] }			
F€Í	ÞIÎI	Ü^æ & æ 1 }	Ü^æ & æ [}	Ü^æ & æ [}			
F€Î	ÞIÎÍ						
F€Ï	ÞIÎÎ						
F€Ì	ÞIÎÏ						
F€J	ÞIÎÌ	Ü^æ&aãi}	Ü^æ&æai }	Ü^æ s æ[}			
FF€	ЫÏG	U Gazag	U same	U State			
FFF	ÞIÏH						
FFG	ÞIÏI						
FFH	ÞIÏÍ						
FFI	ÞIÏÎ						
FFÍ	<u>Pill</u> Þ΀Ì						
		الله محادثا	1"1A ~~O ~T 1	ا تام حمومتا			
FFÎ	Þ΀J	Ü^æ&aaaaa }	Ü^æ \$ æ []}	Ü^æ s æ[}			
FFÏ	ÞÎF€						
FFÌ	ÞÎFF						
FFJ	ÞĴFG						
FŒ	ÞĴFH						
FŒ	ÞĴFJ						
FŒ	ÞĴFÍ						
FGH	ÞĴFĴ						
FG	ÞĴFÏ	Ü^æ&aãi}	Ü^æ & æ (a j }	Ü^æ&aaaa }			
FĞ	ÞÎG	Ü^æ&daji}	Ü^æ & æ [}	Ü^æ&aãi}			
FĜ	ÞÎĠ						
FĞ	ÞÍ GÍ ÞÍ GÏ						
FĠ	ÞÎĠÏ						
FGJ	ÞÎĠ	Ü^æ & æ i }	Ü^æ&æaj }	Ü^æ & æ (a j }			
FH€	ÞÎHG						
FHF	ÞÎHH						
FHG	ÞÎH						
FHH	ÞÍH						
FH	ÞÍH						
FH	ÞÎ FÌ Œ						
FH	ÞÍ FJŒ	Ü^æ&æai }	Ü^æ \$ æ 1 }	Ü^æ s æ[}			
FH	ÞÍ G€Œ	Ü^æ&ai }	Ü^æ&æ[]	Ü^æ s æ i }			
FH	ÞÍ ŒŒ	U aską }	U aska }	U acoupt			
	ÞÏJÌ						
FHU							
FI€	ÞÏJJ						
FIF	ÞÌ€€						
FIG	ÞÌ€F						

>c]bh'6 ci bXUf m'7 cbX]hjcbg ff cbhjbi YXŁ

>CJDIT	OCI DAOITIII C	DAJIJEDY II CDI	JUI IAL				
	R[ãjoÁŠæà∧	ÝÁŽÐajá	ŸÃŽÐajá	ZÁŽE3já	ÝÁÜ[dŽŽËdĐæåá	ŸÁÜ[dĚŽËdĐæåá	ZÁÜ[dÈŽË-6Dæåá
FIH	ÞÌ€Ì						
FII	ÞÌ€J	Ü^æ \$ æ ī }	Ü^æ \$ æ 1 }	Ü^æ \$ æ ī }			
	Pi မ	<u>U^assal}</u> U^assal}	Ü^æ&ai }	Ü^æ s æ i }			
FIÍ		U/\æ&a { }	U^\&&(a }	U/\æscal }			
FIÎ	ÞÌFF						
FΙΪ	ÞÌFÌ						
FIÌ	ÞÌFJ	Ü^æ&æ[] }	Ü^æ \$cā [}	Ü^æ&aãi}			
FIJ	ÞÌŒ						
FÍ€	ÞÌŒF						
FÍ F	ÞÌŒ						
FÍ G	ÞÌGH						
FÍΗ	ÞÌG						
FÍΙ	ÞÌĞÍ	Ü^æ \$ æ ī }	Ü^æ \$ æ 1 }	Ü^æ&æai }			
FÍÍ	ÞÌĞ	Ü^æ s æ i }	Ü^æ s æ i }	Ü^æ&ai }			
FÍÎ	ÞÌ GÏ	U acoupy	U assigi /	U assign /			
FÍΪ	PIG Lì d						
	ÞÌĠ	Ü4 0 7 1	ü. o.z.	ÜA O T)			
FĺÌ	ÞÌGJ	Ü^æ \$ æ [}	Ü^æ \$ æ []}	Ü^æ & æ i }			
FĺJ	Þį́₩€						
F΀	ÞÌHF						
FÎF	ÞÌHG						
FÎ G	ÞÌHH						
FÎΗ	ÞJÌ Ì						
FÎΙ	ÞJÌ J						
FÎÍ	ÞJJ€						
FÎÎ	ÞJJF						
FÎΪ	ÞÌIÌŒ						
FÎÌ	ÞÌIJŒ						
FÎJ							
	ÞÌÍ FŒ						
FÏ€	ÞÌÌÌŒ						
FΪF	ÞÌÌJŒ	Ü^æ % æ i }	Ü^æ & æ (ā]}	Ü^æ \$ æ [}			
FÏG	ÞÌJ€Œ						
FΪΗ	ÞÌ JFŒ	Ü^æ&aã[}	Ü^æ&aã[}	Ü^æ&daj }			
FΪΙ	ÞÌJŒ						
FΪÍ	ÞÌ JHŒ						
FΪÎ	ÞÌ JI Œ						
FΪΪ	ÞÌJÍŒ						
FΪÌ	ÞÌJÎŒ			Ü^æ&æi} }			
FΪJ	ÞÌ JÏ Œ			Ü^æ 8 æ 1 }			
FÌ€	ÞÌJÌŒ			Ü^æ s æ i }			
FÌF	ÞÌJJŒ			Ü^æ s æ i }			
FÌG	ÞJG Œ			Urational }			
		1110 0 27 1	1"IA ==0 =# 1	1"IA ==0 =# 1			
FÌH	ÞJGJŒ	Ü^æ \$ æ [}	Ü^æ \$ æ []}	Ü^æ s æ[] }			
FÌI	ÞJH€Œ						
FÌÍ	ÞJHFŒ						
FÌÎ	ÞJHGŒ			Ü^æ&aaaaa }			
FÌΪ	ÞJHHŒ			Ü^æ&daaaaaa }			
FÌÌ	ÞJI ÌŒ						
FÌJ	ÞJI JŒ						
FJ€	ÞJÍ €Œ			Ü^æ&di}}			
FJF	ÞJÍ ÌŒ	Ü^æ \$ æ ī }	Ü^æ&dãi}	Ü^æ&ai}			
FJG	ÞJÍ JŒ	O copyrdi /	O extendit	O contail			
	ÞJÍ €Œ			ا تام صوحتا			
FJH				Ü^æ&æ{i} }			
FJI	ÞJÌÏŒ			Ü^æ \$ æ []			

>c]bh'6 ci bXUf m'7 cbX]hjcbg ff/ cbhjbi YXŁ

	R[ãjoÁŠæà∧	ÝÃŽÐajá	ŸÆXEByá	ZÁŽEZjá	ÝÁÜ[dĚŽËdĐæåá	ŸÁÜ[dÈŽËdĐæåá	ZÁÜ[œlŽÄËeĐænåá
FJÍ	ÞJÌÎŒ			Ü^æ&a i }			
FJÎ	ÞJÌÌŒ						
FJΪ	ÞJÌJŒ						
FJÌ	ÞJJ€Œ						
FJJ	ÞJJFŒ						
G€€	ÞJJŒ						
G€F	ÞJJHŒ						
G€G	ÞJJI Œ						
G€H	ÞJJÍ Œ						
G€	ÞJJJ						
G€Í	ÞF€€€						
G€Î G€Î	ÞF€€Ì	Ü^æ \$a [}	Ü^æ \$ æ [}	Ü^æ & æ []			
G€Ï	ÞF€€J	Ü^æ &aaa aa }	Ü^æ &a [}	Ü^æ & æ [] }			
G€Ì	ÞF€FÏ	Ü^æ \$a [}	Ü^æ \$ æ] }	Ü^æ&aã[}			
G€J	ÞF€FÌ	Ü^æ \$a [}	Ü^æ \$ æ [}	Ü^æ & æ []			
GF€	ÞF€GÎ						
GFF	ÞF€GÏ						

D`UHY'Df]a Ufmi8 UHJ

	 Šæà^	OEÁR[ã]c	ÓÁRĮājc	ÔÁR[ā]c	ÖÁR[ā]c	Tæe^\¦ãed;	V@&&\}^••Ž a já
F	ÚF	ÞH	ÞIH	Þď	ÞĠ	* æ•	ĒĠ
G	ÚG	ÞIÏ	ÞH	ÞĜ	ÞGJ	* æ•	ĒĠ
Н	ÚI	ÞIÌ	ÞH€	ÞĠ	ÞIÎ	* æ•	ĒĠ
I	ÚÍ	ÞIÎ	ÞĠ	ÞĞ	ÞIÍ	* æ•	ĒĠ
ĺ	ÚÎ	ÞĞ	ÞĠ	ÞI€	ÞHJ	* æ•	ĒĠ
Î	ÚÏ	ÞĠ	ÞH€	ÞIG	ÞI€	* æ•	ĒĠ
Ï	ÚJ	ÞGJ	ÞĜ	ÞĤ	ÞIF	* æ•	ĒĠ
Ì	ÚF€	ÞĜ	ÞĞ	ÞHÏ	ÞĤ	* æ•	ĒĠ
J	ÚFF	ÞHJ	ÞI€	ÞH	ÞH	* æ•	ĒĠ
F€	ÚFG	ÞI€	ÞIG	ÞĤ	ÞH	* æ•	ĒĠ
FF	ÚFI	ÞIF	ÞĤ	ÞHG	ÞH	* æ•	ĒĠ
FG	ÚFÍ	ÞĤ	ÞHÏ	ÞÆ	ÞHG	* æ•	ĒĠ
FH	ÚFÎ	ÞH	ÞH	ÞŒ	ÞŒ	* æ•	ĒĠ
FI	ÚFÏ	ÞŒ	ÞŒ	ÞFÎ	ÞFÍ	* æ•	ĒĠ
FÍ	ÚFÌ	ÞFÍ	ÞFÎ	ÞF€	ÞJ	* æ•	ĒĠ
FÎ	ÚFJ	ÞJ	ÞF€	ÞI	ÞH	* æ•	ĒĠ
FΪ	ÚŒ	ÞH	ÞĤ	ÞG	ÞŒ	* æ•	ĒĠ
FÌ	ÚŒ	ÞŒ	ÞG	ÞFÌ	ÞFÎ	* æ•	ĒĠ
FJ	ÚŒ	ÞFÎ	ÞFÌ	ÞFG	ÞF€	* æ•	ĒĠ
G€	ÚŒH	ÞF€	ÞFG	ÞÎ	ÞI	* æ•	ĒĠ
GF	ÚĠ	ÞGH	ÞH	ÞHG	ÞŒ	* æ•	ĒĠ
GG	ÚGJ	ÞŒ	ÞHG	ÞÆ	ÞFJ	* æ•	ĒĠ
GH	ÚH€	ÞFI	ÞŒ	ÞFJ	ÞFH	* æ•	ĒĠ
G	ÚHF	ÞFÏ	ÞŒH	ÞŒ	ÞFI	* æ•	ĒĠ
Ġ	ÚHG	ÞFF	ÞFÏ	ÞFI	ÞÌ	* æ•	ĒĠ
Ĝ	<u>ÚHH</u>	ÞÌ	ÞFI	ÞFH	þÏ	* æ•	ĒĠ
Ğ	ÚH	ÞÍ	ÞFF	ÞÌ	ÞG	* æ•	ĒĠ
GÌ	ÚHÍ	ÞG	ÞÌ	ÞÏ	ÞF	* æ•	ĒĠ
GJ	ŲΗ <u>Ϊ́</u>	ÞH€	ÞIJ	ÞÍ€	ÞļG	* æ•	ĒĠ
H€	ÚHÏ	ÞIJ	ÞGJ	ÞIF	ÞÍ€	* æ•	ĒĠ

D`UhY`Df]a Ufm'8 UfU`ff cbh]bi YXŁ

	Di ja Gillio Gio I	COIJOI IAL					
	Šænà^∣	OEÁR[ãjc	ÓÁR[ã]c	ÔÁR[ã]c	ÖÁR[ã]c	Tæe^∖ãæ¢	V@2&\}^••Žajá
HF	ÚHÏ Œ	ÞIG	ÞÍ€	ÞÍF	ÞĤ	* æ•	ĒĠ
HG	ÚHÌ	ÞÍ€	ÞIF	ÞÁ	ÞÍF	* æ•	ĒĠ
HH	ÚHÌ Œ	ÞFG	ÞÍG	ÞÍH	ÞÎ	* æ•	ĒĠ
Н	ÚHJ	ÞÍG	ÞFF	ÞÍ	ÞÍH	* æ•	ĒĠ
HÍ	ÚHJŒ	ÞIÏ	ÞGJ	ÞIJ	ÞÍI	* æ•	ĒĠ
HÎ	ÚI€	ÞÍI	ÞIJ	ÞH€	ÞIÌ	* æ•	ĒĠ
ΗÏ	ÚI €Œ	ÞFG	ÞFÌ	ÞÍÍ	ÞÍG	* æ•	ĒĠ
HÌ	ÚI F	ÞÍG	ÞÍÍ	ÞFÏ	ÞFF	* æ•	ĒĠ
HJ	ÚI FŒ	ÞÀ	ÞĠ	ÞÍÎ	ÞÍÍ	* æ•	ĒĠ
I€	ÚI G	ÞÍÍ	ÞÍÎ	ÞGH	ÞFÏ	* æ•	ĖĠ
İF	ÚI GŒ	ÞG	ÞĤ	ÞÍF	ÞÍÎ	* æ•	ĖĠ
IG	ÚI H	ÞÍÎ	ÞÍF	ÞH	ÞGH	* æ•	ĖĠ
ΙΗ	ÚI HŒ	ÞF€Í	ÞF€Î	ÞJÌ	ÞJÏ	* æ•	ĒĠ
	ÚH	ÞF€Î	ÞF€Ï	ÞJJ	ÞJÌ	* æ•	ĒĠ
i í	ÚI Í	ÞF€Ï	ÞF€Ì	ÞF€€	ÞJJ	* æ•	ĒĠ
11	ÚIÎ	ÞF€Ì	ÞFF€	ÞF€G	ÞF€€	* æ•	ĖĠ
ΙΪ	ÚI Ï	ÞF€€	ÞF€G	ÞJI	ÞJG	* æ•	ĒĠ
11	ÚIÌ	ÞJG	ÞJI	ÞÌÎ	ÞÌI	* æ•	<u>Ē</u> Ġ
IJ	ÚI J	ÞJF	ÞJG	ÞÌI	ÞÌH	* æ•	ĒĠ
Í€	ÚÍ €	ÞJ€	ÞJF	ÞÌH	ÞÌG	* æ•	ĒĠ
ÍF	ÚÍ F	ÞÌJ	ÞJ€	ÞÌG	ÞÌF	* æ•	ĒĠ
ÍG	ÚÍ G	ÞFFH	ÞFFI	ÞF€Î	ÞF€Í	* æ•	ĒĠ
ÍH	ÚÍ H	ÞFFI		ÞF€Ï	ÞF€Î		ÊĠ
ÍI	ÚÍ I	ÞFFÍ	ÞFÍ ÞFÎ	ÞF€Ì	ÞF€Ï	* æ•	ĒĠ
ÍÍ	ÚÍÍ					* æ•	ĒĠ
	ÚÍ Î	ÞFFÎ	ÞFFÌ	ÞFF€	ÞF€Ì	* æ•	ĒĠ
11		ÞFFÌ	ÞFFJ	ÞFFF	ÞFF€	* æ•	
ÍÏ	ÚÍ Ï ÚÍ Ì	ÞFFJ	ÞFFÏ	ÞF€J	ÞFFF	* æ•	ÊĠ
ĺÌ		ÞFFÏ	ÞFG€	ÞFFG	ÞF€J	* æ•	ĒĠ
ÍJ	ÚÍ J	ÞFF€	ÞFFF	ÞF€H	ÞF€G	* æ•	ĖĠ
΀	ÚÎ €	ÞF€G	ÞF€H	ÞJÍ	ÞJI	* æ•	ĒĠ
ÎF	ÚÎ F	ÞJI	ÞJÍ	ÞÌÏ	ÞÌÎ	* æ•	<u>ĒĠ</u>
ÎG	ÚÎ G	ÞFFF	ÞF€J	ÞF€F	ÞF€H	* æ•	ĖĠ
ÎΗ	ÚÎ H	ÞF€J	ÞFFG	ÞF€l	ÞF€F	* æ•	ĒĠ
11	ÚÎ I	ÞÌF	ÞÌG	ÞÏI	ÞΪΗ	* æ•	ĒĠ
ÎÍ	ÚÎ Í	ÞÌG	ÞÌH	ÞÏÍ	ÞÏĮ	* æ•	ĒĠ
ÎÎ	ÚÎÎ	ÞÌH	ÞÌI	ÞÏĴ	ÞÏÍ	* æ•	ÊĠ
ÎÏ	ÚÎÏ	ÞÌI	ÞÌÎ	ÞÏÌ	ÞÏĴ	* æ•	ĒĠ
ÎÌ	ÚÎÌ	ÞÌÎ	ÞÌÏ	ÞÏJ	ÞÏÌ	* æ•	ĒĠ
ÎJ	ÚÎ J	ÞF€H	ÞF€F	ÞJH	ÞJÍ	* æ•	ĒĠ
Ï€	ÚÏ €	ÞF€F	ÞF€l	ÞJÎ	ÞJH	* æ•	ĖĠ
ΪF	ÚÏ F	ÞJH	ÞJÎ	ÞÌÌ	ÞÌÍ	* æ•	ĒĠ
ΪG	<u>Ý</u> Ï G	ÞJÍ	ÞJH	ÞÌÍ	ÞÌÏ	* æ•	ĒĠ
ΪΗ	<u>ÚÏ H</u>	ÞÌÏ	ÞÌÍ	ÞĮÏ	ÞÏJ	* æ•	ÊĠ
Ϊļ	Ϋ́Ϊͺİ	ÞÌÍ	ÞĮÌ	ÞÌ€	ÞÏÏ	* æ•	ĘĠ
ΪÍ	ÚΪĹ	ÞÏÏ	Þ <u>Ì</u> €	ÞÏG	ÞĴJ	* æ•	Ēġ
ΪÎ	ÚΪÎ	ÞĴJ	ÞÏG	ÞĴI	ÞĴF	* æ•	ĒĠ
ΪΪ	ÚÏÏ	ÞÏF	ÞÎJ	ÞĴF	Þ <u>Î</u> H	* æ•	ĒĠ
ΪÌ	ÚÏÌ	ÞÏJ	ÞÏÏ	ÞĴJ	ÞÏF	* æ•	ĒĠ
ΪJ	ÚΪJ	þÏÌ	ÞÏJ	ÞÏF	ÞÏ€	* æ•	ĒĠ
Ì€	ÚÌ €	ÞÏ€	ÞÏF	ÞÎH	ÞÎG	* æ•	ĒĠ
ÌF	ÚÌ F	ÞÏÎ	þÏÌ	ÞÏ€	ÞÎÌ	* æ•	ĒĠ
ÌG	ÚÌ G	ÞÎÌ	ÞÏ€	ÞÎG	Þ΀	* æ•	ĒĠ

__D`UhY`Df]a Ufm8 UfU`ff cbh]bi YXŁ

D GIII D	i ja Ullilo UlU l	I COIJOI IAL					
	Šæà^	OEÁR[ãjc	ÓÁR[ã]c	ÔÁR[ã]c	ÖÁR[ãjc	Tæe^∖ãæ¢	V@2&\}^••Ž ā já
ÌΗ	ÚÌ H	ÞÏĤ	ÞÏÍ	ÞÎÎ	ÞÎÍ	* æ•	ĒĠ
ÌI	ÚÌI	ÞÏÍ	ÞÏÎ	þÎÌ	ÞÎÏ	* æ•	ĒĠ
ÌÍ	ÚÌÍ	ÞÏI	ÞÏÍ	ÞÎÏ	ÞÎÎ	* æ•	ĒĠ
ÌÎ	ÚÌΪ	ÞÎÏ	ÞÍÌ	Þ΀	ÞÍJ	* æ•	ĒĠ
ÌÏ	ÚÌÏ	ÞÎÎ	ÞÎÏ	ÞÍJ	ÞÍÌ	* æ•	ĒĠ
ìì	ÚÌÌ	ÞÍÍ	ÞÍÍ	ÞÍÌ	ÞÍÏ	* æ•	ĖĠ
ÌJ	ÚÌ J	ÞFHÎ	ÞFGÌ	ÞFGÍ	ÞFHH	* æ•	ĒĠ
J€	ÚJ€	ÞFHH	ÞFGÍ	ÞFGÏ	ÞFHÍ	* æ•	ĒĠ
JF	ÚJF	ÞFHÍ	ÞFGÏ	ÞFG	ÞFH	* æ•	ĒĠ
JG	ÚJG	ÞFHI	ÞFGÎ	ÞFG	ÞFHG	* æ•	ĖĠ
JH	ÚJH	ÞFHG	ÞFG	ÞFGH	ÞFHF	* æ•	ĒĠ
JI	ÚJI	ÞFHF	ÞFGH	ÞFGG	ÞFH€	* æ•	ĒĠ
JÍ	ÚJÍ	ÞFH€	ÞFGG	ÞFŒ	ÞFGJ	* æ•	ĒĠ
JÎ	ÚFŒ	ÞFÎJ	ÞFÏ J	ÞÄÌ	ÞFÎ Ì	* æ•	ĒĠ
JΪ	ÚFGH	ÞFÏJ	ÞĤ l	ÞFÎ G	ÞFÏÌ	* æ•	ĒĠ
JÌ	ÚFG	ÞFÏJ	ÞFÌ€	ÞĤÍ	ÞĤ	* æ•	ĒĠ
JJ	ÚFĠ	ÞÍÍJ	ÞFÎ J	ÞFÍÌ	ÞFÏ G	* æ•	ĒĠ
F€	ÚFGJ	ÞF΀	ÞFÌ€	ÞÄJ	ÞĤJ	* æ•	ÊĠ
F€F	<u>UFH€</u>	ÞÍÌ	ÞFÎ H	ÞFÍ Í	ÞFÌ€	* æ•	ĒĠ
F€G	ÚFHF	ÞFÍÌ	ÞFÌ€	ÞF΀	PITE	* æ•	ĒĠ
F€H	ÚFHG	ÞFÍÌ	ÞĦ H	ÞĤ H		* æ•	ĒĠ
F€	ÚFHH	ÞFÍJ	ÞfÍ€	ÞFÍJ		* æ•	ĒĠ
F€Í	ÚFH	ÞFÍJ	ÞFÏ G	ÞFÍ Ï			ĒĠ
F€Î	ÚFH ÚFH	ÞFÍÍ	ÞFI Î			* æ•	ĒĠ
F€Ï	<u> </u>			ÞFÍ	50 C	* æ•	ĒĠ
F€		ÞFI	ÞFÌ F	ÞFÌ H	ÞFF	* æ•	ĒĠ
	ÚFHJ	ÞFÌ F ÞFÌ G	ÞFÌ G	ÞÀI	ÞFÌH	* æ•	ĒĠ
F€J	ÚFI €		ÞFHÎ ÞFÌ H	ÞFHH ÞFÌ Í	ÞÀI	* æ•	ĒĠ
FF€	<u>ÚFI€Œ</u> ÚFIF	ÞFF			ÞĦH	* æ•	ĒĠ
FFF		ÞFÌH	ÞĤI	ÞĤÎ	ÞŘÍ	* æ•	ĒĠ
FFG	ÚFIG	ÞFÌI	ÞFHH FRÍ	ÞFHÍ	ÞĤÎ	* æ•	
FFH	ÚFI GŒ	ÞFIH	ÞÐÍ	ÞÄÏ	ÞFIG	* æ•	ÊG ÊG
FFI	ÚFIH	ÞFÌÍ	ÞÀÎ	ÞFÌÌ	ÞFÌÏ	* æ•	
FFÍ	ÚFII	ÞFÌÎ	ÞFHÍ	ÞFH	ÞÀÌ	* æ•	ĖĠ
FFÎ	ÚFIIŒ	ÞFIG	ÞĤÏ	ÞÄJ	ÞFI€	* æ•	ĒĠ
FFÏ	<u>ÚFIÍ</u>	ÞFÌÏ	ÞFÌÌ	ÞFJ€	ÞĤJ	* æ•	<u>ĒĠ</u>
FFÌ	ÚFIÎ	ÞFÌÌ	ÞH	ÞFHG	ÞFJ€	* æ•	ĒĠ
FFJ	ÚFIÎŒ	ÞFI€	ÞĤJ	ÞFJF	ÞFHJ	* æ•	ĖĠ
FŒ	ÚFI Î	ÞFİJ	ÞFJ€	ÞFJG	ÞFJF	* æ•	ĒĠ
FŒ	ÚFIÌ	ÞFJ€	ÞFHG	ÞFHF	ÞFJG	* æ•	ĒĠ
FGG	ÚFIÌŒ	ÞFHJ	ÞFJF	ÞFJH	ÞFHÌ	* æ•	ĒĠ
FGH	ÚFIJ	ÞFJF	ÞFJG	ÞFJI	ÞFJH	* æ•	ÊĠ
FG	ÚFÍ €	ÞFJG	ÞFHF	ÞFH€	ÞFJI	* æ•	ĒĠ
FG	ÚFÍ €Œ	ÞFHÌ	ÞFJH	ÞFJÍ	ÞFHÏ	* æ•	ÊĠ
FĞ	ÚFÍ F	ÞFJH	ÞFJI	ÞFJÎ	ÞFJÍ	* æ•	ĖĠ
FĞ	ÚFÍ G	ÞFJI	ÞFH€	ÞFGJ	ÞFJÍ	* æ•	ĒĠ
FĠ	ÚFÍ GŒ	ÞFÍ	ÞĦÎ	ÞFJÌ	ÞFJÏ	* æ•	ĒĠ
FGJ	ÚFÍ H	ÞFJÏ	ÞFJÌ	ÞFHÌ	ÞFHÏ	* æ•	<u>Ē</u> Ġ
FH€	ÚFÍ HŒ	ÞFIÏ	ÞFIÏ	ÞFJJ	ÞFJÌ	* æ•	ĒĠ
FHF	ÚFÍ I	ÞFJÌ	ÞFJJ	ÞFHJ	ÞFHÌ	* æ•	ĒĠ
FHG	ÚFÍ I Œ	ÞFIÏ	ÞFIÌ	ÞŒ€	ÞFJJ	* æ•	ĒĠ
FHH	ÚFÍÍ	ÞFJJ	ÞŒ€	ÞFI€	ÞFHJ	* æ•	<u>Ē</u> Ģ
FH	ÚFÍ Í Œ	ÞFIÌ	ÞFÍ€	ÞŒF	ÞŒ€	* æ•	ĒĠ

D`UhY'Df]a Ufm8 UhU'fl7 cbhjbi YXŁ

FH ÚFÍ Î ÞŒ€ ÞŒF ÞĦ G ÞĦ € * æ• İ FH ÚFÍ Î Œ ÞĦ € ÞĦ F ÞŒG ÞŒF * æ• İ FH ÚFÍ Ï Œ ÞĦ F ÞĦ J ÞŒH ÞŒG * æ• İ FH ÚFÍ Î Œ ÞĦ F ÞĦ J ÞĦ F ÞĦ H * æ• İ FH ÚFÍ Î Œ ÞĦ J ÞĦ Ğ ÞŒH ÞĦ H * æ• İ FI ÚFÍ J ÞŒH ÞŒH ÞĦ I ÞĦ F * æ• İ FIG ÚFÍ J Œ ÞĞÎ Î ÞĞÎ F ÞĞÎ E ÞĞÎ Î * æ• İ	
FH ÚFÍÎ Œ ÞFÍ € ÞFÍ F ÞŒG ÞŒF * æ• É FH ÚFÍÏ Œ ÞÐÉF ÞŒG ÞÐ H ÞÐ G * æ• É FH ÚFÍÏ Œ ÞÐÍF ÞÐ J ÞÐEH ÞÐ H ÞÐ H * æ• É FH ÚFÍÏ Œ ÞÐ J ÞÐÍ G ÞÆ ÞÆH ÞÐ F ÞÐ F * æ• É FIF ÚFÍJ ÞÆH ÞØE ÞÐÎ I ÞÐ F * æ• É FIG ÚFÍJŒ ÞØÏ Ì ÞØÏ F ÞØÏ € ÞØÏ ï * æ• É	G G G G G G G G G G G
FH ÚFÍÏ ÞŒF ÞŒG ÞĦH ÞĦG * æ• É FH ÚFÍÏ Œ ÞĦF ÞĦJ ÞŒH ÞŒG * æ• É FH ÚFÍÏ ÞŒG ÞŒH ÞĦF ÞĦH * æ• É FI€ ÚFÍÏ Œ ÞĦJ ÞĦG ÞŒH ÞĦF * æ• É FIF ÚFÍJ ÞŒH ÞŒI ÞĦI ÞĦF * æ• É FIG ÚFÍJŒ ÞÄÏ ÞÄF ÞÄ Æ• É	G G G G G G G
FH ÚFÍÏ Œ ÞFÍ F ÞFI J ÞŒH ÞŒG * æ• B FHJ ÚFÍÌ ÞŒG ÞŒH ÞFI F ÞFI H * æ• B FI € ÚFÍÌ Œ ÞFI J ÞFÍ G ÞŒH * æ• B FI F ÚFÍ J ÞŒH ÞŒI ÞFI I ÞFI F * æ• B FI G ÚFÍ JŒ ÞÄÏ Ì ÞÄÏ F ÞÄÏ € ÞÄÏ ï * æ• B	G G G G G G G G
FHJ ÚFÍÌ ÞŒG ÞŒH ÞĦF ÞĦH * æ• É FI€ ÚFÍÌ Œ ÞĦJ ÞĦG ÞŒH * æ• É FIF ÚFÍJ ÞŒH ÞŒI ÞĦI ÞĦF * æ• É FIG ÚFÍJŒ ÞÄÏÌ ÞÄF ÞÄ ÞÄÏ * æ• É	G G G G G G
FI€ ÚFÍÌ Œ ÞFIJ ÞFÍ G ތ ÞŒH * æ• É FIF ÚFÍJ ÞŒH ތ ÞFI I ÞFI F * æ• É FIG ÚFÍJŒ ÞÄÏ Ì ÞÄ F ÞÄ E ÞÄ I * æ• É	G G G G
FIF ÚFÍ J ÞŒH ÞŒE ÞFI I ÞFI F * æ• É FIG ÚFÍ JŒ ÞÄÏ Ì ÞÄÏ F ÞÄÏ * æ• É	G G G G
FIG ÚFÍJŒ ÞŒÌ ÞŒF ÞŒÏ *æ• Ē	G G G
	Ġ Ġ
This one part part part part part	G G
	Ġ
	<u> </u>
	Ġ
	Ġ
	Ġ
	Ġ
	Ġ
FÍF ÚFÎÌ ÞĠÎ ÞĠJ ÞĠF ÞĠÌ * æ•	Ġ
	Ġ
	Ġ
FÍI ÚFÏF ÞGJG ÞGÌÍ ÞGÌI ÞGJF * æ•	Ġ
FÍÍ ÚFÏG ÞGJF ÞĠÌI ÞĠÏ ÞGJI * æ• B	Ġ
FÍÎ ÚFÏH ÞGI ÞĠÏ ÞGIH *æ• Ē	Ġ
FÍÏ ÚFÏI ÞGÌH ÞĠÌ ÞGÌ * æ• Ē	Ġ
FÍÌ ÚFÏÍ ÞGJÍ ÞGÌÌ ÞGÌH ÞGJ€ * æ• Ē	Ġ
	Ġ
	Ġ
	Ġ
	Ġ
	Ġ
	Ġ
	<u>Ġ</u>
	ġ
	Ġ
	Ġ
	Ġ
	Ġ
	Ġ
	<u>G</u>
	G G
	Ġ
	Ġ
	G G
	G
	G
	G
	G
	G
	Ġ
	Ġ
	<u>ā</u>
	Ġ

D`UhY`Df]a Ufm8 UfU`f7 cbh]bi YXŁ

	n ja Onno Olo n						
	Šæà^	OEÁR[ãjc	ÓÁR[ãjc	ÔÁR[ã]c	ÖÁR[ã]c	Tæe^∖俢	V@2&\}^••Ž ā já
FÌΪ	ÚGĞ) Dd	ÞGJ	ÞĜÏ	ÞĜH	* æ•	ĒĠ
FÌ Ì	ÚGGJ	ÞĜH	ÞĠΪ	ÞŒG	ÞŒI	* æ•	ĒĠ
FÌJ	ÚGH€	ÞŒI	5 394	ÞŒF	ÞÆH	* æ•	ĒĠ
FJ€	ÚGHF	ÞŒÏ	ÞĠĺ	ÞGJÏ	ÞŒÌ	* æ•	ĒĠ
FJF	ÚGHG	ÞGJÎ	ÞŒHG	ÞŒH	ÞGJÏ	* æ•	ĒĠ
FJG	ÚGHGŒ	ÞŒÌ	ÞGJÏ	ÞGIÌ	þĠÍ	* æ•	ĒĠ
FJH	ÚGH	ÞGJÏ	ÞŒH	ÞÍ€	ÞGIÌ	* æ•	ĒĠ
FJI	ÚGHŒ	þĠĺ	ÞGIÌ	ÞGJJ	ÞĠÎ	* æ•	ĒĠ
FJÍ	ÚGH	ÞGJÌ	ÞĞ€	Þ₫F	ÞGJJ	* æ•	ĒĠ
FJÎ	ÚGH Œ	ÎĐ¢	ÞGJJ	ÞH€€	ÞĜI	* æ•	ĒĠ
FJΪ	ÚGHÍ	ÞGJJ	ÞGF	ÞďJ	ÞH€€	* æ•	ĒĠ
FJÌ	ÚGHÍ Œ	Ϊ́ĐϤ	ÞH€€	ÞH€F	ÞŒÎ	* æ•	ĒĠ
FJJ	ÚGHÎ	ÞH€€	ÞĠJ	ÞŒJ	ÞH€F	* æ•	ĒĠ
G€€	ÚGHÎ Œ	ÞÆÎ	ÞH€F	ÞH€G	ÞŒÍ	* æ•	ĒĠ
GEF	ÚGHÏ	ÞH€F	ÞŒJ	ÞŒÍ	ÞH€G	* æ•	ĖĠ
G€G	ÚGHÏ Œ	ÞŒÌ	ÞH€H	ÞH€l	ÞŒJ	* æ•	ĖĠ
G€H	ÚGHÌ	ÞH€H	ÞGHÏ	ÞŒÌ	ÞH€l	* æ•	ĒĠ
G€	ÚGHÌ Œ	ÞŒJ	ÞH€l	ÞH€Í	ÞĠÎ	* æ•	ĒĠ
G€Í	ÚGHJ	ÞH€l	ÞŒÌ	ÞĠÍ	ÞH€Í	* æ•	ĒĠ
G€Î	ÚGHIŒ	ÞĠÎ	ÞÆÍ	ÞH€Î	ÞGÏ	* æ•	ĒĠ
G€Ï	ÚGI€	ÞH€Í	ÞĠÍ	PI D	ÞH€Î	* æ•	ĒĠ
G€Ì	ÚGI €Œ	ÞGÏ	<u>PG1</u> ÞH€Î	ÞH€Ï	ÞĠÍ	* æ•	ĒĠ
G€J	ÚGI F	ÞH€Î	ÞG Î	ÞĜl	ÞH€Ï	* æ•	ĒĠ
GF€	ÚG FŒ	ÞĠÍ	PGT ÞH€Ï	ÞH€Ì	ÞŒÌ	* æ•	ĒĠ
GFF	ÚGI G	ÞH€Ï	ÞĜl	ÞÆÎ	ÞH€Ì	* æ•	ĒĠ
GFG	ÚG Œ	ÞÆÌ	PG (ÞH€J	ÞŒÏ	* æ•	ÊĠ
GFH	ÚGIH	ÞH€Ì	ÞÆ	ÞÆÍ	ÞH€J	* æ•	ĒĠ
GFI	ÚGI HŒ	ÞŒU	ÞÆ	ÞÆF	ÞGH€	* æ•	ĒĠ
GFÍ	ÚGII	ÞÆ€	ÞŒ	ÞŒJ	ÞHFF	* æ•	ĒĠ
GFÎ	ÚGIŒ	ÞGH€	ÞHFF	ÞÆG	ÞĞÏ	* æ•	ĒĠ
GFÏ	ÚGIÍ	ÞHFF	ÞŒJ	ÞĠÎ			ĒĠ
GFÌ	ÚGLÍŒ	ÞĠÏ			ÞÆG ÞG Ì	* æ•	ĒĠ
	ÚGIÎ		Þ H G	ÞÆH ÞØÏ		* æ•	
GFJ	ÚGIÎŒ	ÞÆG	ÞĠÎ	ÞGÏ	ÞÆH	* æ•	ÊG ÈG
GG€	ÚGIÏ	ÞĠÌ	ÞÆH	ÞHI	ÞĠÍ	* æ•	
Œ		ÞÆH	ÞGÏ	ÞĠÍ	ÞFI	* æ•	ÊG ÊG
633	ÚGIÏŒ	ÞĠÎ	Þ IF I Þ G Í	ÞÆÍ	ÞŒ€	* æ•	
GGH	<u>ÚGÌ</u>	ÞHFI		ÞÆÌ	ÞÆÍ	* æ•	ĒĠ
GG C	ÚG Ì Œ	ÞŒ€	ÞHÍ ÞŒÌ	Þ IF Î	ÞŒJ	* æ•	ĒĠ
ϒ	ÚGJ	ÞFÍ	ÞÆÌ	ÞŒÏ	ÞFÎ	* æ•	ĒĠ
GGÎ	ÚGIJŒ	ÞG€	ÞHÏ	ÞFÌ	ÞGHF	* æ•	ĒĠ
ϕ ϓ	ÚGÍ €	ÞHFÏ	ÞÆ	ÞGH€	ÞFÌ	* æ•	ĒĠ
<u>66</u>	ÚGÍ €Œ	ÞGHF	ÞFÌ	ÞÆJ	ÞĠÌ	* æ•	ĒĠ
GGJ	ÚGÍ F	ÞFÌ	ÞŒ	ÞĠÏ	ÞÆJ	* æ•	ĒĠ
GH€	ÚGÍ FŒ	ÞĠÌ	ÞHJ	ÞHG€	ÞGJ	* æ•	ĒĠ
GHF	ÚGÍ G	ÞÆJ	ÞĞÏ	ÍĐ¢	ÞHG€	* æ•	<u>Ē</u> Ġ
GHG	ÚGÍ GŒ	ÞGJ	ÞHG€	ÞHŒ	ÞĠÏ	* æ•	ĒĠ
GH	ÚGÍH	ÞHŒ	ÞG Ì	ÞĜÎ	ÞHŒ	* æ•	<u>Ē</u> Ġ
GH	ÚGÍ HŒ	ÞĠÏ	ÞHŒ	ÞH3G	ÞŒG	* æ•	ĒĠ
GHÍ	ÚGÍI	ÞHŒ	ÞĠÎ	Þ 6 0€	ÞHGG	* æ•	ÊĠ
GHÎ	ÚĠĮŒ	ÞŒG	ÞHGG	ÞHGH	ÞŒF	* æ•	ĒĠ
GHÏ	ÚĠÍ	ÞHGG	Þ 33€	ÞŒJ	ÞHGH	* æ•	<u>Ē</u> G
GHÌ	ÚGÍÍŒ	ÞŒI	ÞŒH	ÞHĜ		* æ•	ĒĠ

__D`UhY`Df]a Ufm8 UfU`ff cbh]bi YXŁ

	i ja Uillio UiU i	I COIJOI IAL					
	Šæ•••̀^	OEÁR[ã]c	ÓÁR[ãjc	ÔÁR[ã]c	ÖÁR[ãjc	Tæe^∖ãæe	V@2&\}^••Ž a já
GHJ	ÚGÍ Î	ÞHF	ÞĜH	ÞŒÍ	ÞHGÍ	* æ•	ĒĠ
GI€	ÚGÍÏ	ÞHHFŒ) Dd	ÞĜH	ÞHF	* æ•	ĒĠ
GF	ÚGÍÌ	ÞĞI	Þ G Í	ÞHHFŒ	ÞHKG	* æ•	ĒĠ
GG	ÚďJ	ÞHH	ÞŒÏ	ÞÚI	ÞHKG	* æ•	ĒĠ
GН	ÚĠ΀	ÞНI	ÞŒĤÎ	ÞŒÏ	ÞHH	* æ•	ĒĠ
GI	ÚGÎF	ÞHG	ÞШ	ÞHH	ÞHGÏ	* æ•	ĒĠ
Ġί	ÚGÎ G	ÞHGÏ	ÞHH	ÞHHG	ÞH€	* æ•	ĒĠ
GÎ	ÚGÎH	Þ₩€	ÞHKG	ÞHHFŒ	ÞHGJ	* æ•	ĒĠ
GΪ	ÚĠĨ	ÞHGJ	ÞHHFŒ	ÞHF		* æ•	ĒĠ
GÌ	ÚĠÍ	ÞHÍI	ÞH J	ÞĤÍŒ		* æ•	ĒĠ
GJ	ÚGÎÎ	ÞÍJ	ÞĤ€	ÞĤÎ	ÞĤÍŒ	* æ•	ĒĠ
GÍ€	ÚĠÏ	ÞHJ	ÞHÎ HŒ	ÞHÍ€		* æ•	ĒĠ
ЙF	ÚGÎ Ì	ÞHÎ HŒ	ÞĤIŒ	ÞH F	ÞHÍ€	* æ•	ĖĠ
ĠБ	ÚGÎ J	ÞĤIŒ	ÞĤÍ	ÞH G	ÞH F	* æ•	ĒĠ
ĞН	ÚGÏ F	ÞĤ Ì	ÞĤÌŒ	<u>РИ Ü</u>	ÞHÍ	* æ•	ĒĠ
ĠΙ	ÚGÏ G	ÞHF	ÞH G	ÞĤÌŒ	ÞĤÌ	* æ•	ĒĠ
ĠÍ	ÚGÏ H	ÞHÌ	ÞHU	ÞHÍ	ÞHI Œ	* æ•	ÈĠ
GÎ	ÚĠĬI	ÞHU	ÞH€	ÞHÍ	ÞHÍ	* æ•	ĒĠ
ďΪ	ÚĠĬÍ	ÞH€	ÞH F	ÞHÏ	ÞHÍ	* æ•	ĒĠ
GÌ	ÚĠÏÏ	ÞĤ€	ÞĤÍ	ÞĤÎ	F11#	* æ•	ĒĠ
ďЛ	ÚĠ €	ÞΗΊ	ÞHÏÎ	ÞHÍ	рн" н	* æ•	ĒĠ
G΀	ÚG F	ÞН̈́G	ÞÄI	ÞНH	ÞÄF	* æ•	ĒĠ
GÎF	ÚGÌ G	ÞН€	ÞH G	ÞH F	ÞĤJ	* æ•	ĒĠ
G G	ÚGÌ Œ	ÞĤG	ÞH Ì	ÞĤÏ	ÞĤÍ	* æ•	ĒĠ
ĠН	ÚĠJ	ÞĤI	ÞĤ Ï	ÞH Ì	ÞĤÎ	* æ•	ĒĠ
ĠΊ	ÚGJ€	ÞHÍ	ÞHÌ	ÞHÍ	ÞĤ F	* æ•	ĒĠ
Ġί	ÚGJ€Œ	ÞΗΪ	ÞΗΪ	ÞĤ J	ÞĤÏ	* æ•	ĒĠ
GÎ	ÚGJF	ÞĤÏ	ÞĤJ	PH€	ÞĤÌ	* æ•	ÊĠ
ĠΪ	ÚGIG	ÞĤÌ	ÞHJ€	<u>РТС</u> ÞН Í	ÞΗΪÎ	* æ•	ĒĠ
GÌ	ÚGLGŒ	ÞĤ€	ÞHJF	ÞНG	ÞĤH	* æ•	ĒĠ
GÎ J	ÚGJH	ÞHF	ÞĤ G	ÞĤ I	ÞHJG	* æ•	ĒĠ
Ğ€	ÚGJHŒ	ÞĤH	ÞHJG	ÞWH	ÞĤÍ	* æ•	ĒĠ
ĠΓ	ÚGJI	ÞHIG	ÞĤ I	ÞH Î	ÞHH	* æ•	ĒĠ
GG	ÚGJI Œ	ÞĤÍ	ÞWH	ÞHI	ÞÄJ	* æ•	ĒĠ
ĞН	ÚGJÍ	ÞWH	ÞH Î	ÞĤ F	ÞHI	* æ•	ĒĠ
GII	ÚGIÍ Ó	ÞHÏÎ	ÞÄI	ÞHJ	ÞĤF	* æ•	ĒĠ
GÍ	ÚGJÎ	ÞĤF	ÞHIJ	P103		* æ•	ĖĠ
GÎÎ	ÚGJÏ	ÞĤF	±100 bHli	ÞHÍ	ÞHII	* æ•	ĒĠ
ĠΪ	ÚGJÌ	ÞHII	<u>PIUI</u> ÞHJÎ	ÞĤ J	7.01	* æ•	ĒĠ
Gi	ÚGJJ	ÞHÌ	ÞHIJ	ÞHÍ		* æ•	ĒĠ
۵J	<u>UH€€</u>	ÞHÍ	ÞHJ	ÞÄI	ÞНІÏ	* æ•	ĒĠ
GÌ€	ÚHŒF	ÞHÏI	ÞH G	ÞWÏ		* æ•	ĒĠ
ĠF	ÚH€G	ÞHIÏ	ÞĤ G	ÞḦ€		* æ•	ĒĠ
GG	ÚHŒH	ÞIFÏ	ÞIFÎ	ÞIFF	ÞIFG	* æ•	ĒĠ
ĠН	ÚHEI	ÞIFÎ	ÞIFÍ	ÞIF€	ÞIFF	* æ•	ĒĠ
GI	ÚH€Í	ÞIFÍ	ÞIFJ	ÞIFI	ÞIF€	* æ•	ĒĠ
Ġí	<u>UH€Î</u>	ÞI€Í	ÞI€H	ÞI€G	ÞI€I	* æ•	ĒĠ
GÎ	ÚH€Ï	ÞI€H	ÞI€F	ÞI€€	ÞI€G	* æ•	ĒĠ
ĠΪ	<u>UH€Ì</u>	ÞI€F	PI€J	<u>Pl€C</u> ÞI€Ì	ÞI€€	* æ•	ĒĠ
GÌ	ÚHFÍ	ÞI€J	PIG€	ÞI GH	ÞI€Ì	* æ•	ĒĠ
GJ GJ	ÚHFÎ	ÞIG€	ÞI GF	ÞIG	ÞIGH	* æ•	ĒĠ
GJ€	ÚHFÏ	ÞIŒ	ÞIGG	ÞIĞ	ÞIG	* æ•	ĒĠ
<u> </u>	OFF	FIG	F1 W	FIG	FIG	ω.	I G

D`UhY`Df]a Ufm8 UfU`f7 cbh]bi YXŁ

D Gill L	or ja Gillio Gib II	CDIJDI IAL					
	Šæà^	OEÁR[ãjc	ÓÁR[ã]c	ÔÁR[ã]c	ÖÁR[ã]c	Tæe^¦ãæ¢	V@&&\}^•• Ž ajá
GJF	ÚHFÌ	ÞIGG	ÞI€Ï	ÞI€Î	ÞIGÍ	* æ•	ĒĠ
GJG	ÚHFÌŒ	ÞIFJ	ÞIGÎ	ÞIGJ	ÞIFI	* æ•	ĒĠ
GJH	ÚHFJ	ÞIĞ	ÞIĞ	ÞIH€	ÞIGJ	* æ•	ĒĠ
GJI	ÚHŒ	ÞIĞ	ÞIĠ	ЫHF	ÞIH€	* æ•	ĒĠ
GJÍ	ÚHŒ	ÞIĠ	ÞIFÌ	ÞIFH	ÞIHF	* æ•	ĒĠ
GJÎ	ÚHG Œ	ÞIF€	ÞIFI	ÞIНН	ÞIHG	* æ•	ĒĠ
GJÏ	ÚHGÍ	ÞIHG	ÞIHH	ÞIHÍ	ÞН	* æ•	ĒĠ
GJÌ	ÚHGÎ	ÞIH	ÞIHÍ	ÞI€J	ÞI€F	* æ•	ĒĠ
GJJ	ÚHGÎŒ	ÞIFF	ÞIF€	ÞIHG	ÞIHÎ	* æ•	ĒĠ
H€€	ÚHĞ	ÞIHÎ	ÞIHG	ÞН	ÞIHÏ	* æ•	ĒĠ
HEF	ÚHĠ	ÞIHÏ	ÞН	ÞI€F	ÞI€H	* æ•	ĒĠ
H€G	ÚHGÌ Œ	ÞIFG	ÞIFF	ÞIHÎ	ÞIHÌ	* æ•	ĒĠ
НӨН	ÚHGJ	ÞIHÌ	ÞIHÎ	ÞIHÏ	ÞIНJ	* æ•	ĒĠ
H€	ÚHH€	ÞIHJ	ÞIHÏ	ÞI€H	ÞI€Í	* æ•	ĒĠ
He	ÚHH€Œ	ÞIFI	ÞIGJ	ÞII€	ÞIHH	* æ•	ĒĠ
H€Î	ÚHHF	ЫНН	ÞII€	ÞHF	ÞIHÍ	* æ•	ĒĠ
HeÏ	ÚHHG	ÞIHÍ	ÞHF	ÞIŒ	ÞI€J	* æ•	ĖĠ
H€Ì	ÚHHGŒ	ÞIGJ	ÞIH€	ÞIIG	ÞII€	* æ•	ĒĠ
H€J	ÚHH	ÞII€	ÞIIG	ÞIIH	ÞIIF	* æ•	ĒĠ
HF€	ÚHH	ÞIIF	ÞIIH	ÞIŒ	ÞIG€	* æ•	ĒĠ
HFF	ÚHH Œ	ÞIH€	ÞIHF	ÞIII	ÞIIG	* æ•	ĖĠ
HFG	ÚHH	ÞIIG	ÞIII	ÞHÍ	ÞIIH	* æ•	ĖĠ
HFH	ÚHĤ	ÞIIH	ÞHÍ	ÞIGG	ÞIŒ	* æ•	ĒĠ
HFI	ÚHHÎ Œ	ÞIHF	ÞIFH	ÞHÍ	ÞIII	* æ•	ĖĠ
HFÍ	ÚHHÏ	ÞIII	ÞHÎ	ÞIIÏ	ÞHÍ	* æ•	ÈĠ
HFÎ	ÚHH	ÞHÍ	ÞIIÏ	ÞI€Ï	ÞIGG	* æ•	ĒĠ
HFÏ	ÚHH Œ	ÞIÍH	ÞlÍF	<u>Pid</u> ÞIÍ€	ÞlÍG	* æ•	ĒĠ
HFÌ	ÚHHJ	ÞIÍF	ÞIIJ	ÞIIÌ	ÞIÍ€	* æ•	ĒĠ
HFJ	ÚHI €	ÞIIJ	ÞIÍÏ	ÞIÍÎ	ÞIIÌ	* æ•	ĚĠ
HŒ	ÚHI F	ÞIÍÏ	ÞÍÍÌ	ÞIÍF	ÞIÍÎ	* æ•	ĖĠ
HŒ	ÚHI G	ÞIÍÌ	ÞIÍJ	ÞIÎG	ÞIÍF	* æ•	ĚĠ
HGG	ÚHIH	ÞIÍJ	ÞI΀	ÞIÎH	ÞIÍG	* æ•	ĖĠ
HGH	ÚHII	ÞI΀	ÞIÍÍ	ÞIÍI	ÞIÎH	* æ•	ĚĠ
HG	ÚHIÍ	ÞIÏÍ	ÞIÌÏ	ÞIÏF	ÞIÏJ	* æ•	ĒĠ
HG	ÚHIÎ	ÞIÏJ	ÞIÏF	ÞIÏ€	ÞIÏÌ	* æ•	ĒĠ
HGÎ	ÚHIÏ	ÞIÏÌ	ÞIÏ€	ÞIÍJ	ÞIÏÏ	* æ•	ĒĠ
HĞ	ÚHI Ì	ÞIÏÏ	ÞIÍJ	ÞIÍÌ	ÞIÏÎ	* æ•	ÈĠ
HG	ÚHIJ	ÞIÏÎ	ÞIÍÌ	ÞIÍI	ÞIÏG	* æ•	ĖĠ
HGJ	ÚHÍ.€	ÞIÏG	ÞIÍI	ÞIÍÍ	ÞIÏH	* æ•	ĒĠ
HH€	ÚHÍ F	ÞIÏH	ÞIÌÍ	ÞIÍÎ	ÞIÏI	* æ•	ĖĠ
HHF	ÚHÍ J	ÞIÏF	ÞIÌÏ	ÞIÌF	ÞIÌ€	* æ•	ĒĠ
HHG	ÚH΀	ÞIÌ€	ÞIÌF	ÞÌH	ÞIÌG	* æ•	ĖĠ
HH	ÚHÎ F	ÞIÌG	ÞIÌH	ÞIÌÍ	ÞIÌI	* æ•	ĒĠ
HH	ÚHÎG	ÞIÌI	ÞIÌÍ	ÞIÌÏ	ÞIÌÎ	* æ•	ĒĠ
HH	ÚHÎ H	ÞIÌÎ	ÞIÌÏ	ÞIÌJ	ÞIÌÌ	* æ•	ÈĠ
HHÎ	ÚHÎ I	ÞIÌÌ	ÞIÌJ	ÞIJF	ÞIJ€	* æ•	ÈĠ
HHÏ	ÚHÎ Í	ÞIJ€	ÞIJF	ÞIÍÍ	ÞI΀	* æ•	ÈĠ
HH	ÚHÎÍŒ	ÞIÏ€	ÞIÏF	ÞIÌ€	ÞIJG	* æ•	ĖĠ
HHU	ÚHÎ Î	ÞIJG	ÞIÌ€	ÞIÌG	ÞIJH	* æ•	ĒĠ
H€	ÚHÎÏ	ÞIJH	ÞÌĠ	ÞIÌI	ÞIJI	* æ•	ĒĠ
HF	ÚHÎ Ì	ÞIJI	ÞÍÍI	ÞIÌÎ	ÞIJÍ	* æ•	ĒĠ
HIG	ÚHÎ J	ÞIJÍ	ÞÌÌÎ	ÞIÌÌ	ÞIJÎ	* æ•	ĖĠ



D`UhY`Df]a Ufmi8 UhU`ff cbhjbi YXŁ

<u>D Unr</u>	D'UnY Df]a Ulm8 UnU fl7 cbhjbi YXŁ									
	Šæà^	OEÁR[ã]c	ÓÁR[ãjc	ÔÁR[ã]c	ÖÁR[ãjc	Tæe^∖ãæ	V@2&∖}^•• Ž ajá			
HН	ÚHÏ€	ÞIJÎ	ÞIÌÌ	ÞIJ€	ÞIJÏ	* æ•	ĒĠ			
HII	ÚHÏ F	ÞIJÏ	ÞIJ€	ÞI΀	ÞIÍJ	* æ•	ĒĠ			
НÍ	ÚHÏ FŒ	ÞIÎJ	ÞIÏ€	ÞIJG	ÞIJÌ	* æ•	ĒĠ			
НÎ	ÚHÏ G	ÞIJÌ	ÞIJG	ÞIJH	ÞIJJ	* æ•	ĒĠ			
ΗÏ	ÚHÏ H	ÞIJJ	ÞIJH	ÞIJI	ÞÍ€€	* æ•	ĒĠ			
ΗÌ	ÚHÏ I	ÞÍ€€	ÞIJI	ÞIJĺ	ÞÍ€F	* æ•	ĒĠ			
НJ	ÚHÏÍ	ÞÍ€F	ÞIJĺ	ÞIJÎ	ÞÍ€G	* æ•	ĒĠ			
HÍ€	ÚHÏÎ	ÞÍ€G	ÞIJÎ	ÞIJÏ	ÞÍ€H	* æ•	ĒĠ			
ΗÍF	ÚHÏÏ	ÞÍ€H	ÞIJÏ	ÞIÍJ	ÞÍÌ	* æ•	ĒĠ			
HÍ G	ÚHÏ Ï Œ	ÞIÎÌ	ÞIÎJ	ÞIJÌ	ÞÍ€l	* æ•	ĒĠ			
ΉΗ	<u>ÚHÏ Ì</u>	ÞÍ€l	ÞIJÌ	ÞIJ	ÞÍ€Í	* æ•	ĒĠ			
HÍI	<u>ÚH</u> Ï J	ÞÍ€Í	ÞIJ	ÞÍ€€	ÞÍ€Î	* æ•	ĒĠ			
HÍÍ	ÚHÌ€	ÞÍ€Î	ÞÍ€€	ÞÍ€F	ÞÍ€Ï	* æ•	ĒĠ			
ΗÍÎ	ÚHÌ F	ÞÍ€Ï	ÞÍ€F	ÞÍ€G	ÞÍ€Ì	* æ•	ĒĠ			
ΗĹΪ	ÚHÌ G	ÞÍ€Ì	ÞÍ€G	ÞÍ€H	ÞÍ€J	* æ•	ĒĠ			
HÍÌ	ÚHÌ H	ÞÍ€J	ÞÍ€H	ÞÍÍÌ	ÞĮÍÏ	* æ•	ĒĠ			
ΗÍJ	ÚHÌHŒ	ÞJÍI	ÞÍĴÌ	ÞÍ€	ÞÍF€	* æ•	ĒĠ			
H΀	ÚHÌ J	ÞÍF€	ÞÍ€	ÞÍ€Í	ÞÍFF	* æ•	ĒĠ			
HÎF	<u>ÚHÌ Í</u>	ÞÍFF	ÞÍ€Í	ÞÍ€Î	ÞÍFG	* æ•	ĒĠ			
HĴG	<u>ÚHÌ Î</u>	ÞÍFG	ÞÍ€Î	ÞÍ€Ï	ÞÍFH	* æ•	ĒĠ			
Η̈́Η	ŲΗįį	ÞÍFH	Þĺ€Ï	Þĺ€j	ÞÍFI	* æ•	ĒĠ			
HÎI	<u>ŲHį ì</u>	ÞÍFJ	ÞÍ€Ì	ÞÍ€Ü	ÞÍFÍ	* æ•	Ε̈́Q̈́			
HÎÍ	ŅĤ J	ÞÍFÍ	ÞÍ€J	ÞļÍÏ	ÞÌIŽ	* æ•	ĒĠ			
HÎÎ	ÚHÌ JŒ	ÞÍĴÍ	ÞJÍI	ÞÍF€	ÞÍFÎ	* æ•	ĒĠ			
HĴŢ	ŲHJ€	ÞÍFÎ	ÞÍF€	ÞÍFF	ÞÍFÏ	* æ•	ĒĠ			
HÎÌ	ÚHJF	ÞÍFÏ	ÞÍFF	ÞÍFG	ÞÍFÌ	* æ•	ĒĠ			
HÎJ	ÚHJG	ÞÍFÌ	ÞÍFG	ÞÍFH	ÞÍFJ	* æ•	ĒĠ			
HÏ€	ÚHJH	ÞÍFJ	ÞÍFH	ÞÍFI	ÞÍŒ	* æ•	ĒĠ			
HÏF	ÚHJI	ÞÍŒ	ÞÍFI	ÞÍFÍ	ÞÍŒ	* æ•	ĒĠ			
HÏG	ÚHJÍ	ÞÍŒ	ÞÍFÍ	ÞIIJ	ÞIÍF	* æ•	ĒĠ			
Η̈́Η	ÚHJÍ Œ	ÞIÎÎ	ÞIÍÍ	ÞÍFÎ	ÞÍ GG	* æ•	ÊG ÊG			
HÏI	<u>ÚHJÎ</u>	ÞÍ GG	ÞÍFÎ	ÞÍFÏ	ÞÍGH	* æ•				
HÏÍ	<u>ÚHJÏ</u> ÚHJÌ	ÞÍ GH	ÞÍFÏ	ÞÍFÌ	ÞÍG	* æ•	ÊĠ ÊĠ			
HÏÎ	ÚHJJ	ÞÍG	ÞÍFÌ	ÞÍFJ	ÞÍGÍ ÞÍGÎ	* æ•	ĒĠ			
HÏÌ	Unuu Ul €€	ÞÍGÍ	ÞÍFJ ÞÍŒ	ÞÍŒ ÞÍŒ	ÞÍGÏ	* æ• * æ•	ĒĠ			
HÏJ	<u> </u>	ÞÍG	ÞÍ GF	ÞIÍF	ÞIÍH	* æ•	ĒĠ			
HÌ€	ÚIÎI	ÞÎFH	ÞÎFF	ÞÎF€	ÞÎFG	* æ•	ĒĠ			
ΗF	ÚIÎÍ	ÞÎFF	ÞÍ€J	Þ΀Ì	ÞÎF€	* æ•	ÊĠ			
HÌG	ÚLÎÎ	Þ΀J	ÞÎFÏ	ÞÎFÎ	Þ΀Ì	* æ•	ĒĠ			
HÌH	ÚLÎÏ	ÞÍFÏ	ÞÎFÌ	ÞÍŒ	ÞÍFÍ	* æ•	ÊĠ			
HÌI	ÚLÎÌ	ÞÎFÌ	ÞÎFJ	ÞÍG	ÞÍŒ	* æ•	ĒĠ			
HÌÍ	ÚIÎJ	ÞÎFJ	ÞÎŒ	ÞÎ GH	ÞÌŒ	* æ•	ĒĠ			
HÌÎ	ÚIÏ€	ÞÎŒ	ÞÎFÍ	ÞÍFI	ÞÍ GH	* æ•	ÊĠ			
ΗÏ	ÚIÏF	ÞÎHÍ	ÞÍĠÏ	ÞÎHF	ÞÎHJ	* æ•	ĒĠ			
HÌÌ	ÚIÏG	ÞÎHJ	ÞÍHF	ÞÎH€	ÞÍH	* æ•	ÊĠ			
ΗÌJ	ÚIÏH	ÞÎH	ÞÎH€	ÞÍGJ	ÞÍHÏ	* æ•	ĒĠ			
HJ€	ÚIÏI	ÞÎHÏ	ÞÍGJ	ÞÍĠ	ÞÎHÎ	* æ•	ĖĠ			
HJF	ÚIÏÍ	ÞÎHÎ	ÞÍĠ	ÞÎĠ	ÞÎHG	* æ•	ĒĠ			
HJG	ÚIÏÎ	ÞÎHG	ÞÍG	ÞÍĠ	ÞÎHH	* æ•	ĒĠ			
HJH	ÚIÏÏ	ÞÎHH	ÞÎĠ	ÞÎĠ	ÞÎH	* æ•	ĒĠ			
HJI	ÚIÏÌ	ÞÎHF	ÞÎĠÏ	ÞÎIF	ÞÎI€	* æ•	Ē Ġ			

D`UhY`Df]a Ufmi8 UhU`ff cbhjbi YXŁ

D Uny L	Of Ja Utm8 UtU f	r CDMDI YXŁ					
	Šæà^	OEÁR[ãjc	ÓÁR[ã]c	ÔÁR[ã]c	ÖÁRTáic	Tæe^¦ãæ∳	V@2&\}^••Ž∄já
HJÍ	ÚlÏJ	ÞÎI€	ÞÎÍF	ÞÍÍH	ÞÎIG	* æ•	ĒĠ
HJÎ	ÚIÌ€	ÞÎIG	ÞÎIH	ÞÎTÍ	ÞÎH	* æ•	ĒĠ
HJÏ	ÚIÌF	ÞÎH	ÞÎTÍ	ÞÎIÏ	ÞÎIÎ	* æ•	ĒĠ
HJÌ	ÚIÌG	ÞÎIÎ	ÞÎIÏ	ÞÎIJ	ÞÎIÌ	* æ•	ĒĠ
HJJ	ÚIÌH	ÞÎIÌ	ÞÎIJ	ÞÎÍF	ÞÎÍ€	* æ•	ĒĠ
I€€	ÚLÌT	ÞÎÍ€	ÞÎÍF	ÞÎFÍ	ÞÎŒ	* æ•	ĒĠ
I€F	ÚIÌÍ	ÞÎH€	ÞÎHF	ÞÎI€	ÞÎÍG	* æ•	ĒĠ
I€G	ÚIÌÎ	ÞÎÍG	ÞÎI€	ÞÎIG	ÞÎÍH	* æ•	ĒĠ
I₩	ÚIÌÏ	ÞÎÍH	ÞÎIG	ÞÎII	ÞÎÍI	* æ•	ĒĠ
I€I	ÚIÌÌ	ÞÎÍI	ÞÎH	ÞÎIÎ	ÞÎÍÍ	* æ•	ĒĠ
I€	ÚΙÌJ	ÞÎÍÍ	ÞÎIÎ	ÞĴIJ	ÞÎÍÎ	* æ•	ĒĠ
I€Î	Úl J€	ÞÎÍÎ	Þ <u>Í</u> IÌ	Þį̂Í€	ÞĴÍÏ	* æ•	ĒĠ
I€Ï	ÚI JF	ÞÎÍÏ	ÞÎÍ€	ÞĴŒ	ÞÎFJ	* æ•	ĒĠ
I€Ì	<u>Ú</u> I JG	ÞĴĢJ	ÞÎH€	ÞĴÍG	ÞĴĹÌ	* æ•	ĒĠ
l€J	<u>ÚI JH</u>	ÞÎÍÌ	ÞĴĹG	ÞĴÍH	ÞÎÍJ	* æ•	ĒĠ
IF€	<u>ÚI J</u> J	ÞĴÍJ	ÞĴÍH	ÞĴĹĮ	ÞÎ΀	* æ•	ĒĠ
1 FF	<u>ÚI JÍ</u>	ÞÎ΀	ÞĴĹĮ	ÞĴÍÍ	ÞĴĴF	* æ•	ĒĠ
I FG	<u>ÚI JÎ</u>	ÞÎÎF	ÞĴĹĹ	ÞĴĹĴ	ÞĴĴG	* æ•	ĒĠ
I FH	ÚI J <u>Ï</u>	ÞÎÎG	ÞÎÍÎ	ÞĴÍÏ	ÞĴĴH	* æ•	ĒĠ
I FI	ÚI JÌ	ÞĴÎH	ÞĴĺÏ	ÞĴĘJ	ÞĴFÌ	* æ•	ĒĠ
ΙFÍ	ήľ ΊΊ	ÞĴĠ	ÞĴĢ	ÞĴĴÌ	ÞĴĴ	* æ•	Ε̈́Q̈́
ΙĘĴ	ή́ι €€	ÞĴĴĮ	ÞĴĴÌ	ÞĴĹJ	ÞĴĴĹ	* æ•	ĒĠ
ΙĘ̈́	– ἤ €F	ÞĴĴÍ	ÞĴĹJ	Þ <u>Î</u> ΀	ÞĴĴĴ	* æ•	ĒĠ
ΙFÌ	<u>ÚÍ, €G</u>	ÞÎÎÎ	ÞĴĴ€	ÞĴĴF	ÞÎÎÏ	* æ•	ĒĠ
I FJ	ή̇ί €H	ÞÎÎÏ	ÞĴĴF	ÞĴĴG	ÞĴĴÌ	* æ•	ĒĠ
IŒ	<u> </u>	ÞÎÎÌ	ÞĴĴG	ÞĴĴH	ÞĴĴJ	* æ•	ĒĠ
IŒ	ÚÍ €Í	ÞÎÎJ	ÞÎÎH	ÞĴFÌ	ÞÎFÏ	* æ•	ĒĠ
103	ÚÍ €Î	ÞĴG	Þ <u>Î</u> GÌ	ÞÎÎI	ÞÎÏ€	* æ•	ĒĠ
IЭН	ÚÍ €Ï	ÞÎÏ€	ÞÎÎI	ÞĴĴĹ	ÞÎÏF	* æ•	ĒĠ
IG	<u>ÚÍ €Ì</u>	ÞÎÏF	ÞÎÎÍ	ÞÎÎÎ	ÞĴÏG	* æ•	ĒĠ
ΙĠ	ÚÍ €J	ÞÎÏG	ÞÎÎÎ	ÞÎÎÏ	ÞÎÏH	* æ•	ĒĠ
ΙĠ	ÚÍ F€	ÞÎÏH	ÞÎÎÏ	ÞĴĴÌ	ÞÎÏI	* æ•	ĖĠ
ΙĞ	ÚÍ FF	ÞÎÏI ÞÎÏÍ	ÞÎÎÌ ÞÎÎJ	ÞÎÎJ	ÞÎÏÍ	* æ•	ÊĠ
I Ġ	ÚÍ FG			ÞÎFÏ	Þ΀J ÞÎÏÎ	* æ•	ÊG ÊG
I GJ I H€	<u>ÚÍ</u> FH ÚÍ FI	ÞÎ GÍ ÞÎ Ï Î	ÞÎG ÞÎÏ€	<u>ÞÎÏ€</u> ÞÎÏF	ÞÍÏÏ	* æ•	ĒĠ
I HE	ÚÍ FÍ	ÞÎÏÏ	<u>P∏€</u> ÞÎÏF	ÞÍÏG	ÞÍÏÌ	* æ•	ĒĠ
IHG	ÚÍ FÎ	ÞÍÏÌ	ÞÍÏG	ÞÍÏH	ÞÍÏJ	* æ•	ÊĠ
IH	ÚÍ FÏ	ÞÎÏJ	ÞÍÏH	ÞÍÏI	ÞÎÌ€	* æ•	ĖĠ
I H	ÚÍ FÌ	ÞÎÌ€	ÞÍÏI	ÞÍÏÍ	ÞÍÌF	* æ•	ĖĠ
I H	ÚÍ FJ	ÞÍÌF	ÞÍÏÍ	ÞÍ€J	ÞÎFF	* æ•	ÊĠ
I HÎ	ÚÍ Œ	ÞÍG	ÞÎĠ	ÞÎÏÎ	ÞÍÌG	* æ•	ÊĠ
ΙΗ̈́	<u> </u>	ÞÍÌG	ÞÎÏÎ	ÞÎÏÏ	ÞÍÌH	* æ•	ĒĠ
I H	ÚÍ Œ	ÞÍÌH	ÞÍÏÏ	ÞÍÏÌ	ÞÍÌI	* æ•	ÊĠ
ΙΗ	ÚÍ ŒH	ÞÎÌI	ÞÍÏÌ	ÞÎÏJ	ÞÎÌÍ	* æ•	ĒĠ
11€	ÚÍ G	ÞÎÌÍ	ÞÎÏJ	ÞÎÌ€	ÞÎÌÎ	* æ•	ĒĠ
IIF	ÚÍ GÍ	ÞÎÌÎ	ÞÎÌ€	ÞÎÌF	ÞÍÌÏ	* æ•	ĒĠ
IIG	ÚÍ Ĝ	ÞÎÌÏ	ÞÎÌF	ÞÎFF	ÞÎFH	* æ•	ĖĠ
IIH	ÚÍ €€ Œ	ÞÎFJŒ	ÞÎ FÌ Œ	ÞÎÎJŒ	ÞÎÎÌŒ	* æ•	ĒĠ
111	ÚÍ FHÓ	ÞÍGÏŒ	ÞÎ FJŒ	ÞÎÎÌŒ	ÞÎJI	* æ•	ĖĠ
HÍ	ÚÍ Ġ Ó	ÞÎĠŒ	ÞÍGÏŒ	ÞÎJI	ÞÏ€Ï	* æ•	ĒĠ
HÎ	ÚÍHJŒ	ÞÎ GÍ Œ	ÞÍGÍŒ	ÞÏ€Ï	ÞÏG€	* æ•	ĒĠ

D`UhY`Df]a Ufm'8 UfU`ff cbh]bi YXŁ

	ja G G. G. G.	I COIJOI IAL					
	Šæà^∣	OEÁR[ãjc	ÓÁR[ãjc	ÔÁR[ã]c	ÖÁR[ã]c	Tæe^∖ãæ⊜	V@2&\}^••Ž a já
ПП	ÚÍ Í GŒ	ÞÎĠŒ	ÞÎĠŒ	ÞÏŒ	ÞÏĦĤ	* æ•	ĒĠ
HÌ	ÚÍÎÍŒ	ÞÎ GHŒ	ÞÎGŒ	ÞÏHH	ÞÏIÎ	* æ•	ĒĠ
HJ	ÚÍÏÌŒ	ÞÎ GGŒ	ÞÎ GHŒ	ÞÏIÎ	ÞÏÍJ	* æ•	ĒĠ
IÍ€	ÚÍ JFŒ	ÞÎG€Œ	ÞÎ GGŒ	ÞÏÍJ	ÞÏÏG	* æ•	ĒĠ
ΙÍΕ	ÚÎ €I Œ	ÞÎ Œ	ÞÎG€Œ	ÞÏÏG	ÞÏÌÍ	* æ•	ĒĠ
ΙÍG	ÚÎ FÏ Œ	ÞÎFJŒ	ÞÏJJ	ÞÏJÌ	ÞÎ FÌ Œ	* æ•	ĒĠ
ΙÍΗ	ÚÎ FÌ	ÞÎGÏŒ	ÞÌ€Ï	ÞÏJJ	ÞÎ FJŒ	* æ•	ĒĠ
TÍT	ÚÎ FJ	ÞÎ Œ	ÞÌ€F	ÞÌ€€	ÞÎ G€Œ	* æ•	ĒĠ
TÍÍ	ÚÎ Œ	ÞÎG€Œ	ÞÌ€€	ÞÌ€G	ÞÎ GGŒ	* æ•	ĒĠ
ΙÍÎ	ÚÎ Œ	ÞÎGGŒ	ÞÌ€G	ÞÌ€H	ÞÎ GHŒ	* æ•	ĒĠ
ΙÍΪ	ÚÎ Œ	ÞÎGHŒ	ÞÌ€H	ÞÌ€l	ÞÎGIŒ	* æ•	ĒĠ
TÍÌ	ÚÎ GH	ÞÎGŒ	ÞÌ€l	ÞÌ€Í	ÞÎĠŒ	* æ•	ĒĠ
ΙÍJ	ÚÎ G	ÞÎĠŒ	ÞÌ€Í	ÞÌ€Î	ÞÎĠŒ	* æ•	ĒĠ
I΀	ÚÎ G	ÞÍGÍŒ	ÞÌ€Î	ÞÌ€Ï	ÞÍGÏŒ	* æ•	ĒĠ
lÎF	ÚÎ Ĝ	ÞÌŒH	ÞÌŒ	ÞÌŒ	ÞÌŒ	* æ•	ĒĠ
ΙÎG	ÚÎ GÏ	ÞÌŒ	ÞÌFJ	ÞÌFÌ	ÞÌŒ	* æ•	ĒĠ
ΙÎΗ	ÚÎ Ġ	ÞÌFJ	ÞÌGÍ	ÞÌĠ	ÞÌFÌ	* æ•	ĒĠ
	ÚÎ GJ	ÞÌHH	ÞÌGJ	ÞÌĠ	ÞÌ₩€	* æ•	ĒĠ
I Î Í	ÚÎ H€	ÞÌH€	ÞÌGÎ	ÞÌĠÏ	ÞÌHF	* æ•	ĒĠ
	ÚÎ HF	ÞÌHF	ÞÌGÏ	ÞÌĠ	ÞÌHG	* æ•	ĖĠ
I Î Ï	ÚÎ HG	ÞÌGÎ	ÞÌGJ	ÞÌ H	ÞÌI€	* æ•	ÈĠ
	ÚÎ H	ÞÌI€	ÞÌH	ÞÌHÍ	ÞÌIF	* æ•	ĖĠ
ΙÎJ	ÚÎ H	ÞÌIF	ÞÌHÍ	ÞÌHÎ	ÞÌIG	* æ•	ĖĠ
IÏ€	ÚÎ H	ÞÌIG	ÞÌHÎ	ÞÌHÏ	ÞÌIH	* æ•	ĒĠ
ΙΪF	ÚÎ HÎ	ÞÌIH	ÞÌHÏ	ÞÌHÌ	ÞÌII	* æ•	ĖĠ
ΙΪG	ÚÎH	ÞÌH	ÞÌHÌ	ÞÌW	ÞÌIÍ	* æ•	ĖĠ
ΙΪΗ	ÚÎ HÌ	ÞÌIÍ	ÞÌW	ÞÌĠ	ÞÌFJ	* æ•	ĖĠ
111	ÚÎ HJ	ÞÌGÏ	ÞÌGÎ	ÞÌI€	ÞÌIÎ	* æ•	ĖĠ
ΙΪÍ	ÚÎ I€	ÞÌIÎ	ÞÌI€	ÞÌIF	ÞÌIÏ	* æ•	ĖĠ
ΙΪÎ	ÚÎTF	ÞÌIÏ	ÞÌIF	ÞÌIG	ÞÌIÌ	* æ•	ĖĠ
ΙΪΪ	ÚÎIG	ÞÌIÌ	ÞÌIG	ÞÌTH	ÞÌIJ	* æ•	ĖĠ
ΙΪÌ	ÚÎTH	ÞÌIJ	ÞÌIH	ÞÌII	ÞÌÍ€	* æ•	ĖĠ
ΙΪJ	ÚÎII	ÞÌÍ€	ÞÌII	ÞÌIÍ	ÞÌÍF	* æ•	ĚĠ
IÌ€	ÚÎTÍ	ÞÌÍF	ÞÌIÍ	ÞÌFJ	ÞÌŒ	* æ•	ĒĠ
IÌF	ÚÎ I Î	ÞÌGÌ	ÞÌĠÏ	ÞÌIÎ	ÞÌÍG	* æ•	ĒĠ
ΙÌG	ÚÎIÏ	ÞÌÍG	ÞÌIÎ	ÞÌIÏ	ÞÌÍH	* æ•	ĒĠ
ΙÌΗ	ÚÎIÌ	ÞÌÍH	ÞÌIÏ	ÞÌIÌ	ÞÌÍI	* æ•	ÈĠ
TÌI	ÚÎIJ	ÞÌÍI	ÞÌIÌ	ÞÌIJ	ÞÌÍÍ	* æ•	ĒĠ
I Ì Í	ÚΠ̀	ÞÌÍÍ	ÞÌIJ	ÞÌÍ€	ÞÌÍÎ	* æ•	ÈĠ
I Ì Î	ÚÎÍF	ÞÌÍÎ	ÞÌÍ€	ÞÌÍF	ÞÌÍÏ	* æ•	ĖĠ
I Ì Ï	ÚÎÍG	ÞÌÍÏ	ÞÌÍF	ÞÌŒ	ÞÌGH	* æ•	ĒĠ
	ÚÎΙΉ	ÞÌ€J	ÞÌ€Ì	ÞÌÍJ	ÞÌÍÌ	* æ•	ĒĠ
ΙÌJ	ÚÎÍI	ÞÌÍÌ	ÞÌÍJ	ÞÌÌF	ÞÌ΀	* æ•	ĒĠ
IJ€	ÚÌÍ	ÞÌ΀	ÞÌÍF	ÞÌÌH	ÞÌÌG	* æ•	ĒĠ
I JF	ÚÎÍÎ	ÞÌÎG	ÞÌÍH	ÞÌÌÍ	ÞÌÌI	* æ•	ĒĠ
I JG	ÚÎΪ́	ÞÌÌI	ÞÌÌÍ	ÞÌÌÏ	ÞÌÌÌ	* æ•	ĒĠ
I JH	ÚÎÍÌ	ÞÌÌÌ	ÞÌÌÏ	ÞÌĴJ	ÞÌÌÌ	* æ•	ĒĠ
I JI	ÚÎÍJ	ÞÌÌÌ	ÞÌÎJ	ÞÌÏF	ÞÌÏ€	* æ•	ĒĠ
I JÍ	ÚÎ΀	ÞÌÏ€	ÞÌÏF	ÞÌΪΗ	ÞÌÏG	* æ•	ĒĠ
I JÎ	ÚÎÎF	ÞÌÏG	ÞΪΪΗ	ÞÌÏÍ	ÞÌÏI	* æ•	ĒĠ
ΙJΪ	ÚÎÎG	ÞÌÏI	ÞÌÏÍ	ÞÌÏÏ	ÞÌÏÎ	* æ•	ĒĠ
I JÌ	ÚÎÎH	ÞÌÏÎ	ÞÌÏÏ	ÞÌÏJ	ÞÌÏÌ	* æ•	ĒĠ

D`UhY`Df]a Ufm'8 UfU`ff cbh]bi YXŁ

<u> </u>	· ja Cillio Cib li	I COIJOI IAL					
	Šæèn^∣	OEÁR[ãjc	ÓÁR[ãjc	ÔÁR[ã]c	ÖÁR[ã]c	Tæe^∖ãæ	V@2&\}^••Ž a já
I JJ	ÚÎÎİ	þÌÏÌ	ÞÌÏJ	ÞÌÌF	ÞÌÌ€	* æ•	ĒĠ
Í€€	ÚÎÎÍ	ÞÌÌ€	ÞÌÌF	ÞÌÌH	ÞÌÌG	* æ•	ĒĠ
Í∉F	ÚÎÎÎ	ÞÌÌG	ÞÌÌH	ÞÌG	ÞÌĠ	* æ•	ĒĠ
Í€G	ÚÎÎÏ	ÞÌFÏ	ÞÌ€J	ÞÌÍÌ	ÞÌÌI	* æ•	ĒĠ
Í⊕H	ÚÎÎÌ	þÌÌI	ÞÌÍÌ	ÞÌ΀	ÞÌÌÍ	* æ•	ĒĠ
Í€	ÚÎÎJ	þÌÌÍ	ÞÌ΀	ÞÌÎG	þÌÌÍ	* æ•	ĒĠ
Í€	ÚÎÏ€	ÞÌÌÎ	ÞÌÎG	ÞÌÌI	ÞÌÌÏ	* æ•	ĒĠ
Í€Î	ÚÎÏF	ÞÌÌÏ	ÞÌÌI	ÞÌÌÌ	ÞÌÌÌ	* æ•	ĒĠ
Í∰	ÚÎ Ï G	ÞÌÌÌ	ÞÌÌÌ	ÞÌÌÌ	ÞÌÌJ	* æ•	ĖĠ
Í€Ì	ÚΪΗ	ÞÌÌJ	ÞÌÌÌ	ÞÌÏ€	ÞÌJ€	* æ•	ĖĠ
ĺ€J	ÚÎ Ï I	ÞÌJ€	ÞÌÏ€	ÞÌÏG	ÞÌJF	* æ•	ĒĠ
ÍF€	ÚÎÏÍ	ÞÌJF	ÞÌÏG	ÞÌÏI	ÞÌJG	* æ•	ĖĠ
ÍFF	ÚÎ ÏÎ	ÞÌJG	ÞÌÏI	ÞÌÏÎ	ÞÌJH	* æ•	ĒĠ
ÍFG	ÚÎÏÏ	ÞÌJH	ÞÌÏÎ	ÞÌÏÌ	ÞÌJI	* æ•	ĒĠ
ÍFH	ÚÎ ÏÌ	ÞÌJI	ÞÌÏÌ	ÞÌÌ€	ÞÌJÍ	* æ•	ĒĠ
ÍFI	ÚÎÏJ	ÞÌJÍ	ÞÌÌ€	ÞÌÌG	ÞÌJÎ	* æ•	ĒĠ
ÍFÍ	ÚÎÌ€	ÞÌJÎ	ÞÌÌG	ÞÌ GÍ	ÞÌ HJ	* æ•	ĒĠ
ÍFÎ	ÚÎÌF	ÞÌFÎ	ÞÌFÏ	ÞÌÌI	ÞÌJÏ	* æ•	ĒĠ
ÍFÏ	ÚÎ Ì G	ÞÌJÏ	ÞÌÌI	ÞÌÌÍ	ÞÌJÌ	* æ•	ĒĠ
ÍFÌ	ÚÎÌH	ÞÌJÌ	ÞÌÌÍ	ÞÌÌÎ	ÞÌJJ	* æ•	ÊĠ
ÍFJ	ÚÎÌI	ÞÌJJ	ÞÌÌÌ	ÞÌÌÏ	ÞJ€€	* æ•	ĒĠ
ÍŒ	ÚÎÌÍ	ÞJ€€	ÞÌÌÏ	ÞÌÌÌ	ÞJ€F	* æ•	ĒĠ
ÍŒ	ÚÎÌÎ	ÞJ€F	ÞÌÌÌ	ÞÌÌJ	ÞJ€G	* æ•	ĒĠ
íŒ	ÚÎÌÏ	ÞJ€G	ÞÌÌJ	ÞÌJ€	ÞJ€H	* æ•	ĒĠ
ÍН	ÚÎÌÌ	ÞJ€H	ÞÌJ€	ÞÌ JF	ÞJ€I	* æ•	ĒĠ
ÍG	ÚÎÌJ	ÞJ€l	ÞÌJF	ÞÌJG	ÞJ€Í	* æ•	ĒĠ
ÍĠ	ÚÎ J€	ÞJ€Í	ÞÌJG	ÞÌ JH	ÞJ€Î	* æ•	ÊĠ
ÍĜ	ÚÎ JF	ÞJ€Î	ÞÌJH	ÞÌJI	ÞJ€Ï	* æ•	ĒĠ
ÍĞ	ÚÎ JG	ÞJ€Ï	<u>PIJH</u> ÞÍJI	ÞÌJÍ	ÞJ€Ì	* æ•	ÊĠ
ÍĠ	ÚÎ JH	ÞJ€Ì	ÞÌJÍ	ÞÌJÎ	ÞJ€J	* æ•	ÊĠ
ÍGJ	ÚÎ JI	ÞJ€J	ÞÌJÎ	D) HJ	ÞÌHÌ	* æ•	ĒĠ
ÍH€	ÚÎ JÍ	ÞÌ FÍ	ÞÌ FÎ	ÞÌJÏ	ÞJF€	* æ•	ĒĠ
ÍHF	ÚÎ JÎ	ÞJF€	<u>Piri</u> ÞÍJÍ	ÞÌJÌ	ÞJFF		ĒĠ
ÍHG	ÚÎ JÏ	ÞJFF	ÞÌJÌ	ÞÌJJ	ÞJFG	* æ•	ÊĠ
ÍН	ÚÎ JÌ	ÞJFG		ÞJ€€	ÞJFH		ĒĠ
ÍH	ÚÎ JJ		<u>ÞÌJJ</u> ÞJ€€	ÞJ€F		* æ•	ĒĠ
ÍH	Ui 33 Uï €€	ÞJFH ÞJFI	ÞJ€€ ÞJ€F	ÞJ€F ÞJ€G	ÞJFÍ ÞJFÍ	* æ•	ĒĠ
ÍĤ	Uï €E	ÞJFÍ	ÞJ€F ÞJ€G	ÞJ€G	ÞJFÍ	* æ•	ÊĠ
ÍÄ	<u>Ui €</u> G	ÞJFÍ	<u>PJ€G</u> ÞJ€H	ÞJ€H	ÞJFÏ	* æ•	ĒĠ
ÍÀ	<u> </u>	ÞJFÏ	ÞJ€H ÞJ€I	ÞJ€Í	ÞJFÌ	* æ•	ĒĠ
ÍΗ	<u>Ui €1</u>	ÞJFÌ	<u>PJ€l</u> ÞJ€Í	ÞJ€Î	ÞJFJ	* æ•	ĒĠ
ÍI€	Ui €	ÞJFJ	ÞJ€Î	ÞJ€Ï	ÞJG€	* æ•	ĖĠ
ÍIF	<u>Ui €</u>	ÞJ€	<u>PJە</u> ÞJ€Ï	ÞJ€i	₽JŒ	* æ•	ĒĠ
ÍIG	Ui €i	₽JŒ	ÞJ€Ì	ÞJ€J	ÞJGF	* æ•	ĖĠ
ÍIH	<u>UI €</u>			ÞÌHÌ	ÞÌHÏ		ĒĠ
_	Ui €J	ÞJGG ÞÌFI	ÞJ€J ÞÌFÍ	ÞJF€		* æ•	ĒĠ
	<u>UI €J</u> ÚÏ F€				ÞJGH	* æ•	
		ÞJGH	ÞJF€	ÞJFF	ÞJG	* æ•	ĒĠ
	ÚÏ FF	ÞJG	ÞJFF	ÞJFG	ÞJG	* æ•	<u>ĒĠ</u>
ÍIÏ	ÚÏ FG	ÞJG	ÞJFG	ÞJFH	ÞJG	* æ•	ÊĠ
ÍIÌ	<u>ÚÏ FH</u>	ÞJG	ÞJFH	ÞJFI	ÞJG	* æ•	ÊĠ
ÍIJ	<u>ÚÏ FI</u>	ÞJĞ	ÞJFI	ÞJFÍ	ÞJG	* æ•	<u>Ē</u> G
ÍÍ€	ÚÏ FÍ	ÞJĠ	ÞJFÍ	ÞJFÎ	ÞJGJ	* æ•	ĒĠ

D`UhY'Df]a Ufm'8 UhU'fl' cbhjbi YXŁ

D'UNY Df ja Ulimi8 UNU fil cbhjbi YXŁ									
	Šæà^	OEÁR[ãjc	ÓÁR[ã]c	ÔÁR[ã]c	ÖÁR[ã]c	Tæe^\lãee	V@2&\}^••Žajá		
ÍÍF	ÚÏ FÎ	ÞJGJ	ÞJFÍ	ÞJFÏ	ÞJH€	* æ•	ÊĠ		
ÍÍG	ÚÏ FÏ	ÞJH€	ÞJFÏ	ÞJFÌ	ÞJHF	* æ•	ĖĠ		
ÍÍH	ÚÏ FÌ	ÞJHF	ÞJFÌ	ÞJFJ	ÞJHG	* æ•	ĖĠ		
ÍÍI	ÚÏ FJ	ÞJHG	ÞJFJ	ÞJŒ	ÞJHH	* æ•	ĒĠ		
111	ÚÏ Œ	ÞJHH	ÞJG€	ÞJŒ	ÞJH	* æ•	ĒĠ		
ÍÍÌ	ÚÏ Œ	ÞJH	ÞJŒ	ÞJŒ	ÞJHÍ	* æ•	ĒĠ		
ÍÍÏ	ÚÏ Œ	ÞJHÍ	ÞJŒ	<u> </u>	ÞÌHÎ	* æ•	ĒĠ		
ÍÍÌ	ÚÏ ŒH	ÞÌ FH	ÞÌFI	ÞJGH	ÞJHÎ	* æ•	ÊĠ		
ÍÍJ	ÚÏ G	ÞJHÎ	ÞJGH	ÞJG	ÞJHÏ	* æ•	ĒĠ		
Í΀	ÚÏ GÍ	ÞJHÏ	ÞJG	ÞJGÍ	ÞJHÌ	* æ•	ĒĠ		
ÍÎF	ÚÏ GÎ	ÞJHÌ	ÞJGÍ	ÞJG	ÞJHJ	* æ•	ĒĠ		
ÍÎG	ÚÏĠ	ÞJHJ	ÞJG	ÞJGÏ	ÞJI€	* æ•	ÊĠ		
ÍÎH	ÚÏ Ġ	ÞJI€	ÞJGÏ	ÞJG ÞJG	ÞJI F	* æ•	ÊĠ		
	ÚÏ GJ	ÞJI F	ÞJG	ÞJGJ	ÞJI G	* æ•	ÊĠ		
ÍÎÍ	<u>UÏ H€</u>	ÞJI G	ÞJGJ	<u>PJ₩</u> ÞJH€	ÞJI H	* æ•	ÊĠ		
ÍÎÎ	ÚÏHF	ÞJI H	ÞJH€	ÞJHF	ÞJH	* æ•	ÊĠ		
ÍÎÏ	ÚÏ HG	ÞJH	ÞJHF	ÞJHG	ÞJI Í	* æ•	ĒĠ		
ÍÌÌ	ÚÏ HI	ÞJIÍ	ÞJHG	ÞJHH	ÞJI Î	* æ•	ÊĠ		
ÍÎJ	ÚÏ H	ÞJI Î	ÞJHH	ÞJH	ÞJI Ï	* æ•	ÊĠ		
ÍÏ€	ÚÏ H	ÞJIÏ	ÞJH	ÞJHÍ	ÞJI Ì	* æ•	ÊĠ		
ÍÏF	ÚÏH	ÞJI Ì	ÞJHÍ	ÞÌ HÎ	ÞÌHÍ	* æ•	ÊĠ		
ÍÏG	ÚÏ H	ÞÌFG	ÞÌ FH	ÞJHÎ	ÞJI J	* æ•	ÊĠ		
ÍÏH	ÚÏH	ÞJI J	ÞJHÎ	ÞJHÏ	ÞJÍ €	* æ•	ÊĠ		
ÍÏI	ÚÏHJ	ÞJÍ €	ÞJHÏ	ÞJH	ÞJÍ F	* æ•	ÊĠ		
111	ÚÏ I €	ÞJÍ F	ÞJHÌ	ÞJHJ	ÞJÍ G	* æ•	ÊĠ		
ÍÏÎ	ÚÏIF	ÞJÍ G	ÞJHJ	ÞJI €	ÞJÍ H	* æ•	ÊĠ		
	ÚÏIG	ÞJÍ H	ÞJI€	ÞJI F	ÞJÍ I	* æ•	ÊĠ		
ÍÏÌ	ÚÏTH	ÞJÍ I	ÞJI F	ÞJI G	ÞJÍÍ	* æ•	ÊĠ		
ÍÏJ	ÚÏII	ÞJÍ Í	ÞJI G	ÞJI H	ÞJÍ Î		ÊĠ		
ĺÌ€	ÚÏTÍ	ÞJÍ Î	ÞJI H	ÞJI I	ÞJÍ Ï	* æ• * æ•	ÊĠ		
ĺÌF	ÚÏIÎ	ÞJÍÏ	ÞJI I	ÞJI Í	ÞJÍ Ì		ÊĠ		
ÍÌG	ÚÏIÏ	ÞJÍÌ	ÞJIÍ	ÞJI Î	ÞJÍ J	* æ• * æ•	ÊĠ		
ĺΗ	ÚÏIÌ	ÞJÍ J	ÞJI Î	ÞJI Ï	ÞJÎ €		ÊĠ		
	ÚÏIJ	ÞJÎ €	ÞJI Ï	PJI Ì	ÞJÎ F	* æ•	ÊĠ		
	ÚÏÍ€	ÞJÎ F	ÞJI Ì	ÞÌ HÍ	ÞÌH	* æ• * æ•	ÊĠ		
	ÚÏÍF	ÞÌF€	ÞÌFG	ÞJI J	ÞJÎ G	* æ•	ÊĠ		
	ÚÏÍG	ÞJÎ G	ÞJI J	ÞJÍ €	ÞJÎ H	* æ•	ĒĠ		
	ÚÏÍH	ÞJÎ H	ÞJÍ €	ÞJÍ F	ÞJÍ I	* æ•	ÊĠ		
ÍÌJ	ÚÏÍI	ÞJÍ I	ÞJÍ F	ÞJÍ G	ÞJÍ Í	<u>*</u> æ•	ÊĠ		
ÍJ€	ÚÏÍÍ	ÞJÍ Í	ÞJÍ G	ÞJÍ H	ÞJÍ Î	 * æ•	ÈĠ		
ÍJF	ÚÏÍÎ	ÞJÎ Î	ÞJÍ H	ÞJÍ I	ÞJÍÏ	* æ•	ÊĠ		
ÍJG	ÚÏÍÏ	ÞJÍÏ	ÞJÍI	ÞJÍ Í	ÞJÍ Ì	* æ•	ÊĠ		
	ÚÏÍÌ	ÞJÍ Ì	ÞJÍ Í	ÞJÍ Î	ÞJÍ J	* æ•	ÊĠ		
Í JH Í JI	ÚÏÍJ	ÞJÍ J	ÞJÍ Î	ÞJÍ Ï	ÞJÏ€	* æ• * æ•	ĒĠ		
Í JÍ	<u>UIIJ</u> ÚÏ΀	ÞJÏ €	ÞJÍ Ï	PJI I	ÞJÏ F	* æ•	ĒĠ		
ÍJÎ	<u>Ui î F</u>	ÞJÏ F	ÞJÍ Ì	ÞJÍ J	ÞJÏ G		ĒĠ		
ÍJÏ	ÚÏÎG			ÞJÍ €	ÞJÏ H	* æ•	ĒĠ		
ÍJÌ	ÚÏ Î H	ÞJÏ G ÞJÏ H	ÞJÍ J ÞJÎ €	PJI € ÞJÎ F	ÞJÏ I	* æ• * æ•	ĒĠ		
	<u> </u>	ÞJÏ I	ÞJÎ F	<u>PJIF</u> ÞÌH	ÞÌG		ĒĠ		
ÍJJ	ÚÏÎÍ	ÞÌ FF	PJI F ÞÌ F€	ÞJÎ G	ÞJÏ Í	* æ• * æ•	ĒĠ		
Î∉€	<u> </u>	ÞJÏ Í	PIF€ ÞJÎ G	<u>PJI G</u> ÞJÎ H	PJI Î	<u> </u>	ĖĠ		
Î∉G							ĒĠ		
1 #G	ÚÏÎÏ	ÞJÏÎ	ÞJÎ H	ÞJÎ I	ÞJÏÏ	* æ•	I II G		



D`UhY'Df]a Ufm8 UhU'ff cbh]bi YXŁ

D UIT L	<i>T ja Utme Unu t</i>	r Corjoi TAL					
	Šæà^	OEÁR[ã]c	ÓÁR[ã]c	ÔÁR[ã]c	ÖÁR[ã]c	Tæe∿¦ãæe	V@2&\}^••Žajá
Î₩	ÚΪÎÌ	ÞJÏÏ	ÞJÍ Í	ÞJÎÍ	ÞJÏÌ	* æ•	ĒĠ
΀	ÚΪÎJ	ÞJÏÌ	ÞJÍÍ	ÞJÎÎ	ÞJÏ J	* æ•	ĒĠ
΀	ÚÏÏ€	ÞJÏ J	ÞJÎ Î	ÞJÎ Ï	ÞJÌ€	* æ•	ĖĠ
΀Î	ÚÏÏF	ÞJÌ€	ÞJÍÏ	ÞJÎÌ	ÞJÌF	* æ•	ĖĠ
ÎË	ÚÏ Ï G	ÞJÌ F	ÞJÎ Ì	ÞJÎ J	ÞJÌ G	* æ•	ĖĠ
ÎÈ	ÚÏÏH	ÞJÌ G	ÞJÎ J	ÞJÏ€	ÞJÌ H	* æ•	ĖĠ
΀J	ÚÏÏI	ÞJÌ H	ÞJÏ €	ÞJÏ F	ÞJÌ I	* æ•	ĖĠ
ÎF€	ÚÏÏÍ	ÞJÌ I	ÞJÏ F	ÞJÏ G	ÞJÌÍ	* æ•	ĖĠ
ÎFF	ÚÏÏÎ	ÞJÌÍ	ÞJÏ G	ÞJÏ H	ÞJÌ Î	* æ•	ÈĠ
ÎFG	ÚÏÏÏ	ÞJÌ Î	ÞJÏ H	ÞJÏ I	ÞJÌÏ	* æ•	ĖĠ
ÎFH	ÚÏÏÌ	ÞJÌÏ	<u> </u>	ÞÌGJ	ÞÌHH	* æ•	ĒĠ
ÎFI	ÚÏÏJ	ÞÌ€J	ÞJÌ J	ÞJÌ Ì	ÞÌ€Ì	* æ•	ĒĠ
ÎĦ	<u> </u>	ÞÌFÏ	ÞJJÏ	ÞJÌ J	ÞÌ€J	* æ•	ĒĠ
ÎĤ	ÚÏÌF	ÞÌFF	ÞJJF	ÞJJ€	ÞÌF€	* æ•	ĒĠ
ÎË	ÚÏÌG	ÞÌF€	ÞJJ€	ÞJJG	ÞÌFG	* æ•	ĒĠ
ÎÈ	ÚÏÌH	ÞÌFG	ÞJJG	ÞJJH	ÞÌFH	* æ•	ĒĠ
ÎFJ	ÚÏÌI	ÞÌFH	ÞJJH	ÞJJI	ÞÌFI	* æ•	ĒĠ
ÎŒ	ÚÏÌÍ	ÞÌFI	ÞJJI	ÞJJÍ	ÞÌFÍ	* æ•	ĒĠ
ÎŒ	ÚÏÌÎ	ÞÌFÍ	ÞJJÍ	ÞJJÎ	ÞÌFÎ	* æ•	ĒĠ
ÎŒ	ÚÏÌÏ	ÞÌFÎ	ÞJJÎ	ÞJJÏ	ÞÌFÏ	* æ•	ĒĠ
ÎОН	ÚÎ Í HŒ	ÞÌ€F	ÞÌ GÌ Œ	ÞÌ H€Œ	ÞÌ€€	* æ•	ĒĠ
ÎG	ÚÎÍIŒ	ÞÌĠŒ	ÞÌ GJŒ	ÞÌ HFŒ	ÞÌ H€Œ	* æ•	ĒĠ
ÎĠ	ÚÎÍÍŒ	ÞÌ GJŒ	ÞÎH	ÞÍ GÎ	ÞÌ HFŒ	* æ•	ĒĠ
ÎĜ	ÚÎÍÍÓ	ÞÌ€€	ÞÌH€Œ	ÞÌ HŒ	ÞÌ€G	* æ•	ĒĠ
ÎĞ	ÚÎÍÎŒ	ÞÌ H€Œ	ÞÌ HFŒ	ÞÌ HHŒ	ÞÌ HŒ	* æ•	ĒĠ
ÎĠ	ÚÎÍÏŒ	ÞÌ HFŒ	ÞÎ GÎ	ÞÍÌG	ÞÌ HHŒ	* æ•	ĒĠ
ÎGJ	ÚÎÍÏÓ	ÞÌ€G	ÞÌ HŒ	ÞÌ HI Œ	ÞÌ€H	* æ•	ĖĠ
ÎH€	ÚÎÍÌŒ	ÞÌ HŒ	ÞÌ HHŒ	ÞÌ HÍ Œ	ÞÌ HI Œ	* æ•	ĒĠ
ÎH	ÚÎÍJŒ	ÞÌ HHŒ	ÞÎÌG	ÞÍÌH	ÞÌ HÍ Œ	* æ•	ĖĠ
ÎHG	ÚÎÍJÓ	ÞÌ€H	ÞÌ HI Œ	ÞÌHÎŒ	ÞÌ€l	* æ•	ĒĠ
ÎН	ÚÎ΀Œ	ÞÌ HI Œ	ÞÌ HÍ Œ	ÞÌ HÏ Œ	ÞÌ HÎ Œ	* æ•	ĖĠ
ÎН	ÚÎ Î FŒ	ÞÌHÍŒ	ÞÎÌH	ÞÍÌI	ÞÌ HÏ Œ	* æ•	ĖĠ
ÎH	ÚÎ Î FÓ	ÞÌ€	ÞÌHÎŒ	ÞÌ HÌ Œ	ÞÌ€Í	* æ•	ÈĠ
ÎĤ	ÚÎ Î GŒ	ÞÌHÎŒ	ÞÌ HÏ Œ	ÞÌ HJŒ	ÞÌ HÌ Œ	* æ•	ĖĠ
ÎН	ÚÎ Î HŒ	ÞÌ HÏ Œ	ÞÎÌI	ÞÎÌÍ	ÞÌ HJŒ	* æ•	ĖĠ
ÎÀ	ÚÎ Î HÓ	ÞÌ€Í	ÞÌHÌŒ	ÞÌI€Œ	ÞÌ€Î	* æ•	ĖĠ
ÎHJ	ÚÎÎIŒ	ÞÌHÌŒ	ÞÌHJŒ	ÞÌ I FŒ	ÞÌI € Œ	* æ•	ĖĠ
ÎI€	ÚÎÎÍŒ	ÞÌHJŒ	ÞÎÌÍ	ÞÎÌÎ	ÞÌIFŒ	* æ•	ĖĠ
ÎIF	ÚÎÎÍÓ	ÞÌ€Î	ÞÌI€Œ	ÞÌIŒ	ÞÌ€Ï	* æ•	ĖĠ
ÎIG	ÚÎÎŒ	ÞÌI€Œ	ÞÌIFŒ	ÞÌ I HŒ	ÞÌ I Œ	* æ•	ĖĠ
ÎIH	ÚÎÎÏŒ	ÞÌIFŒ	þĺÌÍ	ÞÎÌÏ	ÞÌIHŒ	* æ•	ĒĠ
ÎH	ÚÎÎÏÓ	ÞÌ€Ï	ÞÌIŒ	ÞÌIIŒ	ÞÏJJ	* æ•	ĒĠ
ÎlÍ	ÚÎ Î ÌŒ	ÞÌIŒ	ÞÌIHŒ	ÞÌIÍŒ	ÞÌIIŒ	* æ•	ĖĠ
ÎIÎ	ÚÎĴJŒ	ÞÌIHŒ	ÞÎÌÏ	ÞÎFH	ÞÌIÍŒ	* æ•	ĒĠ
ÎIÏ	ÚÎÎJÓ	ÞÏJJ	ÞÌIIŒ	ÞÌIÎŒ	ÞÏJÌ	* æ•	ĒĠ
ÎIÌ	ÚÎ Ï €Œ	ÞÌIIŒ	ÞÌIÍŒ	ÞÌIÏŒ	ÞÌIÎŒ	* æ•	ĖĠ
ÎIJ	ÚÎ Ï FÓ	ÞÌIÍŒ	ÞÎFH	ÞÎFG	ÞÌIÏŒ	* æ•	ĖĠ
ÎÍ€	ÚÎ Ï GŒ	ÞĤÍ	ÞÌIÎÓ	ÞÌIÏÓ	ÞĤI	* æ•	ĖĠ
ÎÍF	ÚÎ Ï HŒ	ÞĤÍ	ÞÌIÏÓ	ÞH G		* æ•	ĒĠ
ÎÍG	ÚÎ Ï HÓ	ÞHF	ÞĤÌ	ÞÌIÌŒ	ÞHÍ€	* æ•	ĒĠ
ÎÍH	ÚÎÏIŒ	ÞHÍ€	ÞÌIÌŒ	ÞÌIJŒ	ÞHJ	* æ•	ÈĠ
ÎÍI	ÚÎÏÍŒ	ÞÌIJŒ	ÞÌIÌŒ	ÞHÍ	ÞHI	* æ•	ĒĠ



D`UhY`Df]a Ufmi8 UhU`ff cbhjbi YXŁ

<u>D'UHY I</u>	D'Uny Df ja Ufm8 Unu ff cbhjbi YXŁ									
	Šæè^	OEÁR[ã]c	ÓÁR[ã]c	ÔÁR[ã]c	ÖÁR[ã]c	Tæe^¦ãæe	V@2&∖}^•• Ž ajá			
ÎÍÍ	ÚÎÏÎŒ	ÞÌIÌŒ	ÞĤÌ	ÞHÎ	ÞHÍ	* æ•	ĒĠ			
ÎÍÎ	ÚÎ Ì Œ	ÞÍJ	ÞÌÍFÓ	ÞÌÍŒÓ	ÞĤ€	* æ•	ĒĠ			
ÎÍÏ	ÚÎÌHŒ	ÞÌÍFÓ	ÞHH Œ	Þ H Í	ÞÌÍŒÓ	* æ•	ĒĠ			
ÎÌ	ÚÎ Ì HÓ	ÞĤ€	ÞÌÍGÓ	ÞÌÍ HŒ	ÞĤÍ	* æ•	ĖĠ			
ÎÍJ	ÚÎÌIŒ	ÞÌÍŒÓ	ÞHÍ	Þ HÍ	ÞÌÍ HŒ	* æ•	ĒĠ			
îî€	ÚÌÌIÓ	ÞHÏ	ÞÌÍIŒ	ÞÌÍ HŒ	ÞHÍ	* æ•	ÊĠ			
ÎÎF	ÚÌÌÍŒ	ÞÌÍIŒ	ÞÌIÍÓ	ÞĤ Í	ÞÌÍHŒ	* æ•	ĒĠ			
ÎÎG	ÚÌÌÔŒ	ÞHF	ÞÌÍÎŒ	ÞÌÎ € Œ	ÞHÏ	* æ•	ĒĠ			
ÎÎH	ÚÌÌÏŒ	ÞÌÍÎŒ	ÞÌÍÏŒ	ÞÌÎ FŒ	ÞÌ΀Œ	* æ•	ĒĠ			
ÎÎI	ÚÎÌÌŒ	ÞÌÍÏŒ	ÞÌÍÌŒ	ÞÌÎ Œ	ÞÌÎFŒ	* æ•	ĒĠ			
ÎÎÍ	ÚÎÌJŒ	ÞÌÍÌŒ	ÞÌÍJŒ	ÞÌÎHŒ	ÞÌÎ Œ	* æ•	ĒĠ			
ÎÎÎ	ÚÎ J€Œ	ÞÌÍJŒ	ÞНН	ÞHG	ÞÌÎHŒ	* æ•	ĒĠ			
îîï	ÚÎ J€Ó	ÞÌTÍÓ	ÞÌÎIŒ	ÞÌÎÌŒ	ÞÌIÏÓ	* æ•	ĒĠ			
ÎÎÌ	ÚÎ JFŒ	ÞÌÎIŒ	ÞÌÍÍŒ	ÞÌÎJŒ	ÞÌÎÌŒ	* æ•	ĒĠ			
ÎÎJ	ÚÎ JŒ	ÞÌÎÍŒ	ÞÌÎÎŒ	ÞÌÏ € Œ	ÞÌÎJŒ	* æ•	ĒĠ			
ÎÏ€	ÚÎ JHŒ	ÞÌÎÎŒ	ÞÌÎÏŒ	ÞÌÏ FŒ	ÞÌÏ€Œ	* æ•	ĒĠ			
ÎÏF	ÚÎ JI Œ	ÞÌÎÏŒ	ÞĤ H	ÞÌÍ Œ	ÞÌÏ FŒ	* æ•	ĒĠ			
ÎÏG	ÚÎ JI Ó	ÞÌIÏÓ	ÞÌÎÌŒ	ÞÌÏŒ	ÞH G	* æ•	ĒĠ			
ÎΪΗ	ÚÎ JÍ Œ	ÞÌÎÌŒ	ÞÌÎJŒ	ÞÌÏ HŒ	ÞÌÏŒ	* æ•	ĒĠ			
ÎÏI	ÚÎ JÎ Œ	ÞÌÎJŒ	ÞÌÏ € Œ	ÞÌÏIŒ	ÞÌÏ HŒ	* æ•	ĒĠ			
ÎÏÍ	ÚÎ JÏ Œ	ÞÌÏ € Œ	ÞÌÏ FŒ	ÞÌÏÍŒ	ÞÌÏIŒ	* æ•	ĒĠ			
ÎÏÎ	ÚÎ JÌŒ	ÞÌÏ FŒ	ÞÌÍ Œ	ÞÁ H	ÞÌÏÍŒ	* æ•	ĒĠ			
ÎÏÏ	ÚÎ JÌ Ó	ÞH G	ÞÌÏ Œ	ÞÌÏÍŒ	ÞĤÌŒ	* æ•	ĒĠ			
ÎÏÌ	ÚÎ JJŒ	ÞÌÏŒ	ÞÌÏ HŒ	ÞÌÏÏŒ	ÞÌÏÎŒ	* æ•	ĒĠ			
ÎÏJ	ÚÏ €€ Œ	ÞÌÏ HŒ	ÞÌÏIŒ	ÞÌÏÌŒ	ÞÌÏÏŒ	* æ•	ĒĠ			
ĵì€	<u>ÚÏ €</u> FŒ	ÞÌÏIŒ	ÞÌÏÍŒ	ÞÌÏJŒ	ÞÌÏÌŒ	* æ•	ĒĠ			
ÎÌF	ÚÏ €GŒ	ÞÌÏÍŒ	ÞHH	ÞÌÍ FŒ	ÞÌÏJŒ	* æ•	ĒĠ			
ĴÌG	ÚÏ €GÓ	ÞĤÌŒ	ÞÌÏĴŒ	ÞÌÌ€Œ	ÞĦÏ	* æ•	ĒĠ			
ÎÌH	ÚÏ €HŒ	ÞÌÏĴŒ	ÞÌÏÏŒ	ÞÌÌ FŒ	ÞÌÌ€Œ	* æ•	ĒĠ			
ÎÌI	ÚÏ € Œ	ÞÌÏÏŒ	ÞÌÏÌŒ	ÞÌÌ Œ	ÞÌÌ FŒ	* æ•	ĒĠ			
ÎÌÍ	ÚÏ €Í Œ	ÞÌÏÌŒ	ÞÌÏJŒ	ÞÌÌḤŒ	ÞÌÌ Œ	* æ•	ĒĠ			
ÎÌÎ	ÚÏ €Î Œ	ÞÌÏJŒ	ÞÌÍ FŒ	ÞĦÌ	ÞÌÌ HŒ	* æ•	ĒĠ			
ÎÌÏ	ÚÏ €Î Ó	ÞHÏ	ÞÌ΀Œ	ÞÌÌJŒ	ÞĮĮIŒ	* æ•	ĒĠ			
ÎÌÌ	ÚÏ €Ĭ Œ	ÞÌ΀Œ	ÞÌĴ FŒ	ÞÌÌÍŒ	ÞÌÌJŒ	* æ•	ĒĠ			
ÎÌJ	ÚÏ €Ì Œ	ÞÌĴFŒ	ÞÌĴ Œ	ÞÌÌÎŒ	ÞÌÌÍŒ	* æ•	ĒĠ			
ĴJ€	ŲΪ€JŒ	ÞÌĴŒ	ÞÌÎ HŒ	ÞĴĴĴŒ	ÞÌÌĴŒ	* æ•	ĘĠ			
ÎJF	ŲΪ F€Œ	ÞÌĴ HŒ	ÞНG	ÞĴĹĺŒ	ÞÍJÏŒ	* æ•	Ēġ			
ÎJG	ÚÏ F€Ó	ÞÍÍIŒ	ÞÍÍIŒ	ÞÌĴĮŒ	ÞÌIÎÓ	* æ•	ĒĠ			
ÎJH	<u>ÚÏ FFŒ</u>	ÞÌÌIŒ	ÞÌÌÍŒ	ÞÌĴÍŒ	ÞÌĴĮŒ	* æ•	ĒĠ			
ÎJI	ÚÏ FŒ	ÞÌÌÍŒ	ÞÌÌÎŒ	ÞÌĴĴŒ	ÞÌĴÍŒ	* æ•	ĒĠ			
ÎJÍ	ÚÏ FHŒ	ÞÌÌÎŒ	ÞÌÌÏŒ	ÞÌĴÏŒ	ÞÌÌÎŒ	* æ•	ĒĠ			
ÎJÎ	ÚÏ FIŒ	ÞÌÌÏŒ	ÞÌÍÍŒ	ÞĤH	ÞÌĴÏŒ	* æ•	ĒĠ			
ÎJÏ	<u>ÚÏ FI Ó</u>	ÞÌJIŒ	ÞÌJ€Œ	ÞÌ JFŒ	ÞÌ JÍ Œ	* æ•	ĒĠ			
ÎJÌ	ÚÏ FÍ Œ	ÞÌJÍŒ	ÞÌ JFŒ	ÞÌÌ JŒ	ÞÌ JHŒ	* æ•	ĒĠ			
ÎJJ	<u>ÚÏ FÎ Œ</u>	ÞÍ JHŒ	ÞÌÌ JŒ	ÞÌÌÌŒ	ÞÌ JŒ	* æ•	ÊG ÊG			
Ï€	<u>ÚÏ ŒŒ</u> ÚÏ ŒŒ	ÞÌJ€Œ ÞJ€€Œ	ÞJ€€Œ ÞJ€FŒ	ÞJ€ÏŒ ÞJ€ÌŒ	ÞÌJFŒ ÞJ€ÏŒ	* æ• * æ•	ĖĠ			
Ï€G	ÚÏ ŒŒ	ÞJ€FŒ	ÞJ€FŒ ÞJ€Œ	ÞJ€JŒ ÞJ€JŒ	ÞJ€iŒ ÞJ€iŒ	* æ•	ĒĠ			
Ï₩	ÚÏ G Œ	ÞJ€HŒ ÞJ€HŒ	ÞJ€GŒ ÞJ€IŒ	ÞJ€JŒ ÞJFFŒ	ÞJ€IŒ ÞJF€Œ	* æ•	ĒĠ			
Ï€	ÚÏ Œ	ÞJ€IŒ	ÞJ€ÍŒ ÞJ€ÍŒ	ÞJFGŒ ÞJFGŒ	ÞJFFŒ	* æ•	ÊĠ			
Ï€	ÚÏ ĠŒ	ÞJ€Í Œ	ÞJ€ÍŒ	ÞJFHŒ	ÞJFGŒ	* æ•	ĒĠ			
Ï€Î	ÚÏ Œ	ÞJ€Î Œ	ÞÌ JÌ Œ	ÞÌ JJŒ	ÞJFHŒ	* æ•	ĒĠ			
						100				

D`UhY`Df]a Ufmi8 UhU`ff cbhjbi YXŁ

<u>D'UHY</u>	D'Unif Di ja Ulim8 Unu fil cbhjbi YXŁ									
	Šæà^	OEÁR[ã]c	ÓÁR[ãjc	ÔÁR[ã]c	ÖÁR[ã]c	Tæe^∖ãæ¢	V@2&∖}^•• Ž ajá			
Ï ∃ Ï	ÚÏ Œ Ó	ÞÌ JFŒ	ÞJ€ÏŒ	ÞJFI Œ	ÞÌÌJŒ	* æ•	ĒĠ			
Ï€Ì	ÚÏ ĠŒ	ÞJ€Ï Œ	ÞJ€ÌŒ	ÞJFÍ Œ	ÞJFI Œ	* æ•	ĒĠ			
Ï€J	ÚÏ GJŒ	ÞJ€ÌŒ	ÞJ€JŒ	ÞJFÎ Œ	ÞJFÍ Œ	* æ•	ĒĠ			
ÏF€	ÚÏ HFŒ	ÞJF€Œ	ÞJFFŒ	ÞJFÌ Œ	ÞJFÏ Œ	* æ•	ĒĠ			
ΪÆ	ÚÏ HGŒ	ÞJFFŒ	ÞJFCŒ	ÞJFJŒ	ÞJFÌ Œ	* æ•	ĒĠ			
ΪFG	ÚÏ HHŒ	ÞJFŒ	ÞJFHŒ	ÞJG€Œ	ÞJFJŒ	* æ•	ĒĠ			
ΪFH	ÚÏ H Œ	ÞJFHŒ	ÞÌJJŒ	ÞÌJÏŒ	ÞJG€Œ	* æ•	ĒĠ			
ΪĦ	ÚÏ H Ó	ÞÌÌJŒ	ÞJFI Œ	ÞJGFŒ	ÞÌÌÌŒ	* æ•	ĒĠ			
ΪFÍ	ÚÏ HÍ Œ	ÞJFI Œ	ÞJFÍ Œ	ÞJGGŒ	ÞJŒ	* æ•	ĒĠ			
ΪĤ	ÚÏ HÎ Œ	ÞJFÍ Œ	ÞJFÎ Œ	ÞJGHŒ	ÞJGGŒ	* æ•	ĒĠ			
ΪFΪ	ÚÏ HÌŒ	ÞJFÏ Œ	ÞJFÌŒ	ÞJGÍ Œ	ÞJGI Œ	* æ•	ĒĠ			
ΪFÌ	ÚÏ HJŒ	ÞJFÌŒ	ÞJFJŒ	ÞJGÎ Œ	ÞJGÍ Œ	* æ•	ĒĠ			
ΪFJ	ÚÏI€Œ	ÞJFJŒ	ÞJG€Œ	ÞJGÏ Œ	ÞJGÎ Œ	* æ•	ĒĠ			
ÏŒ	ÚÏIFŒ	ÞJG€Œ	ÞÌJÏŒ	ÞÌJÎŒ	ÞJGÏ Œ	* æ•	ĒĠ			
ΪŒ	ÚÏ I FÓ	ÞJHFŒ	ÞJGJŒ	ÞJGÌ Œ	ÞJH€Œ	* æ•	ĒĠ			
ÏŒ	ÚÏIGŒ	ÞJGJŒ	ÞJHI Œ	ÞJI FŒ	ÞJGÌ Œ	* æ•	ĒĠ			
ΪŒΗ	ÚÏTHŒ	ÞJHI Œ	ÞJHÍ Œ	ÞJI Œ	ÞJI FŒ	* æ•	ĒĠ			
ΪĠ	ÚÏIIŒ	ÞJHÍ Œ	ÞJHĮ Œ	ÞJI HŒ	ÞJI Œ	* æ•	ĒĠ			
ΪĞ	ÚΪΙÎŒ	ÞJHÏ Œ	ÞJHÌ Œ	ÞJIÍŒ	ÞJI JŒ	* æ•	ĒĠ			
ΪĜ	<u>ÚÏ I Ï Œ</u>	ÞJHÌ Œ	ÞJHJŒ	ÞJI Î Œ	ÞJIÍŒ	* æ•	ĒĠ			
ΪĞ	<u>ÚÏ I ÌŒ</u>	ÞJHJŒ	ÞJI €Œ	ÞJIÏŒ	ÞJI ĴŒ	* æ•	ĒĠ			
ΪĠ	<u>ĄÏ</u> ĮJŒ	ÞJÍ €Œ	ÞJ HH Œ	ÞJHGŒ	ÞJÍÏŒ	* æ•	Ε̈́Q̈́			
ΪGJ	<u>ŲΪ</u> ∫€Œ	ÞŊĺ ≅Œ	ÞJ <u>Í</u> €Œ	ÞJĴŢŒ	ÞJÍÏŒ	* æ•	ĒĠ			
ÏH€	<u>ÚÏ Í FŒ</u>	ÞJÍÏŒ	ÞJĴŢŒ	ÞJÎ ĴŒ	ÞJÍ ĴŒ	* æ•	ĒĠ			
ΪΗF	ή <u>ι</u> į σσε	ÞJÍĴŒ	ÞJÎ ĴŒ	ÞJĴÍŒ	ÞJÍÍŒ	* æ•	ĒĠ			
ΪHG	ÚÏÍHŒ	ÞJÍÍŒ	ÞJÎÍŒ	ÞJÍIŒ	ÞJÍIŒ	* æ•	ĒĠ			
ΪΗΗ	ÚÏÍŒ	ÞJÍ HŒ	ÞJÎ HŒ	ÞJĴŒ	ÞJÍ Œ	* æ•	ĒĠ			
ΪΗ	ÚÏÍŒ	ÞJÍ Œ	ÞJÎ Œ	ÞJÎ FŒ	ÞJÍ FŒ	* æ•	ĒĠ			
ÏH	ÚÏÍŒ	ÞJÍ FŒ	ÞJÎ FŒ	ÞJÍÌŒ	ÞJI Ì Œ	* æ•	ĒĠ			
ΪĤ	<u>ÚÏÍÌŒ</u>	ÞJI Ì Œ	ÞJÍÌŒ	ÞJÍ JŒ	ÞJI JŒ	* æ•	ĒĠ			
ΪΗ̈́	<u>ÚÏÎÌŒ</u>	ÞJÍ JŒ	ÞJÍÌŒ	ÞJÍ JŒ	ÞJÎÌŒ	* æ•	ĒĠ ĒĠ			
ÏĤ	<u>ÚÏÎJŒ</u> ÚÏÏ€Œ	ÞJÎÌŒ	ÞJÍ JŒ	ÞJÏ FŒ	ÞJÏ €Œ	* æ•				
ÏHJ ÏI€	<u>ÚÏÏ€Œ</u> ÚÏÏ€Ó	ÞJÏ €Œ ÞJÍ Ì Œ	ÞJÏ FŒ	ÞJGJŒ	ÞJHFŒ ÞJÍ JŒ	* æ•	ÊĠ ÊĠ			
ÏIF	<u>UI I FŒ</u>	ÞJÎ JŒ	ÞJÍ FŒ ÞJÏ Œ	ÞJÏ GŒ ÞJÏ HŒ	ÞJÍ JŒ ÞJÏ FŒ	* æ•	ĒĠ			
ÏIG	ÚÏÏŒ	ÞJÏ FŒ	ÞJÏ HŒ	ÞJH Œ	ÞJGJŒ	* æ• * æ•	ĖĠ			
IIH	ÚÏÏGÓ	ÞJÍ FŒ	ÞJÍ GŒ	ÞJÏ I Œ	ÞJÏ GŒ	41	ĒĠ			
111	ÚÏÏHŒ	ÞJÏ GŒ	ÞJÏ I Œ	ÞJÏ Í Œ	ÞJÏ HŒ	* æ•	ĒĠ			
	ÚÏÏIŒ	ÞJÏ HŒ	ÞJÏ Í Œ	ÞJHÍ Œ	ÞJH Œ	* æ•	ÊĠ			
<u> </u>	ÚÏÏIÓ	ÞJÍ Œ	ÞJÍ HŒ	ÞJÏ Î Œ	ÞJÏ I Œ	* æ•	ÊĠ			
ÏIÏ	ÚÏÏÍŒ	ÞJÏ I Œ	ÞJÏ Î Œ	ÞJÏ ÏŒ	ÞJÏ Í Œ	* æ•	ĒĠ			
ÏÌÌ	ÚÏÏÎŒ	ÞJÏÍŒ	ÞJÏ Ï Œ	ÞJHÎ Œ	ÞJHÍ Œ	* æ•	ĒĠ			
ΪIJ	ÚΪΪÌÓ	ÞJÍ I Œ	ÞJÎ Í Œ	ÞJÌ €Œ	ÞJÏ ÌŒ	* æ•	ĒĠ			
ÏÍ€	ÚÏÏJŒ	ÞJÏ ÌŒ	ÞJÌ €Œ	ÞJÌ FŒ	ÞJÏ JŒ	* æ•	ĖĠ			
ΪÍF	ÚÏÌ€Œ	ÞJÏ JŒ	ÞJÌ FŒ	ÞJHÌ Œ	ÞJHÏ Œ	* æ•	ĒĠ			
ΪÍG	ÚÏÌ€Ó	ÞJÎ Í Œ	ÞJÎ Î Œ	ÞJÌ Œ	ÞJÌ €Œ	* æ•	ÈĠ			
ΪÍΗ	ÚΪÌFŒ	ÞJÌ €Œ	ÞJÌ Œ	ÞJÌ HŒ	ÞJÌ FŒ	* æ•	ĒĠ			
ΪÍΙ	ÚÏ Ì Œ	ÞJÌ FŒ	ÞJÌ HŒ	ÞJHJŒ	ÞJHÌ Œ	* æ•	ĒĠ			
ΪÍÍ	ÚÏ Ì GÓ	ÞJÎ Î Œ	ÞJÎ Ï Œ	ÞJÌTŒ	ÞJÌ Œ	* æ•	ĒĠ			
ΪÍÎ	ÚÏ Ì HŒ	ÞJÌ Œ	ÞJÌ I Œ	ÞJÌ ÍŒ	ÞJÌ HŒ	* æ•	ĒĠ			
ΪĺΪ	ÚΪÌΙŒ	ÞJÌ HŒ	ÞJÌ ÍŒ	ÞJI €Œ	ÞJHJŒ	* æ•	ĒĠ			
ΪÍÌ	ÚΪÌΙÓ	ÞJÎ Ï Œ	ÞJÎ €Œ	ÞJÌÎŒ	ÞJÌTŒ	* æ•	ĒĠ			

D`UhY`Df]a Ufm8 UfU`ff cbhjbi YXŁ

D GIII L	<u> </u>	COIJOI IAL					
	Šæà^	OEÁR[ã]c	ÓÁR[ãjc	ÔÁR[ã]c	ÖÁR[ãjc	Tæe^∖ãæ¢	V@2&\}^••Žajá
ΪÍJ	ÚΪÌÍŒ	ÞJÌIŒ	ÞJÌÎŒ	ÞJÌÏŒ	ÞJÌÍŒ	* æ•	ĒĠ
Ï΀	ÚΪÌÎÓ	ÞJÌ ÍŒ	Ð) Ï Œ	ÞJHHŒ	ÞJI €Œ	* æ•	ĒĠ
ΪÎF	ÚΪΪÌŒ	ÞJ€Œ	ÞJJ€Œ	ÞJJFŒ	ÞJ€JŒ	* æ•	ĒĠ
ΪÎG	ÚÏÏJÓ	ÞJ€JŒ	ÞJJFŒ	ÞJÌ JŒ	ÞJFÎŒ	* æ•	ĒĠ
ΪÎΗ	ÚÏ Ì €Ô	ÞJFÎ Œ	ÞJÌ JŒ	ÞJÌ ÌŒ	ÞJGHŒ	* æ•	ĒĠ
ΪÎΙ	ÚÏ Ì FÓ	ÞJJ€Œ	ÞJ€HŒ	ÞJF€Œ	ÞJJFŒ	* æ•	ĒĠ
ΪÎÍ	ÚΪÌÔ	ÞJJFŒ	ÞJF€Œ	ÞJFÏ Œ	ÞJÌ JŒ	* æ•	ĒĠ
ΪÎÎ	ÚÏ Ì HÓ	ÞJÌ JŒ	ÞJFÏ Œ	ÞJGI Œ	ÞJÌ ÌŒ	* æ•	ĒĠ
ΪÎΪ	ÚÏÌIÔ	ÞJÍ HŒ	ÞJJI Œ	ÞJJÍ Œ	ÞJÎ HŒ	* æ•	ĒĠ
ΪÎÌ	ÚΪÌÍÓ	ÞJÎ HŒ	ÞJJÍ Œ	ÞJJÎ Œ	ÞJÏÎŒ	* æ•	ĒĠ
ΪÎJ	ÚÏÌÎŒ	ÞJÏÎŒ	ÞJJÎŒ	ÞJJÏ Œ	ÞJÏÏŒ	* æ•	ĒĠ
ΪΪ€	ÚΪÌΪŒ	ÞJÏÏŒ	ÞJJÏ Œ	ÞJJHŒ	ÞJHÎ Œ	* æ•	ĒĠ
ΪΪF	ÚΪÌÌ	ÞJHÎ Œ	ÞJJHŒ	ÞJJŒ	ÞJI HŒ	* æ•	ĒĠ
ΪΪG	ÚΪÌJ	ÞJJI Œ	ÞJÍIŒ	ÞJÎ I Œ	ÞJJÍ Œ	* æ•	ĒĠ
ΪΪΗ	ÚÏ J€	ÞJJÍ Œ	ÞJÎIŒ	ÞJÏÌŒ	ÞJJÎŒ	* æ•	ĒĠ
ÏÏI	ÚÏ JF	ÞJJÎŒ	ÞJÏÌŒ	ÞJÏ JŒ	ÞJJÏŒ	* æ•	ĒĠ
ΪΪÍ	ÚÏ JG	ÞJJÏŒ	ÞJÏ JŒ	ÞJHÏ Œ	ÞJJHŒ	* æ•	ĒĠ
<u> </u>	ÚÏ JH	ÞJJHŒ	ÞJHÏ Œ	ÞJI I Œ	ÞJJŒ	* æ•	ĒĠ
ΪΪΪ	ÚÏ JI	ÞF€GÍ	ÞF€GÎ	ÞF€FÏ	ÞF€FÎ	* æ•	ĒĠ
ΪΪÌ	ÚÏ JÍ	ÞF€GÎ	ÞF€GÏ	ÞF€FÌ	ÞF€FÏ	* æ•	ĒĠ
ΪΪJ	ÚÏ JÎ	ÞF€GÏ	ÞF€GÌ	ÞF€FJ	ÞF€FÌ	* æ•	ĒĠ
ïÌ€	ÚÏ JÏ	ÞF€GÌ	ÞF€HÏ	ÞF€HÌ	ÞF€GJ	* æ•	ĒĠ
ΪÌF	ÚÏ JÌ	ÞF€GÌ	ÞF€GJ	ÞF€G€	ÞF€FJ	* æ•	ĒĠ
ΪÌG	ÚÏ JJ	ÞF€HÌ	ÞF€HJ	ÞF€H€	ÞF€GJ	* æ•	ĒĠ
ΪÌΗ	ÚÌ €€	ÞF€GJ	ÞF€H€	ÞF€Œ	ÞF€G€	* æ•	ĒĠ
	<u>ÚÌ €</u>	ÞF€HJ	ÞF€I €	ÞF€HF	ÞF€H€	* æ•	ÊĠ
	ÚÌ €G	ÞF€I €	ÞF€I F	ÞF€HG	ÞF€HF	* æ•	ĒĠ
<u> </u>	ÚÌ €H	ÞF€IF	ÞF€I G	ÞF€HH	ÞF€HG	* æ•	ĒĠ
i i i	ÚÌ €	ÞF€HG	ÞF€HH	ÞF€G	ÞF€GH	* æ•	ĒĠ
<u> </u>	ÚÌ €Í	ÞF€HF	ÞF€HG	ÞF€GH	ÞF€GG	* æ•	ĒĠ
ΪÌJ	<u> </u>	ÞF€H€	ÞF€HF	ÞF€GG	ÞF€Œ	* æ•	ĒĠ
ÏJ€	ÚÌ €Ï	ÞF€€Ï	ÞF€€Ì	ÞJJJ	ÞJJÌ	* æ•	ĒĠ
ÏJF	ÚÌ €Ì	ÞF€€Ì	ÞF€€J	ÞF€€€	ÞJJJ	* æ•	ĒĠ
ÏJG	ÚÌ €J	ÞF€€J	ÞF€F€	ÞF€€F	ÞF€€€	* æ•	ĒĠ
ΪJH	ÚÌ F€	ÞF€F€	ÞF€FF	ÞF€€G	ÞF€€F	* æ•	ĒĠ
ÏJI	ÚÌ FF	ÞF€FF	ÞF€FG	ÞF€€H	ÞF€€G	* æ•	ÈG
ÏJÍ	ÚÌ FG	ÞF€FG	ÞF€FH	ÞF€€I	ÞF€€H	* æ•	ÊĠ
ÏJÎ	ÚÌ FH	ÞF€FH	ÞF€FI	ÞF€€Í	ÞF€€I	* æ•	ÊĠ
ΪJΪ	ÚÌ FI	ÞF€FI	ÞF€FÍ	ÞF€€Î	ÞF€€Í	* æ•	ÊĠ
ÏJÌ	ÚÌ ŒH	ÞF€FÎ	ÞF€FÏ	ÞF€I FŒ	ÞF€I €Œ	* æ•	ĒĠ
ÏJJ	ÚÌ G	ÞF€I €Œ	ÞF€I FŒ	ÞF€I H	ÞF€I CCE	* æ•	ÊĠ
ì€	ÚÌ GÍ	ÞF€I COE	ÞF€I H	ÞF€IÍ	ÞF€II	* æ•	ÊĠ
ì∉	ÚÌ G	ÞF€II	ÞF€I Í	ÞF€€Ì	ÞF€€Ï	* æ•	ÊĠ
Ì€G	ÚÌ GÍ Œ	ÞF€FÏ	ÞF€FÌ	ÞF€IÎ	ÞF€I FŒ	* æ•	ĒĠ
Ì⊕H	ÚÌ GÏ	ÞF€I FŒ	ÞF€IÎ	ÞF€IÏ	ÞF€IH	* æ•	ĒĠ
Ì€	ÚÌ Ġ	ÞF€IH	ÞF€IÏ	ÞF€IÌ	ÞF€IÍ	* æ•	ÊĠ
Ì€	ÚÌ GJ	ÞF€IÍ	ÞF€I Ì	ÞF€€J	ÞF€€Ì	* æ•	ÊĠ
Ì€Î	ÚÌ GIŒ	ÞF€FÌ	ÞF€FJ	ÞF€I J	ÞF€I Î	* æ•	ÊĠ
Ì€Ï	<u> </u>	ÞF€IÎ	ÞF€I J	ÞF€Í €	ÞF€IÏ	* æ•	ĒĠ
Ì€	ÚÌ HF	ÞF€IÏ	ÞF€Í €	ÞF€Í F	ÞF€IÌ	* æ•	ÊĠ
Ì€J	ÚÌ HG	ÞF€IÌ	ÞF€Í F	ÞF€F€	ÞF€€J	* æ•	ĒĠ
ÌF€	ÚÌ HŒ	ÞF€FJ	ÞF€G€	ÞF€Í G	ÞF€I J	* æ•	ÊĠ
Tre	ULLIGUE	PLELI	Prede	Predict	Pred	المن المن المن المن المن المن المن المن	ш

D`UhY'Df]a Ufmi8 UhU'ff cbhjbi YXŁ

	Šæà^	OEÁR[ã]c	ÓÆR[ã]c	ÔÁRĮãjc	ÖÁR[ã]c	Tæe^∖ãæ¢	V@2&\}^•• ž ajá
ÌFF	ŰΗ	ÞF€IJ	ÞF€ÍG	ÞF€Í H	ÞF€Í€	* æ•	ĒĠ
ÌFG	ÚÌ H	ÞF€Í€	ÞF€Í H	ÞF€ÍI	ÞF€ÍF	* æ•	ĒĠ
ÌFH	ÚÌ H	ÞF€Í F	ÞF€ÍI	ÞF€FF	ÞF€F€	* æ•	l È Gì
ÌF	ÚÌ HÍ Œ	ÞF€G€	ÞF€GF	ÞF€Í Í	ÞF€Í G	* æ•	ĒĠ
Ì FÍ	ÚÌ HÎ	ÞF€Í G	ÞF€ÍÍ	ÞF€ÍÎ	ÞF€ÍH	* æ•	ĒĠ
Ì FÎ	ÚÌ HÏ	ÞF€Í H	ÞF€ÍÎ	ÞF€ÍÏ	ÞF€ÍI	* æ•	ĒĠ
ÌFÏ	ÚÌ HÌ	ÞF€ÍI	ÞF€ÍÏ	ÞF€FG	ÞF€FF	* æ•	ĒĠ
ÌÈ	ÚÌ HÌ Œ	ÞF€Œ	ÞF€GG	ÞF€ÍÌ	ÞF€ÍÍ	* æ•	ĒĠ ĒĠ
ÌFJ	ÚÌΗJ	ÞF€Í Í	ÞF€ÍÌ	ÞF€Í J	ÞF€ÍÎ	* æ•	ĒĠ
ÌŒ	ÚÌI€	ÞF€ÍÎ	ÞF€ÍJ	ÞF€Î€	ÞF€ÍÏ	* æ•	ĒĠ ĒĠ
ÌŒ	ÚÌIF	ÞF€ÍÏ	ÞF€Î€	ÞF€FH	ÞF€FG	* æ•	ĒĠ
DO Í	ÚÌIFŒ	ÞF€GG	ÞF€GH	ÞF€Î F	ÞF€ÍÌ	* æ•	ĒĠ ĒĠ
ÌЭН	ÚÌIG	ÞF€ÍÌ	ÞF€ÎF	ÞF€Î G	ÞF€ÍJ	* æ•	HÊGÌ
ÌG	ÚÌTH	ÞF€Í J	ÞF€Î G	ÞF€Î H	ÞF€Î€	* æ•	ĒĠ ĒĠ
ÌĠ	ÚÌII	ÞF€Î€	ÞF€ÎH	ÞF€FI	ÞF€FH	* æ•	ĒĠ
ÌĜ	ÚÌIIŒ	ÞF€GH	ÞF€G	ÞF€Î I	ÞF€ÎF	* æ•	l ÈGì l
ÌĞ	ÚÌTÍ	ÞF€Î F	ÞF€ÎI	ÞF€Î Í	ÞF€Î G	* æ•	ĒĠ
ÌÀ	ÚÌTÎ	ÞF€Î G	ÞF€ÎÍ	ÞF€ÎÎ	ÞF€ÎH	* æ•	ĒĠ
ÌGJ	ÚÌTÏ	ÞF€Î H	ÞF€ÎÎ	ÞF€FÍ	ÞF€FI	* æ•	ĒĠ ĒĠ
ÌH€	ÚÌI€Ó	ÞFÍÎ	ΪĦϤ	ÞFIÎ	ÞÁÍ	* æ•	ĒĠ
ÌÆ	ÚÌ HFŒ	ÞFÍÎ	ÞŔÏ	ÞFIÌ	ÞĦÏ	* æ•	ĒĠ
ÌHG	ÚÌ H G Ó	ÞŔÏ	ÞFÏ G	ÞFÍ€	ÞΠÌ	* æ•	ĒĠ ĒĠ
ìН	ÚÌ HHŒ	ÞFÏG	ÞFÎÌ	ÞFÍF	ÞFÍ€	* æ•	ĒĠ
ÌΗ	ÚÌ H Œ	ÞFÎÌ	ÞFÏÌ	ÞFIJ	ÞFÍF	* æ•	ĒĠ
ÌH	ÚÌ HÍ Ó	ÞFÏÌ	ÞFÎG	ÞFÍ G	ÞFIJ	* æ•	ĒĠ

>c]bh'@UXg'UbX'9bZcfWYX'8]gd`UWYa Ybhg'f6 @' &. @L

	F[ã o ÁŠæà^	ŠÉÖĒT	Öã^&cã}	Tæ*} ãã å^ŽQ É Ë-d DÁQ Éæå DÁQ E• âGÐEE
F	ÞIH	Š	Z	È
G	ÞÎI	Š	Z	È
Н	ÞÁ H	Š	Z	È
- 1	ÞĞF	Š	Z	È
ĺ	ÞĤ€	Š	Z	ÈG
Î	ÞI€Î	Š	Z	È
Ï	ÞIÍI	Š	Z	È
Ì	ÞÎFI	Š	Z	È
J	ÞHÌ	Š	Z	È
F€	ÞÌÏÏ	Š	Z	È
FF	ÞJÌÌŒ	Š	Z	È
FG	ÞJJŒ	Š	Z	È
FH	ÞF€I G	Š	Z	È

>c]bh@UXg'UbX'9 bZcf WYX'8]gd`UWYa Ybhg'f6 @' ' . @&L

	R[ā, o.4Šæà.^	ŠÉÖÉT	Öã^&cã}}	Tæt}ãc å^ŽÇÊËdDÁG ÉæåDÁG E•âGDÈÈ
F	ÞIН	Š	Ϋ	ËĞ
G	ÞÎI	Š	Ϋ	ËĠ
Н	рң Н	Š	Ÿ	ËG
1	ÞĞF	Š	Ϋ	ËG
ĺ	ÞĤ€	Š	Ÿ	ËG
Î	ÞI€Î	Š	Ϋ	⊞G

>c]bh'@UXg'UbX'9 bZcf WYX'8]gd`UWYa Ybhg'f6 @' ' '.' @L'f7 cbh]bi YXL

	R[ā]oÁŠæà^	ŠÉÖÉT	Öã^&cã}	Tæ*} ãã å^ ŽÇ É Ë«DÉÇ) Éæ DÉÇ E• â ŒDÈÈ
Ϊ	ÞIÍI	Š	Ϋ́	ËĠ
Ì	ÞÎFI	Š	Ÿ	ËG
J	ÞHÌ	Š	Ÿ	ËĠ
F€	ÞÌÏÏ	Š	Ϋ	ËG
FF	ÞJÌÌŒ	Š	Ÿ	ËĠ
FG	ÞJJQŒ	Š	Ÿ	ËG
FH	ÞF€I G	Š	Ϋ	Ë

>c]bh'@UXg'UbX'9bZcfWYX'8]gd`UWYa Ybhg'f6@'('.'@Ł

	F[ā]o/Šæà^	ŠÉÖÉT	Öã^&cã}	Tæt} ãc å^žÇ É Ed e Ág Éæt Dág E à GÐE
F	ÞIH		Z	È€G
G	ÞII	Š	Z	È€G
Н	ÞIÏ	Š	Z	È€G
I	۱Ìط	Š	Z	È€G
ĺ	ÞIÌ	Š	Z	È€G
Î	þIÎ	Š	Z Z	È€G
Ϊ	ÞIÍ	Š	Z	È€G
Ì	ÞÎI	Š	Z	ÈEH
J	ÞÏG	Š		È€H
F€	ÞÌ€	Š	Z Z	È€H
FF	þÌÌ	Š	Z	È€H
FG	βĴĹď	Š	Z	ÈEH
FH	ÞF€I	Š	Z	È€H
FI	ÞFFG	Š	Z Z	È€H
FÍ	ÞFG€	Š	Z	ÆH
FÎ	ÞFGÌ	Š	Z	È€GÏ
FΪ	ÞFHÎ	Š	Z	È€GÏ
FÌ	ÞFÌG	Š	Z Z	È€GÏ
FJ	ÞFÌF	Š	Z	È€GÏ
G€	ÞFI	Š	Z	È€GÏ
GF	ÞŒ	Š	Z	È€GÏ
GG	ÞFÍ G	Š	Z	È€GÏ
GH	ÞFÎG	Š	Z	È€GÏ
G	ÞĤl	Š	Z	È€GÏ
GÍ	ÞĤÍ	Š	Z	È€GÏ
Ĝ	ÞFÎH	Š	Z	È€GÏ
GΪ	ÞFÍ H	Š	Z	È€GÏ
GÌ	ÞĜÌ	Š	Z	È€GJ
GJ	ÞĜJ	Š	Z	È€GJ
H€	ÞĞI	Š	Z	ÈEGJ
HF	ÞĞG	Š	Z	È€GJ
HG	ÞĞΗ	Š	Z	ÈEGJ
HH	ÞĞ€	Š	Z	È€GJ
Н	ÞĞF	Š	Z	ÈEGJ
HÍ	ÞНΪ	Š	Z	ÈEHJ
HÎ	ÞHÏÌ	Š	Z	ÈΕΗJ
HÏ	ÞĤG	Š	Z	ÈEHJ
HÌ	ÞHJF	Š	Z	ÈΕΗJ
HJ	ÞĤ€	Š	Z	ÈEHJ
I€	ÞI€Î	\$\\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	Z	È HF
1 F	ÞI€Ï	Š	Z	ÈHF

>c]bh'@UXg'UbX'9 bZcf WYX'8]gd`UWYa Ybhg'fb @' (`. @ Ł'fl' cbhjbi YXŁ

	F[ā] c/Śæà^	ŠÉÖÉT	Öā^&cā}	Tæ*}ãã å^ŽQ ÉEd DÁQ iÊæåD Á Q E•âGĐÈÈ
IG	ÞIIÏ		Z	E HF
I H	ÞIIÎ	Š	Z	ÈEHF
11	ÞIFH	Š	Z	ÈEHF
ΙÍ	ÞIFÌ	Š Š Š Š Š	Z	ÈHF
ΙÎ	ÞIÏÍ	Š	Z	ÈEH
ΙΪ	ÞIÎÏ	Š	Z	È€H
ΙÌ	ÞIÌF	Š	Z	ÈEH
IJ	ЫļН	Š	Z	ÈEH
Í€	ÞIÌÍ	Š	Z	ÈEH
ĺF	ÞIÌÏ	Š	Z	È€H
ÍG	ÞIÌJ	Š	Z	ÈEH
ÍΗ	ÞIJF	Š	Z	È€H
ÍΙ	ÞIÍÍ	Š	Z	ÈEH
ĺĺ	ÞIÍI	Š	Z	È€H
ĺÎ	ÞÎFI	Š	Z	ÈEH
ÍΪ	ÞÎFÍ	Š	Z	È€H
ĺÌ	ÞÎĞ	Š	Z	È€H
ÍJ	ÞÎHÍ	Š	Z	È€H
΀	ÞÎIF	Š	Z	È€H
ÎF	ÞÎIH	Š	Z	ÈEH
ÎG	ÞÎIÍ	Š	Z	ÈEH
ÎН	ÞÎIÏ	\$\int \sigma \si	Z	ÈEH
Îl	ÞÎIJ	Š	Z	ÈEH
îí	ÞÎÍF	Š	Z	ÈEH
ÎÎ	ÞHÌ	Š	Z	ÆGÍ
ÎΪ	ÞÌÍFŒ	Š	Z	ÆGÍ
îì	ÞH H	Š	Z	È€GÍ
ÎJ	ÞÌÍ Œ	Š	Z	ÆGÍ
Ï€	ÞĤH	Š	Z	È€GÍ
ΪF	ÞÌÍÍŒ	Š	Z	ÆGÍ
ΪG	ÞHG	Š	Z	ÆGÍ
ΪΗ	ÞНН	Š	Z	ÆGÍ
ΪΙ	ÞJÌI	Š	Z	È€H
ΪÍ	ÞJÏ F	Š	Z	ÈΕΗ
ΪÎ	ÞJÍÌ	Š	Z	ÈΕΗ
ΪΪ	ÞJIÍ	Š	Z	È€H
ΪÌ	ÞJHG	Š	Z	ÈΕΗ
ΪJ	ÞJFJ	Š	Z	ÈΕΗ
Ì€	ÞJ€Î	Š	Z	ÈΕΗ
ÌF	ÞÌJH	Š	Z	ÈΕΗ
ÌG	ÞÌÏÎ	Š	Z	ÈΕΗ
ÌΗ	ÞÌÏÏ	Š	Z	ĚΕΗ
Ìļ	ÞJÌÌŒ	Š	Z Z	ÈEGG
ÌÍ	ÞJÌ JŒ	Š	Z	ÈEGG
ÌÎ	ÞJJFŒ	Š	Z	ÈGG
ÌÏ	ÞJJ€Œ	Š	Z	ÈGG
ìì	ÞJJ@E	Š	Z	ÈG
ÌJ	ÞJJHŒ	Š	Z	È€G
J€	ÞJJ <u>Ï</u> Œ	Š	Z	È€G
JF	ÞJJĴŒ	Š	Z	ÈEG
JG	ÞJJÍ Œ	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Z	È€G
JH	ÞJJI Œ	Š	Z	È€G



>c]bh'@UXg'UbX'9 bZcf WYX'8]gd`UWYa Ybhg'fb @' (`. @ Ł'fl' cbhjbi YXŁ

	R[ãjoÁŠæàn^	ŠÉÖÉT	Öã^&cã}}	Tæ*}ãã å^ŽÇÊ ËdDÁÇA Êæå DÁÇ E•â GÐÐÈÈ
JI	ÞF€€Î	Š	Z	ÈHF
Jĺ	ÞF€FÍ	Š	Z	ÈHF
JÎ	ÞF€ÎÎ	Š	Z	ÈHF
JÏ	ÞF€ÎÍ	Š	Z	ÈHF
JÌ	ÞF€G	Š	Z	ÈHF
JJ	ÞF€ÎI	Š	Z	ÈHF
F€€	ÞF€HH	Š	Z	ÈHF
F€F	ÞF€I G	Š	Z	ÈHF

>c]bh@UXg'UbX'9bZcfWYX'8]gd`UWYa Ybhg'f6@') : @Ł

	R[ã]oÁŠæà^	ŠÉÖÉT	Öã^&cã}	Tæ*}ãã å^ŽÇÊ Ë«DÊÁÇA Êæå DÊÁÇ E• â GEDÈÈÈ
F	ÞJÎ	Š	Ϋ	ËĠ
G	ÞÌÍ Œ	Š	Ϋ	⊞G

>c]bh'@UXg'UbX'9bZcfWYX'8]gd`UWYa Ybhg'fb@" * . @Ł

	R[a]oÁŠænà∧	ŠÉÖÉT	Öã^&cã[}	Tæ*}ãã å^ŽÇÊ Ë«ĐĐÁÇA) Êæå ĐĐÁÇ E•â GĐĐÈÈ
F	ÞFG€	Š	Ϋ	ËG
G	ÞHH	Š	Ÿ	⊞G

A Ya VYf 'Dc]bh @cUXg '

7	Γ^{à^¦ΑŠæà^	Öå^&d}}	Tæ*}ããå^ŽÉËcá	Šį &acajį) ŽeĐÃ á
	•	ÞÍ ÁÖæææÁti Á	lia wi	-

6 Ug]W @ UX 7 UgYg

	ÓŠÔÁÖ^•&¦ā[cā[}	Ôæ:*[¦^	ÝÁÕ¦æçãcî	ŸÁÕ¦æçãĉ	ZÁŐ¦æçãcî	Rją̃c	Ú[ą̃c	Öãrdâna È	<u>#£0#</u> ^æ@T^{ à^¦D	Ù~¦æ&∧ <u>⊞</u>
F	Ö	ÖŠ		Ë					-	
G	Š	ŠŠ				FH				
Н	ŠG	ŠŠ				FH				
- 1	ŠH	ŠŠ				F€F				
ĺ	ŠI	ŠŠ				G				
Î	ŠÍ	ŠŠ				G				

@:UX'7ca V]bUh]cbg

	Ö^• &¦₫ æ[}	Ù[À	Ě	ÙĚ	ÓŠÔ	Øæ&À	Š ŠÔ	Øæ&À	Š ŠÔ	Øæ&À	ĐŠĈ	Øæ&À	ĎŠÔ	Øæ&À	ĎŠÔ	Øæ&À	ĎŠÔ	Øæ&À	B ŠĈ	Øæ&À	Ď ŠĈ	Øæ&À	ĎŠÔ	Øæ &H
F	Ö	Ÿ^•	Ϋ		F	F																		
G	ÖÉŠ	Ÿ^•	Ϋ		F	F	G	F																
Н	ÖÉŠG	Ÿ^•	Ϋ		F	F	Н	F																
- 1	ÖÉŠH	Ÿ^•	Ϋ		F	F	Τ	F																
ĺ	ÖÉŠI	Ÿ^•	Ϋ		F	F	ĺ	F																
Î	ÖÉŠÍ	Ÿ^•	Ϋ		F	F	Î	F																
Ϊ	ÖËŠ	Ÿ^•	Ϋ		F	F	G	Ë																
Ì	ÖËŠG	Ÿ^•	Ϋ		F	F	Н	Ë																
J	ÖËŠH	Ÿ^•	Ϋ		F	F	1	Ë																

9bj YcdY'>c]bhFYUMjcbg

abj r ca r >cjbnr rovijebg														
	R[ã]c		ÝÆXá	ŠÔ	ŸÆXá	ŠÔ	ZÁŽ á	ŠÔ	ΤΥΆΧΕ̈άα	ŠÔ	ΤΫ́ǼČĒcá	ŠÔ	TZÁŽË-cá	ŠÔ
F	ÞFI	{æ¢	ÈÎF	Н	ÈН	Н	FÈHFJ	ΙÏ	€	F	€	F	€	F
G		{ a	⊞€GÏ	ì	⊞∃H	ì	ËFÈHFJ	G	€	F	€	F	€	F
Н	ÞÌ	{ æ¢	È€HG	ì	ÈΙΪ	Н	FÈ€HÌ	G	€	F	€	F	€	F
		{ a	ËΞΉ	Н	Œ€	ì	ËÈÈHÌ	ΙÏ	€	F	€	F	€	F
ĺ	ÞFÎ	{ æ¢	È€Ë	Н	ĖΊ	Tì	ĔÏÏ	J	€	F	€	F	€	F
î		{ a	E F	ì	EJÏ	H	HIII	ī	€	F	€	F	€	F
ï	ÞF€	{ æ¢	<u>E</u> HÎ	ì	<u> </u>	Tì T	ÊJΗ	Τi	€	F	€	F	€	F
ì	710	{ a	⊞EHG	Н	ÈÍ Í	H	⊞JH	J	€	F	€	F	€	F
J	ÞÎÎ	{ æ¢	<u> </u>	ì	ĖGΗ	H	ÈÏG	G	€	F	€	F	€	F
F€	PII	{ a	ŒGÏ	H	<u>E</u> FÏ	+;+	⊞ÏG	Ιï	€	F	€	F	€	F
FF	ÞÎÏ	{ æ¢	<u>iiii</u>	Н	<u>EH</u> €Ì	H	<u> </u>	i i	€	F	€	F	€	F
FG	PII	{ a	⊞EF	ì		ì	<u> </u>	G	€	F	€	F	€	F
	ьìн		<u>t€</u> €F	11		î			€	F	€	F	€	F
FH	ын	{ æ¢		H	ÈJÏ ÈG	ì	<u>∄ÍG</u> ⊞ÍG	J		F	€			
FI	- LìO	{ ā		ì	È€Ï	++-	<u>Hall G</u>		€			F	€	F
FÍ	ÞÌG	{ æ¢	<u>È</u> FÍ	1	<u>E</u>	H	ĔÍ	1	€	F	€	F	€	F
FÎ	. = 6	{ a	Ë E	H	<u>È</u> EIÍ	1 1	<u> </u>	J	€	F	€	F	€	F
FΪ	ÞF€Î	{ æ¢	ÈGF	1	È€Ï	11	<u>ĚÎÎ</u>	1	€	F	€	F	€	F
FÌ		{ a }	<u>iiiee</u>	Н	<u>Ì</u> €HÏ	H	∰ÎÎ	J	€	F	€	F	€	F
FJ	ÞF€Ï	{ æ¢	<u> </u>	H	Ė		<u>ĚÌÏ</u>	J	€	F	€	F	€	F
G€		{ ā	<u>⊞e</u> j ï		È	H	<u> </u>		€	F	€	F	€	F
GF	ÞFH€	{ æ¢	<u> </u>	Н	ÈŒ		ÊÌF		€	F	€	F	€	F
GG		{ a	⊞≘í	Ì	È€Î	H	ËÌF	J	€	F	€	F	€	F
GH	ÞFHF	{ æ¢	€	Н	ÈF	Ì	ĒlÏ	J	€	F	€	F	€	F
G		{ a	ËŒJ	ì	ÈŒHÍ	H	⊞ÏIÏ		€	F	€	F	€	F
GÍ	ÞFHÌ	{ æ¢	Ë€FF	Н	ÈEJJ	Н	FÈ€€H		€	F	€	F	€	F
GÎ		{ a	III FÍ	Ì	ÈÉÍ	ì	ËÈ€H	J	€	F	€	F	€	F
GÏ	ÞFHJ	{ æ¢	È€GH	Ì	ΕĐΉ	Н	FÈGÎ	J	€	F	€	F	€	F
GÌ		{ a	È€G	Н	ÈÍ	ì	ËÈGÎ		€	F	€	F	€	F
GJ	ÞFIÎ	{ æ¢	ËŒH	Н	ÈËÏF	Н	ÈJG	G	€	F	€	F	€	F
H€		{ a	Ë€F	ì	ÏÌ(FF	ì	⊞JG	ΙÏ	€	F	€	F	€	F
HF	ÞĦÏ	{ æ¢	<u>È</u> Í I	ì	ĖΞΗΪ	Н	FÈH H	ΙÏ	€	F	€	F	€	F
HG		{ a	<u>È</u> FF	Н	EECH)	Tì I	ËHH	G	€	F	€	F	€	F
HH	ÞŒ€	{ æ¢	ŒĜ	ì	EGI Ì	H	ÈÍF	ī	€	F	€	F	€	F
H	, <u>G</u> c	{ ā	É	Н	<u> </u>	1 i	⊞ÍF	J	€	F	€	F	€	F
HÍ	ÞÆF	{ æ¢	<u>E</u> FH	Н	<u>H</u> i	H	₿ĺF	J	€	F	€	F	€	F
HÎ	PUI	{ a	EEFÍ	ì	ÈFÎ	+;+	EJÍ F	ī	€	F	€	F	€	F
HÏ	ÞŒ	{ and	<u>iE</u> €J	Ì	<u>E</u> J	H	FEFG	G	€	F	€	F	€	F
HÌ	PW	{ ā	E€€F	Н	ÈlÍ	1	ËËFG	Ϊ	€	F	€	F	€	F
HJ	ÞŒÍ	1	<u>E</u> EHG	ì	EGFG	H	FEHÎ G	+	€	F	€	F	€	F
I€	РШ	{ æ¢	<u>EHF</u>	L	E Ì	+ 11	ËË G	G	€	F	€	F	€	F
	ьца	{ ā		Н	EEÎ	+		F		F	€	F	€	F
I F	ÞHG	{ æ¢	€	F		1	€	_	€	F		F		
IG	- LIDÎ	{ a	€	F	È€Í È	H	€	F	€		€		€	F
IH	ÞHG	{ æ¢	€	F	ÈF	H	€	F	€	F	€	F	€	F
11		{ a	€	F	È€Í		€	F	€	F	€	F	€	F
	ÞHGÏ	{ æ¢	€	F	ŒHU		€	F	€	F	€	F	€	F
11		{ a }	€	F	ÈEHÏ	H	€	F	€	F	€	F	€	F
ΙΪ	ÞŒH	{ æ¢	€	F	ÈEG	H	€	F	€	F	€	F	€	F
ΙÌ		{ ā	€	F	È€JÏ	İ	€	F	€	F	€	F	€	F
IJ	ÞHF	{ æ¢	€	F	È€JI	H	€	F	€	F	€	F	€	F
Í€		{ a }	€	F	È€JG	Ì	€	F	€	F	€	F	€	F
ĺF	ÞHGJ	{ æ¢	€	F	ÈÉÎG	Н	€	F	€	F	€	F	€	F

9bj YcdY'>c]bhFYUMJcbg'fl7cbljbi YXL

<u>9bj Y</u>	9bj YcdY'>c]bhFYUMjcbg'f7cbljbi YXŁ													
	R[ã]c		ÝÆŽá	ŠÔ	ŸÆČá	ŠÔ	ZÆŽá	ŠÔ	ΤΥΆΧΕ̈ά	ŠÔ	ΤΫÆČËcá	ŠÔ	TZÁŽÜ Écá	ŠÔ
ÍG		{ ā	€	F	È€ÎG	ì	€	F	€	F	€	F	€	F
ÍΗ	ÞHH€	{ æ¢	€	F	È€ÍI	ì	€	F	€	F	€	F	€	F
ÍI		{ a	€	F	ÈÉÍΗ	Н	€	F	€	F	€	F	€	F
ĺĺ	ÞHÍ	{ æ¢	⊞€FI	Ì	ÈÈÌG	Ì	Ė̈́JÌ		€	F	€	F	€	F
ĺÎ		{ a	⊞€ÍÎ	Н	Ë€H	Н	⊞̈́JÌ	J	€	F	€	F	€	F
ĺÏ	ÞHÍ	{ æ¢	ÈĞ	H	ÈJG	ì	ÈFJ	J	€	F	€	F	€	F
ĺÌ		{ a	EEÎÎ	į	È€GJ	H	⊞ĻFŲ		€	F	€	F	€	F
ĺJ	ÞĤÌŒ	{ æ¢	ÈEHÍ	Ì	ÈJ	H	FĖUÌ	ΙÏ	€	F	€	F	€	F
Ĵ€		{ a }	<u>⊞EGG</u>	H	È€G	Ì	<u>Ë</u> ÈÙÌ	G	€	F	€	F	€	F
ÎF	ÞĤÌ	{ æ¢	<u><u><u>È</u>IÍ</u></u>	I	ÈGIF	H	<u>FÈÉĴG</u>	G	€	F	€	F	€	F
ÎG		{ a	<u></u>	Н	È€GÏ	Į	<u>ËFÈÉÎ G</u>		€	F	€	F	€	F
ÎΗ	ÞH G	{ æ¢	<u>È</u> HÏ	H	ÈĞ		ŒĤÏ G		€	F	€	F	€	F
Îl		{ a	<u>⊞</u> HÍ		<u>⊞</u> FF	H	ËQÈHÏ G	J	€	F	€	F	€	F
ÎÍ	ÞĤI	{ æ¢	<u>È</u> HÍ	<u> </u>	<u>È</u> Í H	11.	GÈEFH	J	€	F	€	F	€	F
ÎÎ		{ a	⊞ E HÏ	H	H BH	Н	ËGÈ€FH	ļļ.	€	F	€	F	€	F
ÎÏ	ÞHJÏ	{ æ¢	€	F	ÈEGJ	H	ÈJΗ		€	F	€	F	€	F
ÎÌ	F 1 11)	{ a	€	F	ÈFI	+	∰JH	G	€	F	€	F	€	F
ÎJ	<u>ÍH4</u>	{ æ¢	€	F	ÈUF	H	<u>Ě</u> JÏ		€	F	€	F	€	F
Ï€	LUI C	{ a	€	F	ÈH Ècù		<u> </u>	G	€	F	€	F	€	F
ΪF	ÞН̈€	{ æ¢	€	F	ÈEGÌ	11.	<u>ĚFÌ</u>	J	€	F	€	F	€	F
ΪG	► LUÍ	{ a	€	F	Ë€FI È≎í.∪	H	∰FÌ		€	F	€	F	€	F
ΪΗ	ÞWÍ	{ æ¢	€	F	ÈÍ H	1 1	<u>ËHÏ</u> ËHÏ	G	€	F	€	F	€	F
<u> </u>	►111î	{ a	€	F	È	H			€	F	€	F	€	F
ΪÍ	ÞHJÎ	{ æ¢	€	F	ÈJH	H	<u>Ě</u> ÏJ ∰ÏJ	G	€	F	€	F	€	F
	ÞĤJ	{ a			<u>È</u> €H ÈHÍI		<u>ш</u> іј ÈF	l l		F		F	€	F
ÏÌ	РПЈ	{ æ¢	€	F	<u>⊞</u> III	H	<u>ш</u> г	G	€	F	€	F	€	F
ΪJ	ÞI€F	{ a	<u>€</u>	ì	<u>E</u> ÌÏ	H	<u> </u>	G	€	F	€	F	€	F
Ì€	PIEF	{ æ¢	<u>EG</u>	Н	<u>E</u> H		<u>r∉€</u>	ï	€	F	€	F	€	F
ÌF	ÞI€J	{ æ¢	<u>⊞G</u> EÉÍH	Н	EHÍF	H	<u> </u>	i i	€	F	€	F	€	F
ÌG	PIΨ	{ a		ì	<u>⊞</u>	ì		G	€	F	€	F	€	F
ÌН	ÞIF€	{ æ¢	ŒG	ì	ÈG	+	<u>E</u> JÌ	ı	€	F	€	F	€	F
ìı	PITE	{ a	ŒG	Н	EJÏ	H	<u>⊞</u> JÌ	J	€	F	€	F	€	F
ìi	ÞIFI	{ æ¢	<u>⊞€€</u> H	H	EGFI	+;'	ÈЈ	J	€	F	€	F	€	F
ìî	PIII	{ a			ÈG	H	⊞J	ı	€	F	€	F	€	F
ÌΪ	ÞIIJ	{ æ¢	<u>E</u> H	ì	ÉGÍ F	H	FEG G	i	€	F	€	F	€	F
ii	PITO	{ a	ÈGF	Н	È€Î	 	ËË EG	J	€	F	€	F	€	F
ÌJ	ÞIÍÏ	{ æ¢	<u>E</u> FH	H	ÈHH	H	FÈIH	Ϊ́	€	F	€	F	€	F
J€		{ a	<u>⊞</u> EEF	ì	ÈFÎ		ËÈIH	G	€	F	€	F	€	F
JF	ÞIÎI	{ æ¢	<u> </u>	ì	ÈÌÎ	Ti I	FEG G	Ī	€	F	€	F	€	F
JG		{ a		Н	ΕΪF	Н	ËË EG G	J	€	F	€	F	€	F
JH	ÞIÎÌ	{ æ¢	ÈFG	Н	EGJÌ	ì	FÈ HF	J	€	F	€	F	€	F
JI		{ a	ŒG	ì	ÈGÍ F	Н	ËÈH	Ī	€	F	€	F	€	F
JÍ	Þ΀J	{ æ¢	<u>===</u>	ì	EGÎ Ì	Н	F İ ĞH	П	€	F	€	F	€	F
JÎ		{ a	<u>⊞</u> FF	Н	ΕÍF		ËÈÈH	J	€	F	€	F	€	F
ĴΪ	ÞÎFÏ	{ æ¢	È€GÍ	Н	ÈG	Н	FÈ GJ	ΪÏ	€	F	€	F	€	F
JÌ	-	{ a	Œ€	ì	ÈHG	ì	ËÈG	G	€	F	€	F	€	F
JJ	ÞÎG	{ æ¢	ÈFG	ì	ÈFI	ì	FÈH	I	€	F	€	F	€	F
F€€		{ a	ËŒ	Н	ÈG€Í	Н	ËÈH	J	€	F	€	F	€	F
F€F	ÞÎĠ	{ æ¢	È€F	Н	ÈH€G	ì	FÈUF	J	€	F	€	F	€	F
F€G		{ a	⊞⊕F	ì	È	Н	ËÈUF	1	€	F	€	F	€	F
F€H	ÞÎFJŒ	{ æ¢	È€IÍ	ì	ÈGFÎ	Н	È€Í	I	€	F	€	F	€	F

9bj YcdY'>c]bhFYUMjcbg'f7cbljbi YXŁ

9bj Y	9bj Y`cd Y`>c]bhF YUVIjcbg fI7 cbijbi YXŁ													
	R[ã]c		ÝÆŽá	ŠÔ	ŸÆXá	ŠÔ	ZÆŽ á	ŠÔ	ΤΥΆΧΕσά	ŠÔ	ΤΫÆΧĒcá	ŠÔ	TZÁŽË-cá	ŠÔ
F€	1140	{ ā	<u>F</u> EII	Н	ÈÏÌ		<u>⊞</u> E€Í	J	€	F	€	F	€	F
F€	ÞÎ G€Œ	{ æ¢	EEH	ì	ÈG€Î	H	È€Ï	G	€	F	€	F	€	F
F€Î	PTOCOL	{ a		Н	E) ì	+;+		ΙΪ	€	F	€	F	€	F
F€Ï	ÞÌ€J	{ æ¢	<u></u>	Н	ĚH	H	<u> </u>	i i	€	F	€	F	€	F
F€Ì	PI	{ a	— ⊞ E H	ì	ÈJG	ì	E F	G	€	F	€	F	€	F
	ÞÌF€		<u>E</u> FÍ		ĚÍI				€	F	€	F	€	F
F€J	PIF€	{ æ¢	<u>ŒFI</u> ŒÎÏ	H	ΕΊÌ	H	<u>Æ</u> FJ	J		F	€			F
FF€		{ ā		ì	EGÎF		<u>⊞</u> EFJ ÈÌÌÍ		€			F	€	
FFF	ÞÌFJ	{ æ¢		1		H		G	€	F	€	F	€	F
FFG	.) of	{ ā	ÈEHÏ	H	ÈFI		ĦÌÍ	l l	€	F	€	F	€	F
FFH	ÞÌG	{ æ¢	ÈEGÎ	1	ÈÎH	H	ÈÏÌ		€	F	€	F	€	F
FFI		{ ā	È€Í	H	ÈFÎ		<u> </u>	G	€	F	€	F	€	F
FFÍ	ÞÌĞ	{ æ¢	ŒGJ	1	ÈĠ F	H	<u> </u>	1	€	F	€	F	€	F
FFÎ		{ a	<u> </u>	H	ĚΞΗΪ		<u></u> <u></u> <u> </u>	J	€	F	€	F	€	F
FFÏ	ÞÌGJ	{ æ¢		I	È€Ï	H	<u>Ë</u> IÍ	J	€	F	€	F	€	F
FFÌ		{ a	ŒG	Н	ÈΗ̈́Η		⊞į́lĺ		€	F	€	F	€	F
FFJ	ÞÌÌJŒ	{ æ¢	ÈEFG	H	ĚQ	H	<u>È</u> J	Ĩ	€	F	€	F	€	F
FŒ		{ a	È€H	Ì	⊞HÌ	Ì	⊞÷J	G	€	F	€	F	€	F
FŒ	ÞÌJFŒ	{ æ¢	⊞E€H	Ì	ÈHGJ	ì	ÈEÏÎ	G	€	F	€	F	€	F
FŒ		{ a	ËŒFG	Н	ÈÉÎG	Н	ËEÏÎ	ΙÏ	€	F	€	F	€	F
FGH	ÞÌJÎŒ	{ æ¢	€	F	€	F	ÈEÏI	Ϊ	€	F	€	F	€	F
FG		{ a	€	F	€	F	⊞E I	G	€	F	€	F	€	F
FG	ÞÌJÏŒ	{ æ¢	€	F	€	F	È€FG	ΙÏ	€	F	€	F	€	F
FĜ		{ a	€	F	€	F	⊞GFG	G	€	F	€	F	€	F
FĞ	ÞÌJÌŒ	{ æ¢	€	F	€	F	<u> </u>	J	€	F	€	F	€	F
FĠ	1 101 02	{ ā	€	F	€	F	EE FI	Ĭ	€	F	€	F	€	F
FGJ	ÞÌJJŒ	{ æ¢	€	F	€	F	<u>E</u> FH	Τ̈́	€	F	€	F	€	F
FH€	FIOUAL	{ a	€	F	€	F	EEFH	G	€	F	€	F	€	F
FHF	ÞJGJŒ	{ æ¢	<u>~</u> È€Í I	H	ĚÏÎ	H	ÈII	Ϊ	€	F	€	F	€	F
FHG	Fowa	{ a	ÈEGÏ	ì	È	+;+		G	€	F	€	F	€	F
FHH	ÞJHGŒ		€	F	€	F	<u> </u>	ï	€	F	€	F	€	F
FH	PJIRAL	{ æ¢	€	F	€	F	E F	G	€	F	€	F	€	F
	ÞJHHŒ	{ ā	€			F		ï	€	F	€	F	€	
FH	PJIIIUE	{ æ¢	€	F	€		<u>i</u>	1			€		€	F
FĤ	L IÍ COT	{ ā	€	F	€	F	ËEEI	G	€	F		F	€	F
FH	ÞJÍ €Œ	{ æ¢	€	F	€	F	<u>È</u> FJ	J	€	F	€	F	€	F
FH	(`) ~=	{ a	€	F	€	F	<u> </u>	1	€	F	€	F	€	F
FHU	ÞJÍÌŒ	{ æ¢	ŒĠ	1	ÈÜÎ	11	<u><u>E</u>F</u>	J	€	F	€	F	€	F
FI€		{ a	⊞EÉ I	Н	ÈÏ	Н	Œ F	Ï	€	F	€	F	€	F
FIF	ÞJÎ €Œ	{ æ¢	€	F	€	F	Œ€		€	F	€	F	€	F
FIG	V	{ a }	€	F	€	F	<u> </u>	G	€	F	€	F	€	F
FIH	ÞJÌÏŒ	{ æ¢	€	F	€	F	ÆFG	ĺ	€	F	€	F	€	F
FII		{ a	€	F	€	F	ËŒFG	G	€	F	€	F	€	F
FIÍ	ÞJÌÎŒ	{ æ¢	€	F	€	F	ÈFF	ΙÏ	€	F	€	F	€	F
FIÎ		{ a	€	F	€	F	Ë€FF	G	€	F	€	F	€	F
FΙΪ	ÞF€€Ì	{ æ¢	ÈEIJ	Н	ÈFÌ	i	FÈF	I	€	F	€	F	€	F
FIÌ		{ a	Œ€	ì	È	Н	ËÈF	J	€	F	€	F	€	F
FIJ	ÞF€€J	{ æ¢	ÈEHU	ì	ÈĠF		F Ì G	J	€	F	€	F	€	F
FÍ€		{ a	ŒŒĠ	Н	ÈÎ G	Н	Ë ÎS		€	F	€	F	€	F
FÍF	ÞF€FÏ	{ æ¢	È€GÎ	Н	È€Í	H	FÉHÍ F	G	€	F	€	F	€	F
FÍG		{ a	III II	ì	È	1	ËĖF	Ϊ́	€	F	€	F	€	F
FÍΗ	 ÞF€FÌ	{ æ¢	<u>E</u> €G	ì	ÈÏI	H	FÊH	T T	€	F	€	F	€	F
FÍI	FIGI	{ a }	<u>⊞</u> J	H	E G		ËĒH	G	€	F	€	F	€	F
FÍÍ	V[cæ∳ K		€	Н	FHĚTÍ	H	<u>Œ</u> ÎÍ	J						-
ГП	V COOP IN	{ æ¢	₹	П	гпан		GEII	J						

9bj YcdY'>c]bhFYUMJcbg'fl7cbljbi YXŁ

R[ã]c	ÝÆŽá	ŠÔ	ŸÁŽá	ŠÔ	ZÁŽá	ŠÔ	ΤΥΆΧΕ̈άα	ŠÔ	ΤΫ́ǼČĒcá	ŠÔ	TZÁŽÜ Ëcá	ŠÔ	
FÍÎ { a	€	Ì	ÌĦÍ	Ì	ËGÈÌÍ	_							

9bj Y`cdY'D`UhY#G\Y``Df]bV]dU`GhfYggYg

	Ú æe^		Ù~¦-æ&^	Ùãt{æFÁŽ•ãã	ŠÔ	Ùãt{æGAŽ•ãa	ŠÔ	Væ ÁTæçÆŽ•ãa	ŠÔ	OB;* ^ÆŽæåá	ŠÔ	X[}ÁTã^•ÁŽÈ	ÈŠÔ
F	ÚF	{ æ¢	V	FÈ HG	G	€	F	F È GI J	Ï	F È ÌÍ	Ì	OEÈÏ G	Ϊ
G		{ a		€	F	ËÈH	Ϊ	€	F	⊞ÏG	ΙÏ	€	F
Н		{ æ¢	Ó	FÈ HG	Ϊ	€	F	F È GI J	G	F È ÌÍ	ì	GÈï G	G
1		{ a		€	F	ËÈH	G	€	F	⊞ÏG	G	€	F
ĺ	ÚG	{ æ¢	V	FÈHFH	G	È€Í	Н	FÈ€GÏ	G	ŒH	Ϊ	FÈ€G	G
Î		{ a		⊞€ÊÎ	ì	ËÈF	Ϊ	€	F	⊞ I	J	€	F
Ϊ		{ æ¢	Ó	FÈHFH	Ϊ	È€Í	Н	FÈ€Ğ	Ϊ	GÈH	G	FÈ€G	Ϊ
Ì		{ a		⊞€Î	ì	ËÈF	G	€	F	⊞ I	T	€	F
J	ÚI	{ æ¢	V	ĒΪG	G	€	F	ÈÌÌ	G	GÉGIÍ	G	ÈJG	G
F€		{ a		€	ì	⊞ÏG	Ϊ	€	F	ÈΙΙ		€	F
FF		{ æ¢	Ó	ĒΪG	Ï	€	F	ÈÌÌ	Ï	GÉGIÍ	ΪÏ	ÈJG	ΪÏ
FG		{ a	_	€	ì	ËΪÏG	G	€	F	È I	J	€	F
FH	ÚÍ	{ æ¢	V	ÈHÎ	G	€	Н	ΕĠĤ	Ï	FÐFJ	Н	ÈÌÌ	Τ
FI		{ a	-	€	ì	Ш̈́Нı̂	Ϊ	€	F	ШН	G	€	F
FÍ		{ æ¢	Ó	ÈHÎ	Ï	€	H	EGÎ H	G	FBFJ	H	ÈÌÌ	G
FÎ		{ a		€	ì	Ш̈́Нı́	G	€	F	Ш́НН	Ï	€	F
FΪ	ÚÎ	{ æ¢	V	 FÈ€l	G	ËE€G	Н	ĚlÎ	Ϋ́	FÊJJ	T	FÈEÏ	ΤĦ
FÌ	<u> </u>	{ a	•	€	F	ËÈ Î	ï	È€G	F	<u> </u>	Ϊ́	È€H	F
FJ		{ æ¢	Ó	 FÈ€l	ï	ËÈ€G	H	ĚlÎ	G	FÊJJ	J	FÈEÏ	G
G€		{ a		€	F	<u>⊞E</u> Î	G	È€G	F	HÎÎÎ	G	È€H	F
Œ	ÚÏ	{ æ¢	V	FÈÎÍ	G	<u>⊞</u> €€H	F	ÊFF	İ	FÈG	ī	FÈJÏ	Τ
Œ	0.	{ a	•	€	F	ËÈÏ	i	È€G	F	⊞ÎF	i	È€H	F
GH		{ æ¢	Ó	FÈÎÍ	ï	ŒŒH	F	ÊFF	G	FÈG	J	FÈJÏ	G
G		{ a		€	F	ËÈÏ	G	È€G	F	⊞ÎF	ì	È€H	F
GÍ	ÚJ	{ æ¢	V	FÊ€Ï	G	È€G	ì	FÈHF	ij	FĚ FÎ	Ħ	FÈÏÏ	Ħ
Ĝ		{ a	V	ËE€G	Н	ËËFG	Ϋ́	È€G	F	⊞ HH	Ė	È€H	F
Ğ		{ æ¢	Ó	FÊ€	ï	ÈE€G	ì	FÈEHF	G	FĚ FÎ	J	FÈÏÏ	G
G		{ a		ËË€G	Н	ËËFG	G	È€G	F	⊞ HH	G	È€H	F
GJ	ÚF€	{ æ¢	V	FË FJ	G	€	ì	FEGH	Ϋ́	FÈIH	ī	ŒÎ)	T T
H€	<u> </u>	{ a	V	€	F	ËĖĠ	i	È€G	F	⊞FG	i	È€H	F
HF		{ æ¢	Ó	FË FJ	†	€	ì	FEGH	G	FÈIH	J	ŒÎ)	G
HG		{ ā		€	F	ËËG	G	ÈE€G	F	⊞FG	G	È€H	F
HH	ÚFF	{ æ¢	V	FÐ FÍ	G	⊞€F	Н	₿JÍ	÷ i	FÊIJ	ī	FÐÍJ	
Н	011	{ ā	V	€	F	ËĐĠ	ï	È€G	Н	⊞GHF	i	ÈE€H	Н
HÍ		{ æ¢	Ó	FÐ FÍ	i	⊞€F	H	₿JÍ	G	FÊIJ	J	FÐÍJ	G
HÎ		{ a		F⊠FI	F	ËĐĠ	G	EE€G	Н	EEGHF	G	EE€H	Н
HÏ	ÚFG	{ æ¢	V	——€ GÈ€FÎ	G	EEHÍ	ı	FE	ï	FĚ J	ı	GEÍÍ	T T
	Oi G	{ a	V			ËGÆGJ	Ï	EEH	Н	<u> </u>	1	ŒÎ	<u> </u>
HU		{ æ¢	Ó	GEEFÎ	J ï	<u>E</u> EHÍ	J	FÈ	H G	FĚJ	J	GEÉÍÍ	G
I€		{ a	J			ËGÆGJ	G	EEI	Н	<u></u>	G	EE€Î	Н
I €	ÚFI		V	GEGÍ H	G	EHÍ	ı	FÈÏ F	ï	FĚÍG	ı	G Ì (17
IG	UFI	{ æ¢ { ā}	V			EGÊÎÍ	ï	<u>r</u> EIF	F		i i	<u>GE</u> €Ï	F
IH			Ó	GEGÍ H	J	<u>rcaca i</u> ÈHÍ	J	<u>re€i</u> FÈïF	G	FĚÍG	1	G Ì (G
		{ æ¢ { ā}	U			EGÊÇÎ Î	G	FEIF E€€	F	FEIG HÌÎ	G	<u>GE</u> €Ï	F
lĺ	ÚFÍ		V	GÈ FH	G	€	ì	FÈHÎJ	T I	FÈJH	ı	G <u>t</u> ijî	T T
ΙÎ	UFI	{ æ¢ { ā}	V	€	Н	<u>€</u> ËGÈG	Ï	<u>F</u> EIIJ	F	FEJN	i i	EE€Ï	F
11		19		~		LOI G		ECI		шп		ECI	I T

30]	· · · · · · · · · · · · · · · · · · ·		ù Grigg				, ~	× .	~	× ^	, , ,	
	Ú æe^	Ù"¦æ&^	Ùãt{æFÁX.∙ãã	<u></u> \$0_	· -	<u>\$</u>	Væ ÁTæçÁŽ•ãa		OB;*ļ^AŽanåá		X[}ÁTã ^•ÁXÈ	
	{ æ		GÈ FH	1	€		FÈĤ J	G	FÈ JH	J	Œ <u>Ť</u> JÎ	G
	{ }		€ .	Н	ËŒĠ	G	Ì € €I	F	<u></u>	G	È€Ï	F
ΪĴ	ÚFÎ {æ		GĚ FÎ	G	<u>i</u> ÉJH	l l	FÈH	1	<u>FĚIÌ</u>	l l	ŒĬ€Í	
Í€	{ a	-	⊞ĜÌĞ	IJ	ËŒĤ		.€	Н	∰îlí		È€G	Н
ÍΕ	{ æ		<u>Ģ</u> Ě FÎ	1	ËËÌḤ	J	FÈGHÏ	G	<u>FĚIÌ</u>	J	Œţ€	G
ÍG	{ a		⊞GIG	-	ËŒŢĤ	G	€	Н	∰JI	G	ÈE€G	Н
ÍΗ	ÚFÏ { æ		HÈG	-	ĔĮÏ		FĚG€G	J	FĚÍÍ	l l	ŒÌÍ	J
İI	{ a	,	⊞ŢĪÎ	J	ËËIJ	J	È€€G	Н	ŒijŢĢĢ		Ì€€Í	Н
İİ	{ æ		HÈG	J	ĔĮÏ	J	FĚG€G		FĚÍÍ	J	ŒÌÍ	
ÌÏ	{ a		⊞ŢÎ	-	ËHÈIJ		È€G	Н	ŒŢŒ	G	Œ€Í	Н
ÍΪ	ÚFÌ { æ		ĘĒΙ	ı	€	Н	ÈÎG	J	FË FG	<u> </u>	FĒÌÌ	J
ĺÌ	{ a	,	È€F	Н	ËĖΙJ	J	,€	Н	È€FI		È€F	Н
ÍJ	{ æ		ĘĒΙ	J	€	Н	ÈÎG		FË FG	J	FĒÌÌ	
Ĵ€	{ a		È€F	Н	Ε̈́ĒΙJ		€	Н	ŒFI	G	È€F	Н
ÎΕ	ÚFJ { æ		FÈ€Ê		<u>iE</u> Ì F		ÈÎJ	G	<u>F</u> ĚÎJ	l l	ĖΪJ	G
ÎG	{ a		EE Ï	G	ËĘŒFÎ	G	È€€H	Н	∰ǵ		ÈEEI	H
ĴΗ	{ æ		FÈ€Ê	G	<u>È</u> F	G	ĖÎJ		<u>F</u> ĚÎJ	J	ĖΪJ	
	/ { a		ŒŒŢÏ	-	ËĘĒFÎ		Œ€H	Н	ŒŢĠĹ	G	È€	H
ÎÍ	ÚG€ { æ		ĞĘĴÏ	G	<u>i</u> ÈŲ G	Ţ	ĘĖĠ		<u>FÊ</u> FÌ		QĚÍÏ	
ÎÎ	{	,	⊞ĤĢ	J	ËÇIË FF		Œ€	Н	<u></u>	Н	È€J	Н
ÎΪ	{ æ		ĞĘĴÏ		<u>i</u> ÈŲ G	J	ĘĖĠ	G	FÊ FÌ	J	QĚÍÏ	G
ÎÌ	, { a		∰ÎĢ		ËĢĒFF	G	È€	Н	<u> </u>	Н	È€J	Н
ĴJ	ÚŒF {æ		HÈGIÌ	1	Ë€Î		FÈFH	1	<u>FĚ Ï H</u>		H <u>E</u> H	J
Ï€	{ ā	,	∰FF	J	ËËH	J	E€U	Н	<u> 単íI</u>	Н	ÈFÌ	Н
ΪF	{ æ		HÈGIÌ	J	Ë€Î	J	FÈ FH	G	FĚΪΗ	J	H <u>E</u> H	
ΪG	{ }		⊞FF		ÜÜH	Ĺ	Œ€J	Η	曲(i	Н	ÈFÌ	H
ΪΗ	ÚGG { æ		FÊÍÍ	ļ	⊞€€J		<u> </u>	ļ	F <u>È</u> ÌÍ		FËÎ	
ΪΙ	{ a		È€Î	<u> </u>	ËĒÎÌ	J	È€È		ĦÎÎ	Н	ÈFH -÷÷÷	
ΪÍ	{ æ		FÊÍÍ	Ţ	<u>⊞</u> €€J		ÞΪΪ	G	FÈÌÍ	J	FËÎ	G
ΪÎ	{ }		È€Î	l l	ËËÎÌ	1	È€È		HÎÎÎ	Н	ÈFH →	
ΪΪ	ÚGH { æ		FÈFH	<u> </u>	<u>ÈH</u> F	J	ÈFÌ	G	<u>G</u> ÈÎ	Н	FÈ€€Í	G
ŢÌ.	{ a		⊞H I		ËĖFÍ	G	È€Î	Н	iig i	J	ÈF	H
ΪJ	{ æ		FÈFH	G	ÈH F	ļ	ÈFÌ	1	<u>G</u> ÈÎ	Н	FÈ€€Í	
Ì€	{ a		⊞H I	J	ËÈFÍ		È€Î	Н	iig i		ÈF	H
ÌF	ÚĠ { æ		HÈHÍ	G	ÊHH	G	FÈÌÍ	ļ	FË FÏ	F	HÈ€JÏ	1
ÌG	{ a		⊞HÍ	ļ.		ı l	È€€		iig i	G	È€È	
ÌΗ	{ æ		HÈHÍ	1	ÊHH ##	1	FÈÌÍ	G	FË FÏ	F	HÈ€JÏ	G
	{ a		⊞HÍ	G		G	È€€	ı,	EÉGÎ Ï	<u> </u>	EEEÌ	l l
	ÚGJ { æ		HĚH	G	ĚHÍ	G	FĚ€J		FĚ JH	J	HÈHFÏ	
ÌÎ	{ a	,	⊞H	ļ.	ËËÍG	ļ.	È€Î	F	⊞ìÎ	G	<u>E</u> FF	F
	{ æ		HĚH	ı	ĚHÍ	1	FĚ€J	G	FĚ JH	l T	HÈHÏ	G
11	{ }		⊞ H LÀ LÏ	G	ËËÍG	G	È€Î	F		-	<u>E</u> FF	F
ÌJ	ÚH€ { æ		IÈIÏ ÜÈÈ ↔	G	FÈ G	G	FË G	1	FĚÌH	J	I ÈH I	1
J€	{ a		ËÈG	ı l	ËÈÏÏ	ı ı	È€Ë	<u> </u>	∰1 G		<u>E</u> FH	1
JF	{ æ		IÈIÏ Ü∵È ↔		FÈ G	1	FË G	G	FĚÌH		I ÈH I	G
JG	{ a		ËÈG	G	ËÈÏÏ	G	È€Ű	ı ı	⊞i G		ÈFH Lit ↔	-
JH	ÚHF { æ		I ÈG	G	FÈÌF	G	FËHG		FÐÏÍ Ösú	F	IÈ€G	
JI	{ }	,	ËÈÌJ	ï	ËÐÍH	Ÿ	ÈE€H		<u>⊞€</u> JÎ	G	ÈEEÏ	
JÍ	{ æ		I ÈG		FÈÌF		FË HG	G	FÐÏÍ ÖGÐ	F	IÈ€G	G
JÎ	{ ā		ËÈÌJ	G	<u>ËÀÍH</u>	G	È€H FÈ-4	Ţ	ÎŒÎ		ÈEEÏ OÈ-II E	+
JÏ	ÚHG { æ		GÉ JG	G	Ĥ	G	FÈ€		GÊJÎ	F	GÈHÏ F	
JÌ	{ a		⊞GJÎ		ˌΠ€Í		Œ€H		⊞GF		Æ€Í	

United U	30) 1	CUI D OIII R	· ·		io di iggi			 			
Fee		Ú æ^				ŠÔ	ŠÔ				
Fef				0				G		F	G
FEG			{ a					Ĺ		ĺ	İ
Feb		ÚHH		V		G	G	Ţ_	FÉG	Į	Ţ
Feg			{ a	,		Ĩ	Ĩ	ĺ		ĺ	İ
Fef				Ó		Ĩ	Ï	G		Ļ	G
Fei			{ a			G	G	Ì		Ì	Ì
Fed (a) fifth G fifth G fifth G fifth G fifth G fifth G fifth G fifth G fifth G fifth G fifth G fifth I fifth G fifth I fifth G fifth I fifth G fifth I fifth I fifth I fifth G fifth I fifth G fifth I fifth G fifth I fifth G fifth I fifth<		ÚH		V		Ï	Ï	J		Ï	Ï
Fei			{ a					Ì			Ì
FFE				Ó		G	G			_	G
FFE		, ,	{ a			Ĩ	Ï	ĺ		H	İ
FFG		ÜHİ		V		Ï		G		Ĺ	G
FFG			{ a	,		-	G	Ĺ		G	İ
FFH				Ó		G		Ĩ		Ĺ	Ĩ
FFI							1				1
FFI (ax) Ó FÉHGH ï ÉÉGG FÉTILI J FÉTILI G FÉTILI J FÉTI		UHI		V			F			Ļ	1
FF				,		F					
FF				0		1				Į	
FFJ								F			F
FFJ		UHI		V			F			Ļ	
FOSE				,		F					
FGF				0			_			Ĺ	
FGG		./ #					G	F			F
FGH		UHI Œ		V	ŒE€		ļ			Ļ	
FG				1		J					
FG ÚHÌ {æ¢ V CŒTÎ G ĒĒÎÎ I FĒZJH Ï FĒÎÎÎ I QÊTÎÎ Î PÊZHÎ				0						_	
FG { a} EEET J EEET I EEET I EEET I EEET I EEET I EEET I EEET I EEET I EEET I EEET I EET J GETII		./ \$					 G	F		G	F
FG {as Ó GET ï ÉÜÏ J FÉJH G FÉJI J GET		UHI		V			1			ļ ļ	1
FG {â ∰EĞÎ I ÜDÊTÎH G Œ€F Î ∰UG G Œ€H Î FGJ ÛHÎCE {axt V ÊÎ F I ÊÛÎ G ÊÛHF J FÊÛÎ J FÊÛÎ J FÊÛÎ J FÊÛÎ J FÊÛÎ J FÊÛÎ I ÊÊÛÎ Î ÊÊÛÎ Î ÊÊÛÎ Î ÊÊÛÎ Î ÊÊÛÎ Î ÊÊÛÎ Î ÊÊÛÎ Î ÊÊÛÎ Î ÊÊÛÎ Î ÊÊÛÎ Î ÊÊÛÎ Î ÊÊÛÎ Î ÊÊÛÎ Î ÊÊÛÎ Î ÊÛÎ Î ÊÛÎÎ Î ÊÊÛÎ Î ÊÛÎÎ Î ÊÛÎ Î ÊÛÎÎ Î ÊÛÎ Î ÊÛÎÎ Î ÊÛÎ Î ÊÛÎ Î ÊÛÎ Î ÊÛÎ Î ÊÛÎ Î ÊÛÎ Î ÊÛÎ Î Î Î Î Î Î Î Î				<u> </u>		J	<u> </u>		ЩIJĞ	Н.	1
FGJ ÚHÌŒ {æç V ÉIF I ÉEJÍ G ÉGHF J FÉIÌ G ÉÉ € J FHE {â ÉÉBÍ I ÉÉIÍ J ÉÉGI I ÉÉIJÍ I ÉÉGI I ÉÉJÍ I ÉÉGI I ÉÉJÍ I ÉÉGI I ÉÉJÍ I ÉÉGI I ÉÉJÍ I ÉÉGI I ÉÉJÍ I ÉÉGI I ÉÉJÍ I ÉÉGI I ÉÉJÍ I ÉÉGI I ÉÉJÍ I ÉÉGI I ÉÉGI I ÉÉJÍ I ÉÉGI I ÉÉJÍ I ÉÉGI I ÉÉJÍ I ÉÉGI I ÉÉJÍ I ÉÉGI I ÉÍJÍ I ÉÉGI I ÉÍJÍ I ÉÉGI I ÉÍJÍ I ÉÉGI I ÉÍJÍ I ÉÉGI I ÉÍJÍ I ÉÉGI I ÉÉJÍ I				0				G			G
FHE		r'uni or						+			++-
FHF {asc} Ó ÉIF J ÈEJÍ Ï ÉBHF I FÉIÌ Ï ÉÉÉ I FHG {a} ÉÉÉÎÎ G ÉHIÍ I ÉÉÉG Ì ÉHIÍ Ì ÉÉGG Ì ÉHIÍ Ï ÉÉGG Ì ÉHIÍ Ï ÉÉGG Ï ÉHÍÍ Ï ÉHÍÍ Ï ÉÉGG Ì ÉHÍÍ J ÉÉGG Ì ÉHÍÍ J ÉÉGG Ì ÉHÍÍ J ÉÉGG Ì ÉHÍÍ J ÉÉGG Ì ÉHÍÍ G CÉGG Ï ÉHÍÍ G ÉHÍÍ G ÉÉGG Ì ÉHÍÍ G ÉÉGG Ì ÉHÍÍ G ÉÉGG Ì ÉHÍÍ G ÉÉGG Ì ÉHÍÍ G ÉÉGG Ì ÉHÍÍ G ÉÉGG Ì ÉHÍÍ G ÉÉGG Ì ÉHÍÍ G ÉÉGG Ì ÉHÍÍ G ÉÉGG J ÉHÍÍ		UHI Œ		V		ı ï		J		G	J
FHG				Á			J			<u> </u>	++-
FIH UHU { aac V $acc} V$				0		_		1			+
FH		1/11.11		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			1	 ı l			++-
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		UHJ		V		ī	T	ì			+
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				Ó		ï	ï			ij	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				0							1
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		I III IŒ		\/				G		G	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		Orbac		V			+			ī	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				Ó		ij	F	÷ i		†	+ +
FIF $UI \in \{acc \ V \ FRECH \ G \ \in \ F \ ELIF \ G \ GREGJ \ G \ FRECGG \ G$ FIG $\{acc \ O \ FRECH \ I \ \in \ F \ ELIF \ I \ GREGJ \ I \ FRECGG \ I \ FII \ GREGG \ I \ FRECGG \ I \ FRECGG \ I \ GREGGG \ I \ FRECGG $						_		F		i i	F
FIG $\{3\}$ \in \hat{I}		lÍII €		V						_	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		0, 0		V		ì	i			Ť	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				Ó		ij	F	÷ i		Ϊ́	Ť
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						ì		F		j	F
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		ÚL∉Œ		V		G	ì	İ			Τ̈́
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		J. 332				ì	Ï	 Ì		_	
FIÌ {ã} € Ì ËFĪĒ IÍ G ÌE€G Ì ËËÐ Ï FIJ ÚIF {æ¢ V FÞÐÍG G ÞEÏ Ì G ÞÐIF Ï GÆEÍ Å F FÐÐGH Ï				Ó		Ϊ	 ì	G		Ī	G
FIJ ÚIF {æx V FÈIG G ÈEÏÌ G ÈIF Ï GÀEÍÎ F FÈIGH Ï						ì	G	 ì		İ	ì
		ÚI F		V		G		Ϊ		F	 Ϊ
						Ϊ	Ϊ	 Ì		ì	Ì

30] 1	· · ·			` ar rgg i				, ,	× .	~	× .	, , ,	
	Ú æe^		Ù"¦æ&^	Ùãt{æFÁX.∙ãã	ξO		SΩ	Væ ÁTæçÁŽ•ãa		OB;* ^AŽanåá		X[}ÁTã^•ÁŽÈ	
FÍF	{	æ ¢	Ó	<u>FÐ</u> (G		<u>ĒĒ</u> Ì		ÐΙF	Ğ	<u>G</u> ÉÉÍ Î	Ę	FÈGH	Ğ
FÍG		ą			G	ËÐÎG	Ğ	È€F	<u> </u>	<u>⊞</u> ĕG		È€G	4 !
FÍΗ	ÚI FŒ {	æ¢	V	<u>Ģ</u> Ē Ï G	G	EEEÍ	Ţ	FÈ G	Ĺ	<u>FĚÍH</u>	J	Œ <u></u>	\bot
FÍI	{	ą	,	ŒŒH	H	ËËÌÌ	ĺ	È€G		⊞ <u></u> €j	G	È€Í	
FÍÍ	{	æ¢	Ó	ΘÊΪG		Œ€Í.		FÈ G	Ğ	<u>FĚÍH</u>	ļ.	Œij	G
FÍÎ		ą		ËËŒH	Н	ËÇËÎÎÎ	G	È€€G	I	⊞ ` €Ì		È€Í	1
FÍΪ	ÚI G {	æ¢	V	HÌÈG	G	ÈEI G	G	FĚJI	Ţ	G	F	HÈGFH	Ļ
FĺÌ	{	ą	,	iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii		ËHÈCHÎ		€		ËÈG+U		€	1
FÍJ	{	æ¢	Ó	HÈG	Ĩ	ÈEI G	Ï	FĚJI	G	G	F	HÈGFH	G
F΀	{	ą		EE Ì	G	ËHÈGHÎ	G	€	Ĺ	ŒGĤU	ĺ	€	l l
FÎF	ÚI GOE {	æ¢	V	<u>G</u> È FG	G	EEÌ Ï		FÈ G	Ţ	FÊ	J	ŒĤ	Ĩ
FÎG	{	ą	,	ËEJF	J	ËGËHG	Ï	È€	ĺ	ŒŢÌ	G	È€È	Ĺ
FÎΗ	{	æ¢	Ó	QÈ FG	Ï	È Ï	J	FÈ G	G	FÈ	1	QÊ HÎ	G
FÎI	{	ą		ËŒJF	1	ËĢÈHG	G	È€€I	Ì	EE;ïì	Ï	È€È	Ì
FÎÍ	ÚIH {	æ¢	V	HÈHF	G	ÈHH	G	FĚ€Í	Ï	FËI	Н	H <u>B</u> EÌG	Ţ
FĴĴ	{	ą		⊞HÌ	Ï	ËHÈIJ	Ϊ	€	Ì	ËŒHÍ	G	ÈE€G	Ì
FÎΪ	{	æ¢	Ó	HÈHF	Ï	ÈHH	Ϊ	FĚ€Í	G	FË∣	Н	HÈ€ÌG	G
ΓÎÌ	{	ą		⊞HÌ	G	ËHÈIJ	G	€	ì	⊞GHÍ	Ï	ÈE€G	Ì
ΓÎJ	ÚI HŒ {	æ¢	V	ËΊ	J	ÈEGG	J	ÈUΗ		FËÌÎ	Ï	ËIJÎ	1
FÏ€	{	ą		ËEG	1	⊞Ì€Î	\perp	ÈE€G	Н	ÈΙÌ	1	È€EI	Н
FΪF	{	æ¢	Ó	Ė̈́JÌ	Т	ÈEGG	_	ÈШН	J	FËÌÎ	G	ËIJÎ	J
FΪG	{	ā		ËEG	J	⊞EÎ	ک	È€G	Н	ÈΙÌ	J	È€	Н
FΪΗ	ÚII {	æ¢	٧	FÈ FH	П	⊞E€Î	Η	ÌΪĠ	J	FÊE€G	ΙÏ	FÈJF	J
FΪΙ	{	ā		È€H	F	ËĖG	J	È€Í	Н	⊞êîì	I	È€È	Н
FΪÍ	{	æ¢	Ó	FÈ FH	J	⊞ E €Î	Н	ÌΪĠ	Т	FÊ€G	G	FÈÌJF	
FΪÎ	{	ā		È€H	F	ËÈĠ		È€Í	Н	⊞EÎÌ	J	È€ÈÌ	Н
FΪΪ	ÚI Í	æ¢	V	HÈIJ	Т	ĒΉ	Т	FĚΪΪ	J	FĚ FI	J	HĚÏÌ	J
FΪÌ	{	ā		ĦΉ	J	ËHÈÌÌ	J	È€Ï	Н	ËŒJÎ	G	È€FI	Н
FΪJ	{	æ¢	Ó	HÈIJ	J	ĒΉ	J	FĚΪΪ	П	FĚ FI	Т	HĚÏÌ	
FÌ€	{	ā		ΗŒΉ	T	ËHÈÌÌ	1	È€Ï	Н	ŒĴĴ	Ϊ	È€FI	Н
FÌF	ÚI Î {	æ¢	V	ŒĦ	Т	È	Т	ÈÌF	J	FĚIF	Н	ŒFJF	J
FÌG	{	ā		Ĥ	J	ËGÈHÎH	J	È€€H	Н	ËЭН	G	È€Ê	Н
FÌΗ	{	æ¢	Ó	G Ì H	J	È	J	ÈÌF	Т	FĚIF	Н	GÈJF	
FÌI	{	ā	-	Ĥ	Ī	ËGÈHÎH	Ī	È€€H	Н	ËЭН	Ï	È€Î	Н
FÌÍ	ÚI Ï {	æ¢	V	СЕСН	Т	ÊHH	Т	È€Ì	J	FÈH	Н	GÈEFG	J
FÌÎ	{	ā		Η̈́HÌ	J	ËGËĆÍI	J	È€€H	Н	⊞ĤG	G	È€EÌ	Н
FÌΪ	{	æ¢	Ó	СЕСН	J	ÊHH	J	È€Ì	Т	FÈH	Н	GÈEFG	
FÌÌ	{	ā	-	Η̈́HÌ	Ī	ËGËĆÍI	Ī	È€€H	Н	⊞ĤG	Ï	È€È	Н
FÌJ	ÚIÌ {	æ¢	V	G Ì I FÎ	Т	È€F	Т	ËÎJ	J	FËJÍ	Н	GÈ€ÍJ	J
FJ€	{	ā		⊞EG	J	ËŒHU	J	È€Í	ì	⊞FH	G	È€F	
FJF	{	æ¢	Ó	G Ì I FÎ	J	È€F	J	Ε̈́ÎJ	Ť	FĖJÍ	Н	GEÍJ	
FJG	{	ā	-	⊞EG	Ī	ËŒHU	Ī	Ì€€Í	ì	⊞FH	Ï	ÈF	
FJH	ÚI J {	æ¢	V	l ÈFG	Ť	FĚ€Ì	Ť	FÈHFJ	J	FÈJJ	Î	HÈH	J
FJI	{	ā	-	ËËF	J	ËÈIJ	J	È€È	Ì	È€€H	G	È€FÎ	ì
FJÍ	{	æ¢	Ó	I ÈFG	J	FĚ€	J	FÈFJ	T	FÈ JJ	î	HÊH	
FJÎ	1	ā		ËĚF	Ī	ËÈIJ	Ī	È€È	ì	È€H	ΙÏ	ÈFÎ	
FJÏ	ÚÍ € {	æ¢	V	ŒÎÌ	i	ÈGG	i	ÈJF	J	ŒÈÌ G	T	GE	J
FJÌ	J. J	a	•	⊞GFJ	J	ËËË	J	È€Î	Ť	<u>E</u> FÍ	G	<u>E</u> F	Ť
FJJ	, I	æ ¢	Ó	ŒÈÌÌ	J	ÈCC	J	₿JF	i	<u>Œ</u> ÌG	ì	GÊ	
G€€	1	ā		EEFJ	Ī	ËÈÈ	Ī	È€Î	ì	<u>E</u> FÍ	Ï	È€F	ì
G€F	ÚÍ F	—————————————————————————————————————	V	<u>B</u> FJ	J	<u> </u>	Ϊ	ÈΗ	T	FÈH	J	ÈJJ	
G€G	5. 1	a		H H	G	⊞G	İ	È€H	Ì	⊞IJ	Н	È€Í	
		9				3		201					

9bjYcdY'D`UhY#G\Y``Df]bV]dU'GhfYggYg'fl7cbljbiYXL

<i>90] 1</i>	CUID OIIIR							, ~	× .	~	× .	, , ,	
	Ú æe^		Ù`¦æ&^	Ùãt{æFÁX.•ãã	<u>so</u>	Ùãt{æ69—£Xi•ãa		Væ ÁTæçÁŽ•ãa		OB;*ļ^AŽanåá	<u></u> 80_	X[}ÁTã^•ÁŽÈ	
G€H		{ æ¢	Ó	₿ĘJ	<u> </u>	<u>È</u> Í	G	ĖΗ	Ĺ	<u>FÈ Ĥ</u>		Ε̈́Ĵ	Į
G€		{ a		<u>⊞</u> H		⊞G	J	É€€H		⊞ĭIJ	Н	È€Í	
G€Í	ÚÍ G	{ æ¢	V	ĔÏÏ	J	Œ€H	Н	È€Ì	1	<u>F</u> ÊQ	J	È€F	
G€Î		{ a		ÈEG	Н	⊞ìH		È€G	Н	曲(i)	Н	È€I	Н
G€Ï		{ æ¢	Ó	ĚÏÏ		ËË€H	Н	È€Ì	J	F <u></u> ÊQ		È€F	J
G€Ì		{ a		È€G	Н	∰ÌH	J	È€G	Н	曲(i)	Н	È€EI	Н
G€J	ÚÍ H	{ æ¢	V	FĒĞ	1	⊞EG	Н	ÙG	J	<u>Ģ</u> ĖĐFÍ	Н	FËJF	J
GF€		{ a	,	È€G	Н	ËËĤ	J	È€€G	Н	<u>⊞</u> J	G	È€EI	Н
GFF		{ æ¢	Ó	FĒĞ	J	ËE€G	Н	ÙG		<u>Ģ</u> ĖĐFÍ	Н	FĔJF	1
GFG	.,	{ a		È€G	Н	ËËĤ		È€G	Н	Œ J		È€	Н
GFH	ÚÍ I	{ æ¢	V	HÈGG	-	<u>IĚ</u> GH		FÈHFH	J	<u>FËÌÎ</u>	Н	фф	J
GFI		{ a	,	⊞ĕGG	J	ËJĖIJ	J	È€€H	Н		G	È€Î	Н
GFÍ		{ æ¢	Ó	HÈG	J	ΕĚ,GH	J	FÈHFH		FËÌÎ	Н	ŒġŒH	1
GFÎ		{ a		⊞ĕĢ		ËHÈJ	1	È€H	Н	ŒŢÎ Ì	Ï	È€Î	Н
GFÏ	ÚÍÍ	{ æ¢	V	QĚ I Í		ÈĠÍ		FŒÍF	J	FΕ̈́Ì	Н	Q I II	J
GFÌ		{ a		ËĞİ	J	ËĢĚĴĴ	J	È€G	Н	ËĠΪ	G	È€EI	Н
ŒIJ		{ æ¢	Ó	QĚTÍ	J	ÈĠÍ	J	FÈ F	1	FΕ̈́Ì	Н	Q È I I	I
G €		{ a		ËĞI	-	ËĢĚÎÎ	1	ÈE€G	Н	ΕΕΘίΪ	Ï	È€EI	H
GGF	ÚÍ Î	{ æ¢	V	FÈE	I	È€IG	1	ËÌÎ	J	GÈEGÌ	Н	FĚJH	J
GGG		{ a		⊞G	J	ËËF	J	ÈE€G	Н	⊞GÍ	G	ÈE€H	H
GGH		{ æ¢	Ó	FÈE	J	È€IG	J	ËÌÎ		GÈEGÌ	Н	FĚJH	1
GG		{ a		ËEGG	_	ËĒFI	_	ÈE€G	Η	⊞GÍ	Ϊ	ÈE€H	Н
GGÍ	ÚÍ Ï	{ æ¢	V	ĒΪΗ		ËË€€G	Н	ÈFÎ	J	GÈ€FÍ	Н	ÈĖ	J
ϔ		{ a }		€	ĺ	ËΪJ	٦	È€F	Н	ЩНÍ	G	ÌŒ€H	Н
GĞ		{ æ¢	Ó	ĒΪΗ	J	ËÈ€G	Н	ÈFÎ	_	GÈEFÍ	Н	Èŧëï	1
GG		{ a }		€	ĺ	ËΪJ	_	È€F	Н	ĦН́	Ϊ	ÌŒ€H	Н
GGJ	ÚÍ Ì	{ æ¢	V	ÈHGÍ	G	€	Н	ΕÌJ	Ϊ	FÐÎÍ	J	ĖΉΙ	Ï
GH€		{ a		€	Ì	⊞igí	Ϊ	€	Ì	ĦÏÏ	G	€	F
GHF		{ æ¢	Ó	ÈHGÍ	Ϊ	€	Н	ÈÌJ	G	FÐÎÍ		ÈÚI	G
GHG		{ a		€	—	⊞HGÍ	G	€	—	ĦΪΪΪ	ΙÏ	€	F
GHH	ÚÍ J	{ æ¢	V	FĚÏÎ	Т	È∰JF	_	Ė	J	GÈÉÎ	Н	FĚ€	J
GH		{ a		⊞FJF	7	ËĒJ	J	ÈE€H	Η	⊞ŪÎ	G	È€Î	Н
GHÍ		{ æ¢	Ó	FĚΪÎ	J	È∰JF	J	Ė	\perp	GÈÉÎ	Н	FĚ€	1
GHÎ		{ a }		⊞FJF	1	ËĚJ	_	È€H	Н	⊞ŪÎ	Ϊ	È€Î	Н
GНÏ	ÚÎ €	{ æ¢	V	FĚΪΪ	-	ÈGIÎ	_	ĒΪΗ	J	GÈEEÏ	Н	FÈÌI	J
GHÌ		{ a		ËĠÎ	7	ËELJG	J	È€	F	曲口	G	ÌŒ€Ï	F
GHJ		{ æ¢	Ó	FĚΪΪ	7	ÈGIÎ	J	ĒΪΗ		GÈ€Ï	Н	FÈÌI	1
GI€		{ a		ËGÎ	_	ËĒJG	\perp	È€	F	曲口	ΙÏ	ÌŒ€Ï	F
GIF	ÚÎ F	{ æ¢	V	FĚⅡ		È J	\perp	ËHG	Ϊ	FÐI	Н	FĚ€F	Ϊ
GG		{ a }		⊞G J	J	ËĒÍJ	J	È€	F	⊞JÏ	G	Ì E €Ï	F
GН		{ æ¢	Ó	FĚⅡ	J	È J	J	ËHG	G	FÈI	Н	FĚ€F	G
GП		{ a }		⊞G J	1	ËĒÍJ	_	È€	F	⊞JÏ	Ϊ	Ì E €Ï	F
Θĺ	ÚÎ G	{ æ¢	V	ÈHG	G	ËE€H	F	ÈŒ	Ϊ	GÈEÏÏ	Н	ÈΙ	Ϊ
ВÎ		{ a		€	Î	⊞Ĥ	Ϊ	È€G	F	⊞̈́FÎ	G	ÈE€H	F
GΙΪ		{ æ¢	Ó	ÈHG	Ϊ	ËE€H	F	ÈŒ	G	GÈ€ÏÏ	Н	ÈΙ	G
GÌ		{ a		€	Î	Η̈́H	G	È€G	F	⊞̈́FÎ	ΙÏ	ÈE€H	F
ĠЛ	ÚÎ H	{ æ¢	V	Ê€F	G	È€Í	Î	ÈHÍJ	G	ŒÈÏ	G	ĒÎÏ	G
GÍ€		{ a		€	ì	⊞€F	Ϊ	€	F	ÈGIG	I	€	F
ЙF		{ æ¢	Ó	Ê€F	Ϊ	È€Í	Î	ÈHÍJ	Ϊ	GÈÏ	Ϊ	ĒÎÏ	ΪÏ
ЯĠ		{ a		€	ì	⊞€F	G	€	F	ÈGIG	J	€	F
ďН	ÚÎ I	{ æ¢	V	ÈΪF	J	<u>E</u> ïì	G	Œ€J	J	GEFÎ F	Ϊ	ĖJJ	J
GίΙ		{ a		EE I	Ϊ	iii í	I	È€€H	ì	EEG I		È€E	ì

9bjYcdY'D`UhY#G\Y``Df]bV]dU'GhfYggYg'fl7cbljbiYXL

30j i	Ca i D Oiling	-		o di iggi									
	Ú æe^		Ù`¦æ&^	Ùãt{æFAXo•ãã	ŠÔ		ŠÔ	Væ`ÁTæ¢ÁŽ•ãa	ŠÔ	OB;* ^AŽtæåá		X[}ÁTã^∙ÁŽÈ	ÈŠÔ
Gί	{	(æ¢	Ó	ÈÏF	_	ÈEÏ Ì	Ϊ	È€J		GÉÈÌF	G	ÈIJ	
ΘÎ		{ a		⊞EÌI	G	⊞îí	J	ÌŒ€H	Ì	⊞GÍI	J	È€EI	Ì
ďΪ	ÚÎ Í {	æ¢	V	FÈÌÍ	1	ÈHÏG	G	ĔÎÏ	J	FÈÏÎ	J	FËIG	J
GÍÌ		{ a		⊞H G	Ϊ	ËÈΙ	ے	ÈE€G	Ì	⊞EH	G	È€	Ì
ďЈ	{	(æ¢	Ó	FÈÌÍ	J	ÈHÏG	Ϊ	ĖĨÏ	T	FÈÏÎ	П	FËIG	
Ĝ€		{ a		⊞H G	G	ËÈJI	1	È€G	ì	ËË€H	Ϊ	È€	ì
GÎΕ	ÚÎ Î {	(æ¢	V	HÈH		ĒÎΪ	Т	FÈGIÎ	J	FĒGJ	J	HÈ€ÍH	J
GÎ G		{ a		ËΪΙ	J	ÜHÈH Î Î	J	È€	ì	⊞ `	G	È€J	Ì
GÎН	{	(æ¢	Ó	HÈH	J	ĖĨÏ	J	FÈGIÎ	Т	FĒGJ	П	HÈ€ÍH	
GÎ۱		{ a		ĤΪI	Т	ËHÈHÎÎ		È€€I	Ì	i <u>ï</u> €	Ϊ	È€J	Ì
GΊÍ	ÚÎ Ï {	(æ¢	V	ŒLÌÌ	ı	ĚÎΙ	ı	ÐΪF	J	FĒÏÎ	J	GÈGÏ J	J
GÎÎ		{ a	_	Η̈́ÎΪ	J	ËŒĬ€J	J	È€€I	ì	iii GGG	G	Ì E €Ï	ì
ĠΪ	{	æ¢	Ó	OEÈÌÌ	J	ĚÎI	J	ÐΪF	Ť	FÈÏÎ	Ĭ	GEGÏ J	Ħ
GÎÌ		{ a		Η̈́ÎΪ	Ī	ËŒ €J	Ī	È€€I	ì	EEGG	Ϊ	È€Ë	ì
Ĝ J	ÚÎ Ì {	(æ¢	V	FÊÌJ	G	ÈH€F	i	ĖÌI	Τ̈́	FÊÏJ	í	FÊ H	Τ̈́
Ğ€	<u> </u>	{ a		⊞H€F	J	ËË	Ï	È€€I	ì	<u>∷ii</u> ii	G	È€Î	ì
ĠΓ	Į	æ¢	Ó	FÊÌJ	ï	ÈH€F	J	ËÌI	G	FÊÏJ	í	FÊH	G
ĠĞ		{ a		⊞H€F	i i	ËË	G	È€	ì	<u> </u>	Ϊ́	Ì€€Î	ì
ĠН	ÚÎ J {	æ¢	V	<u> </u>	G	⊞EEH	F	ĚFÏ	÷	GEÉÍÎ	Н	FÈEFG	T T
ĠΊ	010	{ a	V	€	F		ï	È€G	F	<u>GE</u> FJ	G	È€	F
Ġί	j	(æ¢	Ó	ΒÌΙ	ij	⊞E€H	F	<u>Ě</u> FÏ	G	GEÉÍÎ	Н	FÈ€FG	G
GÎÎ		$\{a\}$		€	F		G	È€G	F	<u>⊞</u> FJ	ï	È€	F
ĠΪ	ÚÏ € {	(æ¢	V	È€G	G	€	F	ĖJÌ	G	<u>Œ</u> iì	G	₿FÍ	G
GÌ	OI &	$\{\tilde{a}\}$	V	⊞€GH	í	⊞€G	i i	€	F	ÈH€F	ı	€	F
GÜJ	-		Ó	È€G	<u> </u>	€	F	ĖJÌ	F	<u>ure</u> r GÈÉÍÌ	÷	₿FÍ	+ -
Gi€	1	<u>æ¢</u> {ā}	0	<u>⊞€</u> GH	í	⊞€G	G	€	F	<u>Œ</u> H€F	J	€	F
ĠF	ÚÏ F {		V	<u>B</u> JÎ	G	€	î	ÊlH	G	<u> </u>	G	FÈÎJ	G
GG	OI F	<u>æ¢</u> {ā}	V	<u>⊞</u>	٠, و	⊞JÎ	ï	€	F	<u>GETT</u>	ì	<u>r⊞ij</u> E €F	F
ĠΗ			Ó	<u>B</u> JÎ	ï	€	î	ĒlH	Ţ	<u>EGII</u> GETÎÎ	<u> </u>	FÊÎ J	T-
ĠП	1	(æ¢	U	<u>⊞</u>	í	⊞JÎ	G	€	F	<u>GETTÎ</u>	ì	<u>r⊞ij</u> E €F	F
ĠÍ	ÚÏ G {	{ a	V			EF	G		F		-	FÈÌF	F
	UI G	(agt	V	FÈG	G		ı T	Ê FH		<u>GÈEGG</u> ⊞iìì	Н		+
ĠÎ		{ a	Á	ËE€J FÈG	J	ËÈH	-	ÈE€G	F		G	È€(F
ĠΪ		(<u>æ</u>	Ó	FÈĞ		ÈF ¨∵È.F	J	Ê FH	G	<u>GÈE</u> GG	H	FÈÌ F	G
GÌ	ı'ıï ı ı	{ a	\ \ /	Œ€J		ËÈH	G	ÈE€G	F			ÈEEI	F
ĠJ	ÚÏ H {	(<u>æ</u>	V	FÈFJ	G	È Î	ı,	ËÎΗ	Ļ	<u>FÐÏI</u>	Н	FÈH	L_
GJ€		{ a	<u> </u>		J	ËÈHGH	4	ÈE€G	F	ĦÎÎ	G	È€I	F
GJF		(æ¢	Ó	FÈFJ	<u> </u>	È Î	J	ËÎΗ	G	FÈÏI	Н	FÈH	G
GIG	./.: .	{ a		Ê	<u> </u>	ËÈHGH	G	ÈE€G	F	<u> </u>		E€I	F
GJH	<u>ÚÏ I</u> {	<u>æ¢</u>	V	FÈJG	G	€	ļ	ÈHF	Ģ	GÈGEÏ	Ģ	FÈÌI	G
GII		{ a	<u> </u>	€	F	ËÈJG	ļ	€	Ļ	€	ļ ļ	€	l l
GJÍ	{		Ó	FÈJG		€		ÈHF	ļ	GÈGEÏ	ļ	FÈÌI	Ļ
GJÎ	7.0.7	{ a		€	F	ËEJG	G	€		€		€	
GŲ	ÚÏ Í {	æ ¢	V	<u>F</u> ĤÍ	G,	Œ€	H	FÈEIÎ	G	Œ <u></u>	G	FÈI	G
GlÌ		{ a	,	Œ€Í		ËÈÌÍ		€	F	<u>E</u> ÈÌÏ	<u> </u>	€	F
GJJ	{	[æ¢	Ó	<u>F</u> ĤÍ	Ļ	ÌŒ€	Н	FÈEIÎ		Œ <u>Ģ</u> Î1	<u> </u>	FÈI	
H€€		{ a		ŒŒÍ	İ	ËÈÌÍ	G	€	F	<u>E</u> ÌÏ	J	€	F
HEF	ÚÏ Î {	[æ¢	V	FÈÍF	G	€	Ì	FĒ	G	<u>GHÍ I</u>	G	GEGH	Ï
H€G		{ a }		€	F	ËÈÍF	Ï	€	F	<u> </u>		€	F
H U H	{	(æ¢	Ó	FÈÍF	Ϊ	€	ĺ	FÈ	Ϊ	<u>QÈHÍ I</u>	Ϊ	G È GH	G
H€		{ a		€	F	ËÈĹF	G	€	F	ŒijÎ	J	€	F
H€Í	ÚÏ Ï {	(æ¢	V	FÈFI	G	È€FÎ	1	FÈÍJ	Ϊ	FĚÏF	F	GÈ€ÍJ	∐ ∐
H€Î		{ a }		lle fî	J	ËËĤ	Ϊ	È€F	ĺ	ËΪÍΪ	G	ÌŒ€H	Î

9bjYcdY'D`UhY#G\Y``Df]bV]dU'GhfYggYg'fl7cbljbiYXL

<i>30</i>] 1	· ·			`` ar rgg i				, ~	× 4	~	× .	, , ,	
	Ú æe^		Ù`¦æ&^	Ùãt{æFÁXo•ãa	ŞO_	Ùãt{ <u>æ</u> 9¥X •ãã		Væ ÁTæ¢ÁŽ•ãa		O5}* <u> </u> ^AŽŽæåá		X[}ÁTã^•ÁŽÈ	
H€Ï		{ æ¢	Ó	FÊ FI		ÈFÎ	J	FÈÍJ	Ģ	<u>FĚÏF</u>	F	ĞŒÍJ	Ğ
H€Ì	7.0.3	{ a		<u> </u>		ËĒÀ	G	È€F	l l	ijίï		È€H	<u> </u>
H€J	ÚΪÌ	{ æ¢	V	<u>FĚ FF</u>	G	<u>Ì</u> €Í Í	l l	ÈΪĺ	Ĺ	FĚ JÌ	J	FĚΪΗ	Ļ
HF€		{ a	,	⊞€ I	Ĵ	ËĚFÍ		È€F		⊞̈́Ğ	G	È€H	
HFF		{ æ¢	Ó	<u>F</u> Ě FF		<u>i</u> €j í	J	ÌΪĠ	Ğ	<u>FĚJÌ</u>	<u> </u>	FΕ̈́ΙΗ	Ğ
HFG	7.11	{ a }		EE I		ËĘĚFÍ	G	È€F	ļ.	⊞̈́Ğ	ļ	Ì€€H	1
HFH	ÚΪ J	{ æ¢	V	FÈÎÍ	G	ÈG€G	I	ÈJÎ	Ţ	FÊlÌ	L	FÈĤ	I
HFI		{ a }	,	⊞G€G	J	ËĖÏÏ	1	Œ€H		ЩĮ́ÍJ	ļ	Ì€€Ï	1
HFÍ		{ æ¢	Ó	FÈÎÍ	1	ÈG€G	J	ÈJÎ	Ğ	FÊlÌ	L	FÈĤ	G
HFÎ		{ a		⊞G€G		ËÈÏÏ	G	È€H		Щ́ÍJ	ļ	È€Ë	1
HFÏ	ÚÌ €	{ æ¢	V	QEÉÎG	G	ÈEGJ	<u> </u>	FŒÎJ	1	FĚÏF		Q i QFÌ	I
HFÌ		{ a	,	ËEGJ	J	ËÇ Ì€ Ï I	Ï	È€€G	Ĩ	⊞ġĢF	Ģ	Ì€€H	Ĩ
HFJ		{ æ¢	Ó	GÈEÎG	Ï	È€GJ	J	FÈÌJ	G	FĚÏF	<u> i</u>	QÈGFÌ	G
HŒ		{ a		ËŒGJ		ËGE I	G	È€G	Î	⊞igF	Ï	È€H	Î
HŒF	ÚÌ F	{ æ¢	V	OEÊÎI	G	ĚÍJ	G	FÈ€Î	Ţ	FΕ̈́Ϊ́Ϊ	Ĺ	QÈÍF	Ï
HGG		{ a		Щ́ĺН	Ï	ËŒÌH	Ϊ	È€€G	Ì	ЩGG	Ì	È€EI	Ì
HGH		{ æ¢	Ó	OÉÈÎI	Ϊ	ĚÍJ	Ϊ	FÈÉÎ	G	FĖΪĺΪ	ĺ	OÈÍF	G
HG		{ a		Ш́ÎН	G	ËŒÎH	G	ÈE€G	Ì	⊞GG	ì	È€EI	Ì
HGÍ	ÚÌ G	{ æ¢	V	HĐ ÉĐ	G	ÈÏF	G	FÈGHÏ	Ï	FÈG	J	ΆHJ	Ï
HGÎ		{ a		ΞŒ	:	ËGÈII	Ϊ	ÈE€G	Î	⊞î I	G	È€EI	Î
HGÏ		{ æ¢	Ó	ΘÉΘ	Ϊ	ÈÏF	Ï	FÈGHÏ	G	FÈĠ	1	ΆHJ	G
HG		{ a		ËΪ	G	ËGÈII	G	ÈE€G	Î	⊞îl	Ϊ	ÌŒ€I	Î
HGJ	ÚÌ H	{ æ¢	V	ÈĠG	J	È€HÏ	ΙÏ	ÈÎÌ	_	GÈHGÏ	Î	ÈH€Ï	1
HH€		{ a		⊞eiF	G	⊞GÎI	I	È€F	Ì	Η̈́Î	ĺ	ÈE€G	Ì
HHF		{ æ¢	Ó	ÈGÎG	1	È€HÏ	G	ÈÎÌ	J	G Ì I GÏ	Î	ÈH€Ï	J
HHG		{ a		⊞EF	Ϊ	⊞GÎI	J	È€F	Ì	Η̈́Î	ĺ	ÈE€G	Ì
НН	ÚÌΙ	{ æ¢	V	HĚ	G	ÈΗ	G	FÈHH	Ϊ	GÈ€ÎÍ	Î	HÈJ	Ï
HH		{ a		⊞HJ	Ϊ	ËHĚĞ	Ϊ	È€€G	Ì	曲íï	ì	È€€I	Ì
HH		{ æ¢	Ó	HĚ	Ϊ	ÈΗ	Ϊ	FÈHH	G	GÈ€ÎÍ	Î	HÈJ	G
HHÎ		{ a		⊞HJ	G	ËHĚĞ	G	È€€G	Ì	曲íï	ì	È€€I	Ì
HHÏ	ÚÌÍ	{ æ¢	V	FÈ Î G	G	ÈHÏ	G	ĒÏÌ	J	GĚGÎ Ï	F	FË G	Ϊ
HHÌ		{ a		ËΉΪ	Ϊ	ËÈÏF	Ϊ	È€€G	ì	ĦΪΪÍ	ì	È€€I	ì
HHU		{ æ¢	Ó	F È Î G	Ϊ	ÈHÏ	Ϊ	ĒÏÌ	Т	GĚGÎ Ï	F	FËG	G
H€		{ a		ËΗΪ	G	ËÈÏF	G	È€€G	Ì	ĦΪΪÍ	ì	È€EI	ì
HIF	ÚÌÎ	{ æ¢	V	HÈÍJ	G	FÈÏÌ	G	FÈHÍ	Ï	FÈĖ	J	HÈÍF	ΪÏ
HIG		{ a		ËÈÏÍ	Ϊ	ËHÈÌÎ	Ϊ	È€€H	ì	ШЭЭ	ì	È€Î	ì
ΗН		{ æ¢	Ó	HÈÍJ	Ï	FÈÏÌ	Ï	FÈHÍÍ	G	FÈ€Ï		HÈÍF	G
HII		{ a		ËÈÏÍ	G	ËHÈÌÎ	G	È€€H	ì	ЩЭFН	ì	È€Î	ì
НÍ	ÚÌΪ	{ æ¢	V	OÈTIÍ	G	È€JÏ	G	FÈ€HG	Ï	FÈÏÏ	J	GÈFF.	ΪÏ
НÎ		{ a		ËŒJF	Ϊ	ËĐĖÍÍ	Ϊ	È€€G	ì	ËF	ì	È€€H	ì
ΗÏ		{ æ¢	Ó	Q E TI Í	Ï	È€JÏ	Ï	FÈ€HG	G	FÈÏÏ	Ħ	ŒFF	G
ΗÌ		{ a		Ë€JF	G	ËĐĖÍÍ	G	È€€G	ì	⊞́F	ì	È€€H	ì
HIJ	ÚÌ Ì	{ æ¢	V	FÆHG	Ï	ȀΠÍ	J	ĚFF	G	FĒĞ	J	FÈHF	G
HÍ€		{ a		⊞a H	İ	ËFÈ€HJ	G	€	ì	⊞ F	G	€	ì
HÍF		{ æ¢	Ó	FÆHG	G	ÈÉÎÍ	Ī	ĚFF	Ï	FĒĠ	Ť	FÈHF	Ť
HÍG		{ a		⊞É H	J	ËÈH	Ï	€	ì	F E	İ	€	
ΗΉ	ÚÌ J	{ æ¢	V	ÈHG	G	ÈEGJ	i	ĖJ	G	FÈ JH	T	Ηίì	G
HÍI	<u> </u>	{ a		⊞EGÌ	J	⊞HF	Ï	€	ì	⊞EH	G	È€F	ì
HÍÍ		{ æ¢	Ó	ÈHG	Ϊ	ÈEGJ	J	ÈJ	Ï	FÈJH	J	HÍÌ	İ
ΗÍÎ		{ a		⊞EGÌ	i	⊞HF	G	€	ì	⊞EH	Ï	È€F	ì
ΗΪΪ	ÚJ€	{ æ¢	V	È€Ì	i	<u>E</u> ÍÏ	ī	ÈÏJ	J	ŒÉ€Í	G	Ėìì	J
HÍÌ		{ a		i i i	J	⊞FÍ	J	È€G	Н	#FH	Н	È€€H	Н
		11.9			.		.	1		ш. і і і			

30) 1	· ·		Di jovgo						v .		~ ^	, , , , ,	
	Ú æe^		Ù`¦æ&^_	Ùãt{æFÁŽ•ãã		Ùãt{æ64Ã. •ãa		VaěÁTaq¢ÁŽ•ãa	<u>so</u>	OB;* ^AŽanåá	<u> </u>	X[}ÁTã ^•ÁXÈ	ESO .
HÍJ		{ æ¢	Ó	È€Ì	J	ÈÍÏ ₩ rí	J	ÈΪJ		GÈ€	1	ËÌÌ	1
H΀		{ a	.,,	ÉÉÍÎ		⊞FÍ		ÈE€G	H	#FH =Àìï	H	È€H	H
HÎF	ÚJF	{ æ¢	V	FĚ JÏ	<u> </u>	È H	<u> </u>	ËÌÎ	J	FÈÌÏ	G	FĚJI	J
HÎG		{ a	6	⊞G	J	ËĒF	J	ÈE€H	Н	ÈÍ	H	È€Î	H
ΗÎΗ		{ æ¢	Ó	FĚ JÏ	J	ÈEIH	J	ĔÌÎ	1	FÈÌÏ	1	FĚJI	- !
HÎI	ı'ııo.	{ a		⊞ G		ËĒF		È€H	H	ÈÍ	H	È€Î	H
HÎÍ	ÚJG	{ æ¢	V	GEGÍ F	<u> </u>	EGÍ I	<u> </u>	FÈEFÎ	J	FÈÏÏ	G	Q È Ï	J
HÎÎ		{ a	6	⊞G H	J		J	È€Ű	Н	ÈEGÌ	l l	ÈEFH ⇔Èï	H
HÎÏ		{ æ¢	Ó	GEGÍ F	J	È I	J	FÈEFÎ	1	FÈÏÏ		Q È Ï	1
HÎÌ		{ a		⊞G H				ÈEEÏ	H	ÈEGÌ		ÈFH OÈ U	H
HÎJ	ÚJH	{ æ¢	V	<u>ĢĚ JÌ</u>	<u> </u>	ÈÏÌ	<u> </u>	FÈ Ï	J	FÈÍÎ	G	GÈ II	J
HÏ€		{ a	6	⊞ÏF	J	ËŒÎÎ	J	ÈFF □ÈÈ Ï	Н		l l	ÈEGG	H
HÏF		{ æ¢	Ó	ŒĬĴ	J	ÈÏÌ	J	FÈ Ï	1	FÐÍÎ		GÈ II	- !
HÏG	1'1.11	{ a		⊞ÏF			1	<u>È</u> FF	H	Ê		ÈGG	H
Η̈́Η	ÚJI	{ æ¢	V	FÈÌÍ	1	⊞€FF □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□	H	ĒΓ	J	FÀJI	G	FÈG	J
HÏI		{ a	6	ÈEEÌ	H	ËË E	J	È€J	Н	⊞HG	l l	ÈFÎ	H
HÏÍ		{ æ¢	Ó	FÈÌÍ	J	<u>⊞</u> FF	H	ĔΕ	1	FÐJI		FÈG	1
HÏÎ		{ a	.,	È€È	H	ËË ËGEG	<u> </u>	È€J	Н	⊞HG	<u> </u>	<u>E</u> FÎ	H
HÏÏ	ÚJÍ	{ æ¢	V	FÈ€Ğ	J	ÈFH	J	ÈÏ		GŒJH	Н	ÙJÌ	1
HÏÌ		{ a	<u> </u>	⊞EÌ		ËE Ì		È€Ï	Н	ÈÏÌ	J	ÈFG	H
ΗÏJ		{ æ¢	Ó	FÈ€Ğ	<u> </u>	ÈFH	<u> </u>	ÈÏ	J	GÈEJH	H	₿JÌ	J
HÌ€	ı'ı=oo	{ a	.,	⊞÷€Ì	J		J	È€Ï	Н	ÈÏÌ	Н.	ÈEFG	H
ΗÌF	ÚFŒ	{ æ¢	V	GĚ I I	G	È F	l ÿ	FÈÏÎ		GÈFÎ	J	QĒΪΗ	
HÌG		{ a	<u> </u>	⊞GF	J	ËŒĬIJ	<u> </u>	ÈE€G	F	<u> </u>	1	È€	F
HÌ H		{ æ¢	Ó	GĚ I I	l	È F	J	FÈÏÎ	G	GÈFÎ		ĢĒΪΗ	G
HÌI	ÚEGI	{ a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	⊞É F	1	ËŒIJ	G	ÈE€G	F	<u> </u>	G	È€€	F
HÌÍ	ÚFGH	{ æ¢	V	GÈÎ	G	€ ÖDÈÎF	F	FĚÍÍ		FÐJÏ	F	GÈIG	
HÌÎ		{ a	Ó	€ OÈÎ	F	ËGÈÎF		€	F	⊞ HH	J	€	F
HÌÏ		{ æ¢	Ó	GÈÎ	<u> </u>	€ ÖDÈÎF	F	FĚÍÍ	G	FÐJÏ	F	GÈIG	G
HÌÌ	ÚFG	{ a	V	€ ŒĚ	F	ËGÈÎF ÈE€I	G	€ FĚJI	F	EË HH FÈ Ï H	H	€ GÈ€Î	F
HÌJ	UFG	{ æ¢	V	<u>⊞</u>	G	EGÉ €F	H	FEJI			-		F
HJ€		{ a	<u> </u>		l ï		1		F	<u>шіі</u> FÈÏH	+	€ GÈ€Î	
HJF		{ æ¢	Ó	O <u>I</u> EE€	ì	ÈE€I ËOLĚÆF	H	FĚJI	G F		-		G
HJG	ÚFĠ	{ a	\/	<u>⊞€</u> GËFÌ	G	EIÎ	ı	€ FÈÎÍ	Ţ	<u>⊞</u> II GŒÌÏ	J	€ GÈHÎ	F
HJH	UFG	{ æ¢	V		J	ËGËHG	ï	FŒII	F	θ	H	<u>GE</u> FÌ	F
HJÍ		{ æ¢	Ó	<u>⊞</u> II ŒÎFÌ	υ	EIÎ	1	FÈÎÍ	G	<u>⊞</u> €F	H	OÈ HÎ	G
HJÎ		{ a			1	ËËHG	G	EE€	F	θ	G	θ	F
HJÏ	ÚFGJ	{ æ¢	V	ŒĬIG	G	E€€F	ì	FĚÌH	+	GEHU	J	Œ€i	T T
HJÌ	UFGJ	{ a}	V	ŒŒF	Н	ËËIÏ	i i	Æ€G	F	<u>Œ</u> ÏH	ī	E€€I	F
HJJ		{ 28¢	Ó	ŒĬIG	ï	E€€F	1	FĚÌH	G	G Ì H U		Œ€i	G
1€€		{ a}		ŒF	Н	ËŒIÏ	G	ÈE€G	F	<u>Œ</u> ÏH	G	E€€I	F
I€	ÚFH€	{ æ¢	V	GĚIH	G	€	F	FÊÌF	+	GE€GÍ	F	HE€H	+ !
I€G	OFFE	{ ā	V	€	F	ËŒĬI	ï	€	F	<u>arc</u> i	J	€	F
I⊕H		{ æ¢	Ó	ŒĬH	i	€	F	FÊÌF	G	GE€GÍ	F	HE€HÏ	G
I€I		{ a		€	F	ËŒĬI	G	€	F	<u>GEG</u> ∰Î		€	F
I€	ÚFHF	{ æ¢	V	Œ	G	<u>⊞</u> EEH	F	FÊÎH	†	GEGÎ F	H	HE€H	+
I€Î	OFF	{ a	V	€	F	ˌ΀	Ï	Æ€G	F	⊞HÍ	J	EE€H	F
I€Ï		{ æ¢	Ó	ŒÎ	ï	EEEH	F	FÊÎH	G	GEGIF	Н	HE€H	G
I€		{ a		€	F	<u>iiii</u> €	G	EE€G	F	⊞HÍ		<u>HE</u> €H	F
I€J	ÚFHG	{ 28¢	V	Œ	G	€ mr.a	F	FÊÎÎ		G Ì (E		HE€€Í	
IF€	OI 1 D	{ a	V	€	F	ËĐĚ€Î	Ï	€	F	⊞HG	G	€	F
116		119		-		TOT 4		-		шЮ	J	_	

30] 1	· ·			ù Giriggi				, ~	× .	~	× .	, ,,	
	Ú æv^		Ù`¦æ&^	Ùãt{æFÁX.∙ãã	έ	Ùãt{æGAXomãa		Væ ÁTæçÁŽ•ãa		OB;* <u>(</u> ^AŽtæåá	∖ ⊗	X[}ÁTã^•ÁXÈ	
LFF		{ æ¢	Ó	GŁÉ		€	F	FÊÎÎ	G	<u>GÎH</u>	<u> </u>	HÈ€€Í	G
I FG		{ a		€	F	ËĢĚ∮Î	G	€	F	⊞̈́HG	Į	€	F
I FH	ÚFHH	{ æ¢	V	<u>G</u> ÈÌF	G	ÈlÍ		FĚÌI	1	<u>G</u> EU		HŒIF	
IF		{ a	,	ŒŢĺ	J	ĒŒŢJÍ		Œ€	F	⊞į̃ÏJ	G	Ì€€Ì	F
ΙFÍ		{ æ¢	Ó	QÈÌ F	Ï	ÈlÍ	J	FĚÌI	G	GEGU	Ĺ	HÈELF	G
ΙFÎ		{ a		i i	ı	ËŒĴ	G	È€	F	⊞į̃ÏJ	Ĩ	È€È	F
ΙĘ̈́	ÚFH	{ æ¢	V	HË€Ï	G	Ě	G	FĒF	Ī	<u> ÇEĞ</u>	Ĩ	HEĚ€Ï	Ĩ
ΙFÌ		{ ā	,	⊞JJ	Ĩ	ËHËH	Ĩ	È€Î	F	ÈĄÏ		ÈFG	F
I FJ		{ æ¢	Ó	HË€Ï	Ĩ	Ě	Ĩ	FÊFÍ	G	GÉGG	G	HĚÉ	G
IŒ	,	{ a		∰IJ	G	ËHËH	G	È€Î	F	ÈĤÏ	J	ÈEFG	F
ΙŒ	ÚFHÏ	{ æ¢	V	HÈ FG	J	FÈÌI	Ĩ	FŒÎ H	Ţ	FÈH€Ì	Ĩ	HÈ€FJ	
I Œ		{ a	,	ĔĖÏÏ	G	ËHÈFF		È€€G	ĺ	ЩÍН	F	È€Í	F
IGH		{ æ¢	Ó	HÈ FG		FĖÌI	G	FŒÎ H	J	FÈH€Ì	G	HÈ€FJ	J
IG	,	{ a		ËÈÏÏ	Ï	ËHÈFF	J	È€G	Ì	Щ́ÍН	F	È€Í	F
Ιď	ÚFH	{ æ¢	V	FĚÌÏ	G	€	Н	₿Ġ	G	FĖĞ	<u> </u>	FËΗ	G
ΙĜ		{ a		€	Ì	ËĖÌÍ	Ï	È€F	F	Щ́ĺì	Ţ	ÈE€G	F
ΙĞ		{ æ¢	Ó	FĚÌÏ	Ï	€	Н	₿Ġ	Ϊ	FĖĞ	Ì	FËΗ	Ï
ΙĠ		{ a		€	Ì	ËĖÌÍ	G	È€F	F	Щ́ĺì	J	È€G	F
I GJ	ÚFHJ	{ æ¢	V	FÈÏÍ	G	€	Н	ĒÌÌ	G	FÈ€JI	Ï	F È ĠÌÏ	G
IH€		{ a		€	ì	ËÈÏH	Ϊ	È€F	Ì	⊞ÏJ	1	ÈE€G	F
1 HF		{ æ¢	Ó	FÈÏÍ	Ï	€	Н	ĒÌÌ	Ϊ	FÈ€JI	G	F É ĠÌÏ	Ï
IHG		{ a		€	Ì	ËÈÏH	G	È€F	Ì	⊞ÏJ	J	ÈE€G	F
IН	ÚFI€	{ æ¢	V	ĔÍ	G	ÈÉÎ∣	_	ÈĠ	G	FÈ€ÍH	Ï	È€Î	G
I H		{ a		⊞≘ÎH	J	⊞ïlì	.	€	Ì	⊞̈́HU		ÈE€G	ì
ΙΉ		{ æ¢	Ó	Ëί	Ϊ	ÈÉÎ∣	J	ÈĠ	Ϊ	FÈÉÍH	G	È€Î	Ï
ΙĤ		{ a		⊞≘ÎH	T	⊞ïlì	O	€	Ì	ЩН	J	È€G	ì
ΙHΪ	ÚFI €Œ	{ æ¢	V	FĒÎÌ	G	ÈĠÎ	_	ÈÌI	Ϊ	Œ	T	FË GH	Ï
ΙĤ		{ a		⊞GÎI	J	ËĒΪΗ	Ϊ	ÈE€H	F	⊞ĭJĺ	G	È€Í	F
ΙHU		{ æ¢	Ó	FÊÎÌ	Ϊ	ÈĠÎ	J	ÈÌI	G	Œ	J	FË GH	G
II€		{ a		ËEĞI	1	ËĒΪΗ	G	ÈE€H	F	⊞ĭJĺ	Ï	È€Í	F
HF	ÚFI F	{ æ¢	V	F È GÍ	G	ĖΘΙ	_	ĒΙÍ	Ϊ	GÈÈÌH	T	FÈĞÏ	Ï
IIG		{ a		⊞G F	J	ËĖ	Ϊ	ÈE€H	Н	ËÎÌ	G	È€Í	Н
HII		{ æ¢	Ó	F È GÍ	Ϊ	ĖΘΙ	J	ĒΙÍ	G	GÈÈÌH	J	FÈĞÏ	G
111		{ a		⊞GF	T	ËĖ	G	È€H	Н	ШĨÌ	Ï	È€Í	Н
HÍ	ÚFI G	{ æ¢	V	ÈÍF	G	ÈΪG	_	ÈHF	Ϊ	GÈHIJ	G	ÈÍJ	ΪÏ
HÎ		{ a		Œ-Ï	J	⊞íî	Ï	ÈE€G	Н	⊞Fï	Н	ÈE€I	Н
ПÏ		{ æ¢	Ó	ÈÍF	Ϊ	ÈÏG	J	ÈHF	G	GÉH J	Ï	ÈÍJ	G
HÌ		{ a		<u> </u>	1	ШÍÎ	G	ÈE€G	Н	ËËFÏ	Н	ÈE€I	Н
HJ	ÚFI Œ	{ æ¢	V	FÈÏÌ	1	ĚHÎ	\perp	ÈÎJ	Ϊ	GÈH€J	G	FÈ FH	Ï
IÍ€		{ a		ЩН	J	ËÈJI	J	ÈE€G	Н	ÈΗÍ	Н	È€Î	H
ΙÍΕ		{ æ¢	Ó	FÈÏÌ	J	ĚHÎ	J	ÈÎJ	G	GÈH€J	Ï	FÈ FH	G
ΙÍG		{ a		ЩНÍ	1	ËÈJI	1	ÈE€G	Н	ÈHÍÍ	Н	È€Î	H
ΙÍΗ	ÚFI H	{ æ¢	V	FËÍF	1	È€G	1	ĒÌI	J	GÈGFH	G	FÊÊ€Î	J
TÍT		{ a		⊞€F	J	ËËÎJ	J	ÈE€H	Н	ÈGÎÌ	J	È€Î	Н
ΙÍÍ		{ æ¢	Ó	FËÍF	J	È€G	J	ĒÌI		GÉGFH	Ï	FÊ€Î	
ΙÍÎ		{ a		⊞€F	1	ËËÎJ	$\overline{}$	ÈE€H	Н	ÈGÎÌ	1	È€Î	Н
ΙÍΪ	ÚFH	{ æ¢	V	FĚÍÏ	-	ÈJÌ	1	ĔΙ	J	GEÈÌÌ	G	FĚÌΪ	J
TĤ		{ a }		⊞JÎ	J	ËĒÏÎ	J	È€€I	Н	ÈÎG	J	È€Ï	Н
ΙÍJ		{ æ¢	Ó	FĒÍÏ	J	ĖJÌ	J	ĒΙ	I	GÈÈÌÌ	Ϊ	FĚÌÏ	
I΀		{ a		ŒIJÎ	1	ËĒÏÎ	1	È€	Н	ÈÎ G		È€Ï	Н
ΙÎΕ	ÚFIIŒ	{ æ¢	V	GÈFJ		₿Jĺ		ЭŒ	J	GÈ€H	G	OÈLJÎ	J
ΙÎG		{ a		⊞JÎ	J	ËĐÈI	J	È€Í	Н	ÈF	J	ÈFF	F

	Ú æe^		Ù"¦æ&^	Ùãt{æFÁŽt∙ãa	ŠÔ	Ùãi{æ€AŽi∙ãa	χ̈́Ω	VæiÁTæçÁŽ•ãa	ŠÔ	OE}* ^AŽ(æåá	ŠΩ̈́	X[}ÁTã:^•ÁŽÈ	 Ĉě:Ĥ
ΙÎΗ	المارات المارات	{ æ¢	Ó	GÊ FJ	J	BJÍ	J	ÈG	ī	GEH	ΙÏ	GÊ JÎ	$\overline{\Box}$
111		{ a		<u>⊞</u> JÎ	ı	ËŒÌI	ı	È€Í	Н	ÈF	1	ÈFF	F
i î í	ÚFIÍ	{ æ¢	V	ŒÎ G	i	ÈH€F	i	FŒÏ	J	FĐÌ Í	G	ŒĤ	J
	OITI	{ a	V	⊞H€Í	J	ËELI	J	È€Î	Н	ÈlÍ	J	ÈFG	Н
111		{ æ¢	Ó	OÈ G	J	ÈH€F	J	FŒÏ		FÐÌÍ	ï	ŒĤ	
		{ a		⊞H€Í	ı	ËEÌIÍ	J	È€Î	Н	ÈI Í		ÈFG	Н
ΙÎJ	ÚFIÎ	{ æ¢	V	GEG€H	i	ÈH€I	i	ΒÎΪ	J	FBH	G	ŒŒ	J
IÏ€	OITI	{ a	V	⊞H€I	J	ËGËGHÏ	J	È€J	Н	E	J	<u>Æ</u> FÌ	Н
IÏF		{ æ¢	Ó	GEGEH	J	ÈH€I	J	<u>B</u> ÎÏ		FBH	Ϊ	ŒŤ€G	
ΙΪG		{ a		⊞€	ı	ËGËH	ı	È€J	Н	E		<u>Æ</u> FÌ	H
ΙΪΗ	ÚFI Î Œ	{ æ¢	V	HĖÏH	i	FÊ Ĝ	i	FEJ	J	FË FÎ	G	HÈH	J
111	OTTTOL	{ a	V	ËËG	J	ËHÈ€F	J	È€Ï	ì	È€Ì	J	ÈFH	ì
111		{ æ¢	Ó	HĖÏH	J	FÊĜ	J	FÈ€J	+	FË FÎ	Ϊ	HÈH	
1 1		{ a		ËËG	ı	ËHÈ€F	J	ÈEEÏ	ì	È€Ì		ÈFH	
111	ÚFIÏ	{ æ¢	V	ŒÉÍÍ	i	ÈEGH	G	FÈ€JÏ	+	FË H	G	GÊTÎ	J
111	OITI	{ ā	V	⊞EGÎ	ï	ËEFÎF	J	È€Í	ì	<u> </u>	J	È€J	ì
IÏJ		{ æ¢	Ó	GÉÍÍ	J	EEGH	ï	FÈ€JÏ	+	FË H	ï	GE;∐	
IÌ€		{ a}		EEGÎ	G	ËGËÎF	+	È€Í	ì	<u> </u>	H	Œ€J	1
lÌF	ÚFI Ì	{ æ¢	V	O <u>É</u> ÏI	ı	ÈJF	-	FÈÉÎI	J	FЀ	G	ŒE ŒĒFJ	J
IÌG	OFTI	{ a	V	ŒH	J	ËËF	J	EFÏ	Н	EFJ	J	<u>Œ</u> HH	Н
IÌH		{ æ¢	Ó	G <u>Ě</u> ÏI	J	ÈJF	J	FEÎ I		FЀ	ï	GE FJ	
1111		{ a	0	ŒH	ı	ËËF	J	FŒI I	Н	EFJ		<u>Œ</u> HH	Н
111	ÚFIÌŒ	{ æ¢	V	Œ€I	1	ÊHH	1	ËÍG	J	FÈ GJ	G	FÈÌÏ	J
	OFITUE	{ a	V	⊞FH	J	ËŒFÏ	J	Œ€	ì	⊞ÎJ	ì	EFI	ì
		{ æ¢	Ó	ŒΈ€J	J	ÊHH	J	Ε̈́ÍG	+	FÈGJ	÷	FÈÌÏ	+
		{ a	0	⊞ FH	ı	ËŒFÏ	J	Œ€	ì	<u>r⊪G</u> ∰ÎJ	+	EFI	
lÌJ	ÚFIJ	{ æ¢	V	FÈ FH	ı	ÈFÎ	1	Ě€F	J	<u>штэ</u> FĚ FH		FEGÍ	J
IJ€	OFIJ	{ a	V	⊞ FJ	J	ËEG	J	Œ€H	ì	<u> </u>	<u> </u>	E€Ê	ì
I JF		{ æ¢	Ó	FÈ FH	J	<u>E</u> FÎ	J	Ě€F	+	FĚ FH	J	FEGÎ	+
IJG		{ a	0	⊞ FJ	ı	ËEG	J	Œ€H	ì	<u> </u>	G	E€Î	
IJH	ÚFÍ€	{ æ¢	V	FÈÌ J	ı	<u> </u>	Н	ÈFÍ	J	FĐĠ	G	FĚH	J
IJI	OFTE	{ a	V	<u>F⊞IJ</u>	Н	ËFËFG	J	E€FG	Н	<u>E</u> HGÏ	J	EEGF	Н
l JÍ		{ æ¢	Ó	FÈÌ J	J	<u>IIII</u>	Н	ÈFÍ		FÐĠ	ï	FĚH	
l JÎ		{ a		E€Î	Н	ËFÈFG		ÈEFG	H	ÈHGÏ		ÈEGF	H
I JÏ	ÚFÍ €Œ	{ æ¢	V	ÊÌI	J	⊞E€G	Ï	ĚĠ	J	<u>u.⊠</u> G±HÍÎ	F	ËÌF	J
I JÌ	OFFECE	{ a	V	⊞EEÎ	G	<u>⊞</u> ï	i	È€Í	ì	ĦÎÎ		È€Ì	ì
I JJ		{ æ¢	Ó	ÊÌI	ī	⊞€€G	G	ÈĠ	+	GEHÍ Î	F	ËÌF	
í€		{ a		iiii∈î	i	<u>⊞</u> ï	J	È€Í	i	ĦÎÎ		È€È	
í∉	ÚFÍ F	{ æ¢	V	FÈ€II	i	ÊÌÌ	ı	ÈÏ J	<u> </u>	GEÉÍI	†	₿FJ	Ti-
í€G	OFF	{ a	V	Ħìì	J	ËEF	J	È€€I	i	<u> </u>		È€Ë	
í⊕H		{ æ¢	Ó	FŒII	J	ÊÌÎ	J	ÈÏ J	J	GEÉÍI	G	₿FJ	J
Í€Ì		{ a		Ħìì	ī	ËEF	ī	È€	ì	<u> </u>	ì	È€Ï	Ť
í€	ÚFÍ G	{ æ¢	V	ĖΗ	J	ÈEGH	J	È€Ì	J	GEÉÍI		ÈĠ	J
Ì€Ì	0110	{ a	V	EE Î	ı	⊞H	ı	È€Ì	Н	ÈH	i	ÈEFI	Н
Ì∰		{ æ¢	Ó	ĖΗ	i	ŒGH	i	È€Ì		GEÉÍI	J	ÈĠ	
Í€		{ a		EE Î	J	⊞ HÍ	J	È€È	Н	ÈH	G	ŒFI	H
í€J	ÚFÍ Œ	{ æ¢	V	ÈÏ F	Ï	€	ì	<u>EG</u>	Ť	F Ē FJ	ì	ĚÍG	T
ÍF€	OI TOL	{ a	V	E€€F		<u> </u>	G	€	ì	⊞FJ	G	È€F	
ÍFF		{ æ¢	Ó	ÈÜF	G	€	ì	<u>È</u> HFÏ	G	FÈFJ	ì	ĚÍG	G
ÍFG		{ a		È€F	ì	<u> </u>	Ï	€	ì	⊞FJ	i	È€F	ì
ÍFH	ÚFÍ H	{ æ¢	V	ÈÍI	G	⊞€€H	ì	EGÍ H	G	ŒΉ	G	ÈÌH	G
ÍFI	CITI	{ a	V	È€G	ì	HIII	Ï	È€H	ì	⊞HG	Н	È€Í	Ť
		1 9			•				•				

<i>30] 1</i>	CUTD OITHE	· ·		Since - Fig.					×A	~ · · · · · · · · · · · · · · · · · · ·	×A		
li ei l	Ú æ^	, .	Ù*¦æ&^_	Ùãt{æFÁX.∙ãã	<u> </u>		ŞO	Væ ÁTæçÁŽ•ãa	<u>\$0</u>	OB;* ^AŽanåá	<u> </u>	X[}ÁTãi^•ÁXÈ	±şo ;
ÍFÍ		{ aa¢	Ó	ÈÍI	ļ	ŒŒH	ı	EGÍ H	<u> </u>	<u>G</u> H	1	ÈÌH	
ÍFÎ	·′ı=í	{ a		ÈE€G		<u>⊞IÏ</u>	G	È€H	<u> </u>	⊞HG	H	È€Í	
ÍFÏ	ÚFÍ HŒ	{ aa¢	V	<u>GÈÏF</u>	ļ.	ÈJH	G	FÉGÍ	J	<u>FĚÏÎ</u>		GË FF	Ţ
ÍÀ		{ a	<u> </u>	<u>Ħìï</u>	<u>.</u>	ËŒÏÎ	J	È€F		ËEG		ÈE€G	
ÍFJ		{ and	Ó	<u>GÊ</u> ÏF	J	ÈJH		FÉGÍ	1	FĚÏÎ	G	Œ FF	1
ÍŒ		{ a		<u>Ħìï</u>	G	ËŒÏÎ		È€F	4.	ŒG	J	È€G	1
ÍŒ	ÚFÍI	{ and t	V	<u>GÈ</u> HÌ		ËÏ		ËÌÍ	Ţ	GĦJ	Н	GÈEÏG	J
ÍŒ		{ a	<u> </u>	ΞΪJ	J	ËŞĖŲÌ	J	ÈE€H	-	⊞ÎJ	F	È€Í	1
ÍŒΗ		{ aa ¢	Ó	<u>GÈ</u> HÌ	J	ĚÏ	J	ËÌÍ	ļ	<u>G</u> Ħ J	Н	GÈEÏG	1
ÍG	.′.=′=	{ a		ΞÏIJ		ËŒH Ì		È€H	4.	<u>Ë</u> ÎJ	F	E€Í	
ÍĠ	ÚFÍ I Œ	{ æ¢	V	<u>IÈÏÏ</u>	G	FÊ I Î	G	FÐFÍ	Ţ	<u>FÀÏF</u>	F	IÈĤ	J
ÍĜ		{ a	<u> </u>	ËËIF	1	ËÈJÌ	9	È€€	-	H L	<u> </u>	È€È	1
ÍĞ		{ æ¢	Ó	<u>IÈÏÏ</u>		FÊ I Î		FÐFÍ		<u>FÈÜ</u> F	F	IÈĤ	1
ÍÀ		{ a		ËĒIF	G	ËÈJÌ	G	È€E		<u> </u>	1	È€Ì	
ÍGJ	ÚFÍÍ	{ aa¢	V	<u>lÈÌÏ</u>	<u> </u>	FÈÏF	<u> </u>	FĚFÌ	J	GÉGFÎ	H	HÈJ	J
ÍH€		{ a	<u> </u>	<u> </u>	J	ËĚG	J	È€J	-	È€U	<u> </u>	È FÌ	
ÍF		{ aa¢	Ó	<u>lÈÌÏ</u>	J	FÈÏF	J	FĚ FÌ	<u> </u>	<u>G</u> ÉGFÎ	H	HÈJ	1
ÍHG	·'·=({ a		ËÈÌI	<u> </u>	ËĚG		Œ€J	Ų.	<u>Ì</u> €€J	Ţ	<u>E</u> FÌ	l l
ÍHH	ÚFÍÍŒ ·	{ aa¢	V	HĚ Œ	G	FÈ€	l v	FÉG	<u> </u>	<u>GÉGIÌ</u>	1	HÈÏ	1
ÍH		{ a	<u> </u>	ËÈ€U	J	ËËÏ		È€H		<u>ÈGHG</u>	Ļ	È€Í	
ÍH		{ aa¢	Ó	HĚŒ		FÈ€	J	FÈ	G	GÉGI Ì	<u> </u>	HÈÏ	G
ÍĤ	.′. - (î	{ a		ËÈ€J	<u> </u>	ËËÏ	G	È€H	Ų.	ÈGHG	J	È€Í	
ÍH	ÚFÍ Î	{ aa¢	V	HÈÌÏ	<u> </u>	FÈE	<u> </u>	FÈFÍ	<u> </u>	GÈ€Î	Н	GÈ FF	J
ÍĤ		{ a	<u> </u>	Ë ÌÒ€Ï	J	ËHÈGFG	J	È€Ë		ÈÎH	<u> </u>	ÈFH oò ==	
ĺΨ		{ <u>æ¢</u>	Ó	HÈÌÏ	J	FÈE	J	FÈEFÍ	G	Œ	H	GÈ FF	1
ÍI€	ríreí î or	{ a		<u>ËÈĞ</u>	<u> </u>	<u>ËHÈ</u> GFG		È€Ë	.	ÈÎ H	J	ÈFH OŤ ∂	4
ÍIF	ÚFÍÎŒ	{ æ¢	V	<u>GĚ J</u>	G	ÊÏI	ı,	FÈG	1	<u>GÊ</u> ÎÏ	H	QĚ€	1
ÍIG		{ a	<u> </u>	ЩÏН	J	ˌΠ€	-	È€H		⊞JH	-	È€Î	1
ÍIH	•	{ æ¢	Ó	GĚJ		ÎÏ I	J	FÈG	G	<u>Ģ</u> ĒÍÏ	H	QĚ€Î	G
111	rúreí ï	{ a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	⊞ÏH		ˌΠ€	G	È€H	+	⊞JH	G	È€Î	+
ÍIÍ	ÚFÍÏ	{ æ¢	V	<u>GÈH</u>	G	ÊÎH	ı,	FÈÏ I	-	<u>GÈEÏÍ</u>	l l	GÉGÍ Í	1
ÍIÎ		{ a	<u> </u>	∰ÎF	J		-	È€H	Н	<u> </u>	-	È€È	Н
ÍIÏ		{ æ¢	Ó	<u>GÈH</u>		ÊÎH	J	FÈÏ I	G	<u>G</u> ÈEÏÍ ⊞ÏII		GÉGÍ Í	G
	úcí i oc	{ a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<u>⊞ÎÎF</u>		ËŒĤÌ	G	ÈE€H	H		G	ÈEEÌ	H
ÍIJ	ÚFÍ ÏŒ	{ æ¢	V	<u> GÉGI</u>	G-	ÈG€G	ı T	FÉG G	<u> </u>	<u>G</u> HII ∭ JÌ	J	CHÈ€	-
ÍÍ€ ÍÍF		{ a	Ó	<u>⊞G€F</u>	J	ËŒ	-	ÈE€G FÈGÍG	F	O∰II		<u>È</u> €E CHÈ €Ì	F
		{ æ¢	Ó	<u> GÉGI</u>		LÉG€G EGEH	J		G	<u>G⊞</u> JÌ			G
ÍÍG	rú c ()	{ a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ÊŒF OÈCU			G	Æ €G	F		-	È€I	F
ÍÍH	ÚFÍ Ì	{ æ¢ { ā}	V	<u>GÈEGH</u> EÈGÍÌ	G-	EGÉGÍJ EGE€GÌ	ı T	FÈEÌ G	F	<u>GÈHGG</u> EÈÏÍG	J	ŒU	F
			Ó	OEEOH	J	EGÍ J	-	EE€G FEÈÌG		<u>⊞iG</u>	-	<u>E</u> EEI GEEJJ	_
		{ æ¢ { ā}	U	<u>GEG</u> 1		EGEGÌ	J		G F	⊞ÍG		<u>GESU</u>	G
111	ÚFÍÌŒ		V		G	€	Н	<u>E</u> E€G FEHFJ	Ţ	<u>⊞iG</u> FЀ	F	Œ€I	 -
	UFITUE	{æ¢ {ā}	V	<u>OE</u> FJÍ €	<u>.</u>	ËŒĒJÎ	ï	FEIFJ	F	<u>r⊡€</u> ∰ÎÌ		θ	F
ÍÍJ			Ó	OŒĴÍ	ï		Н	FÈHFJ	G	<u>⊞II</u> FЀÍ	J F	<u>Œ€</u> F	
Í΀	,	{ æ¢ { ā}	U	<u>GE-3i</u>	ì	€ ËGËFJÎ	G	F⊞FJ	F	── <u>F₽</u>	F	E€€F	G
ÍÎF	ÚFÍ J		V	€ FÈIJ	G	€ EDE-N	Н	€ FÈÍÎ	G	<u>шіі</u> FÈÍF	F	OÈÍH	G
	UFIJ	{ æ¢ { ā}	V	F⊟IJ		EÐIJ	ï	FŒII	F	<u>F⊞IF</u> ∰ÎG	_	EE€G	F
ÍÎG ÍÎH			Ó	€ FÈIJ	ï	€	H	€ FÈÍÎ	ï	<u>шіс</u> FÈÍF	J F	OŒÍH	i i
ÍÎI		{ æ¢ { ā}	U	<u></u>	ì	EBIJ	G	FŒII	F	<u>F⊞IF</u> ∰ÎG		EE€G	F
	ÚFÍ JŒ		V	€ FĚ⊕H	G	EE€H	ì	— € F E GÖ	ï	— <u>⊞iG</u> ŒGJÌ	+	OŒ I H	<u> </u>
	UFIJUE	{ æ¢ { ā}	V	<u>r∎€</u> H	Н	ËË€	ï	FE33	F	EGHG		Œſ⊓ Œ€F	F
111		19		шесп	П	IL II A		-	Г	טרט		IZ-CF	

<i>30) 1</i>	Carb Onnes	-		· · · · · ·				, ~	× .	~	× .	, , ,	
() "	Ú æz^		Ù*¦æ&^	Ùãt{ aaFAX ∙ãa	ŠÔ		ŠÔ	Væ ÁT æ¢ÁŽ•ãa		ΟΕ}* ^ΑΣζααåά		X[}ÁT¸ãr^∙ÁXÌÈ	
ÍÎÏ	{	æ¢	Ó	FÉ€H		È€H		FĚGÏ	G	Q i GJÌ	G	Q È TH	G
ÍÎÌ	{	[a		⊞E€H	Н	ËÉ€	G	€	F	ÈGHG	J	È€F	F
ÍÎJ	ÚF΀ {	æ¢	V	FÈF	G	€	Ĺ	FÈ€HÏ	Ï	<u>QİH</u> İ I	Ĩ	FÈH	Ĩ
ÍÏ€	{	(a		€	F	ËÈF	Ĵ	.€	F	⊞̈́Ģ	Н	È€G	F
ÍÏF	{	æ¢	Ó	FÈF	Ĩ	€	ĺ	FÈEHÏ	G	<u>G</u> ÈÍ I	G	FÈH	G
ÍÏG	{	(a		€	F	ËÈF	G	€	F	⊞̈́GU	Н	ÈE€G	F
ÍΪΗ	ÚFÎ F {	æ¢	V	FÈGIÎ	G	€	Ì	ÈlÍ	Ï	QÊÊÎÎ	Н	F <u></u> Ě FJ	Ï
ÍÏI	{	(a		€	Н	ËĖ	Ţ	€	Ì	ĦΪĴĮ	Ï	È€F	Ì
ÍÏÍ	{	æ¢	Ó	FÈGIÎ	Ĩ	€	Ĺ	ÈlÍ	G	GÉÌÌ	Н	F <u>Ě</u> FJ	G
ÍÏÎ	{}	[a		€	Н	ËĖ	G	.€	Ĺ	Ξijĵį	G	È€F	ĺ
ÍÏÏ	ÚFÎ G {	æ¢	V	FÈ€IF	G	ŒŒG	Ĺ	ĒΙJ	Ĩ	ŒÈ€Î	Ĺ	FÈJG	Ĩ
ĺÏÌ		[a	,	€	Н	ËÈ Í	Ĵ	È€€G	İ	ΞÏÎ	Ĩ	Ì€€H	ĺ
ÍÏJ	{	æ¢	Ó	FÈ€IF	Ĩ	ËËŒĢ	Ĺ	ĒΙJ	G	ŒÉ€Î	Ĺ	FÈJG	G
ĺÌ€	{	[a		€	Н	EE É	G	È€G	<u> </u>	⊞įíI	G	È€€H	1
ÍÌF	ÚFÎ H {	æ¢	V	È	G	ËE€G	Н	ÈίΗ		<u>Ğ</u> İH H		ÈÎ	
ÍÌG	{	(a		€	F	⊞EH		ÈE€G	Н	<u>⊞</u> €Ì		È€€H	Н
ĺΪΗ	{	æ¢	Ó	È		⊞E€G	Н	ÈίΗ	G	<u>Č</u> ĖH H	G	ÈÎ	G
	{	(ā		€	F	∰€H	G	È€G	Н	<u>∰€Ì</u>	J	Ĵ <u>€</u> €H	H
	ÚFÎ I {	æ¢	V	ĚÍG	G	ŒŒĢ	Н	ÈÆ		<u>Q</u> ÈHG		ĚÌΗ	
<u>[]</u>	{	(ā	,	€	F	∭ÍÍ		Æ€F	Н	<u> </u>		È€G	Н
ĺΪ	{	æ¢	Ó	ĚÍG		ËË€G	Н	ÈH€I	G	<u>G</u> ÈHG	G	ĚÌH	G
(i)		[a		€	F	ШÍÍ	Ğ	È€F	H	<u> </u>	J	È€G	H
ίÌͿ	ÚFÎÍ {	æ¢	V	FÈ JJ	G	€	Ţ	FÈFÎ		<u>ĢĒFG</u>		<u>Q</u> EGFÎ	\perp
ÍJ€	{	[a	,	.€	F	ËЀ	Ĺ	È€F	F	ÈĠ		È€H	F
ÍJF	{	æ¢	Ó	FÈ JJ	<u> </u>	€		FÈFÎ	G	<u>ĢĒFG</u>	G	Q Ì ÒFÎ	G
Í JG	.′^ ^	[a		€	F	ËЀ	G	È€F	F	ÈĠ	J	E €H	F
ÍJH	ÚFÎÎ {	æ¢	V	FĚÎÏ	G	È€F		FÈÍ		<u>GÊ</u> ÎÍ	Н	FÈÍÌ	
ÍJI	}	[a	<u> </u>	€	H	ËËÏÎ	1	È€H	F	<u>È</u> Í	1	È€Í	F
ÍJÍ	{	æ¢	Ó	FĚÎÏ	<u> </u>	È€F		FÈÍ	G	ŒÌÍ	Н	FÈÍÌ	G
ÍJÎ	· · · · · · · · · · · · · · · · · · ·	[a	. ,	€	Н	ËËÏÎ	G	È€H	F	<u>ÈÉ</u> Í	J	È€Í	F
ÍJÏ	ÚFÎ Ï {	æ¢	V	FÊ€	G	€	l i	ÈJI	1	GÉGÍ F	Н	FË€J	
ÍJÌ		[a	<u> </u>	È€F	H	ËĒĀ	Ļ	ÈE€G		<u>È</u> F	1	È€	
ÍJJ	{	æ¢	Ó	FÊ€	<u> </u>	€	1	ÈJI	G	GÉGÍ F	H	FÈ€J	G
΀€	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	[a	.,	È€F	Н	ËĒĀ	G	ÈE€G	Ų.	<u>È</u> F	J	E€E	<u> </u>
Î∉F	ÚFÎÌ {	æ¢	V	FÈIJ	G	ËŒI	ļ	ËÏI	ļ	GÊTÎ Ï	H	FĚ€Ï	1
΀G		[a	<u> </u>	È€F	<u>H</u>	ËÈÌH	ļ	ÈE€H	<u> </u>		<u> </u>	È€Í	
Î∉H	{	æ¢	Ó	FÈIJ	<u> </u>	ËEEI	ı	ËÏI	G	GÈÍÏ	H	FĚ€	G
΀	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	[a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	É€F	Н	ËÈÌH	G	ÈE€H	Ų.		J	E €Í	+
΀	ÚFÎ J {	æ¢	V	FÈFG	G	ËŒÎ	l ÿ	ÊÌÎ	 	<u>FÐJÍ</u>	1	FÈH	1
΀Î	{	[a	<u> </u>	€	Ĥ	ËÈĠ	Ì	ÈEEI	<u> </u>			Ì €€Ï	
Î∉Ï	{	æ¢	Ó	FÈFG	1		1	ÊÌÎ	G	<u>FÐJÍ</u>	G	FÈÚ	G
΀	YET C	[a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	€	Н	ËÈĠ	G	È€	+		J	È€Ï	+
΀J	ÚFÏ € {	æ¢	V	F È E	G	ËŒÏ	H	ÊΗ		FÈÏÏ	1	FÈG F	+
ÎF€		[a	<u> </u>	€	H	ËÈG		ÈE€H	Н	—————————————————————————————————————	<u> </u>	È€Ï	H
ÎFF	{	æ¢	Ó	F È E	1	ËŒÏ ŒÒ	Н	ÊΗ	G	FÈÏÏ	G	FÈG F	G
ÎFG	úci e	[a	17	€	Н	ËEG	G	ÈE€H	H		J	ÈEEÏ OŤ IC	H
ÎFH	ÚFÏ F {	æ¢	V	GĚ€Í	G	ÈEHÏ "COŤ CO	i i	FÈHH	_	FÐÌÏ	F	ŒÍJG ÈG	
ÎFI		[a]	ć	ÉÉHÏ OŤ d	J	ËGË FG		ÈE€G	F	<u>È</u> ÍÏ		ÈEEI OŤ 10	F
ÎFÍ		æ ¢	Ó	GĚ€Í		ÈEHÏ ¨ÖTĞ FO	J	FÈHH	G	<u>FÐÌÏ</u>	F	O <u>É</u> JG	G
ÎĤ	ÚEÏO	[a	\/	OÈ IÒ		ˌ FG	G	È€G	F		-	ÈEEI O'CLU	F
ÎFÏ	ÚFÏ G {	æ ¢	V	GÉHG	G	ĖG	I ï	FÈG	1	<u>GÊ</u> ÏÍ	F	ŒĴ	ì
ÎÈ		(a		⊞GÍ	J	ËGËHU		Œ€H		ÈEHG		È€Î	

<i>90] 1</i>	· Cu i D Oili#D	•		` ar rgg i				, ~	× 4	~	× .	, , ,	
^	Ú æe^	_	Ù`¦æ&^_	Ùãt{æFÆX•ãã	<u>چ</u>	Ùãt{æGÁX.∙ãã		Væ ÁTæ¢ÁŽ•ãa		OB;* ^AŽtanåá		X[}ÁTã^•ÁŽÈ	
ĴFJ		{ æ¢	Ó	<u>ĢĒ</u> IĞ		ĖĠ	J	FŒG	Ğ	GŒÎ Í	F	ĞĒŽ	Ğ
ĴŒ	7	{ a		⊞GÍ		ËŒHU	G	Ì€€H	l l	ÈEHG	Í	È€Î	1
ÎŒ	ÚFÏ H	{ æ¢	V	<u>G</u> EG€Ï	G	È	l l	FÈÌJ	Ĺ	<u>Ģ</u> ĐĴF		ŒŒ	ĮĮ.
ÎŒ		{ a		ËF€G	Ĵ	ËBÈG		€		ÈEFÎ	Ļ	È€F	
ĴСН		{ æ¢	Ó	ŒŒ		<u>`</u> È	J	FÈÈÌJ	Ğ	Q È ÔÎ, F		ŒŒ	Ğ
ÎG		{ a		⊞Ę€G		ËEËG	G	€	ļ.	È€FÎ	J	È€F	1
ÎĠ	ÚFÏ I	{ æ¢	V	GŒH	G	Ė	I	FÈ€HF	Ţ	<u>G</u> ÈG	Н	ŒÉÍÏ	I I
ÎĜ		{ a	,	⊞Ę€G	J	ËGÈ€Í H		È€		ŒŒGH		Ì€€Ï	I
ÎĞ		{ æ¢	Ó	GŒH	1	È	J	FÈ€HF	Ğ	<u>Ģ</u> ĒG	Н	ŒÉÍÏ	G
ÎÀ	, ,,	{ a		ËEG		ËÇBÈÉÍ H	G	Œ€		ŒŒGH	J	È€Ë	1
Î GJ	ÚFÏ Í	{ æ¢	V	FÈΪΗ		ÈĠ		ÙΙΪ	Ĺ	FÈÎJ	Н	FÈÌÎ	Ļ
ÎH€		{ a	,	⊞EG	J	ËÈĴÎ	J	È€Î	ĺ	ŒŒHÏ		ÈFF	İ
ÎĦ		{ æ¢	Ó	FÈÏH	J	ÈĠ	J	ÙΙΪ	G	FÈÎJ	Н	FÈÌÎ	G
ÎHG		{ a		⊞EG		ËÈJÎ	1	È€Î	Ì	ËŒHÏ.	J	ÈFF	Ì
ÎН	ÚFÏÎ	{ æ¢	V	FÐFÌ		È€HÏ	1	ÈĹ	J	FËJÌ	Ï	FÀG	J
ÎΗ		{ a		Ë€HÎ	J	ËÈII	J	È€Ï	Ì	EE Î	1	È€FH	Ì
ÎH		{ æ¢	Ó	FÐFÌ	J	ÈEHÏ	J	Ìί		FËJÌ	G	FÈG	I
ÎĤ		{ a		⊞⊞Ĥ	_	田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田	1	È€Ï	Ì	ËÊÎ I	J	ÈEFH	ì
ÎΗ̈́	ÚFÏÏ	{ æ¢	V	HĚGF	G	ËFG	G	FÈ€J	Ï	GÈÌ	F	HÈGHF	Ï
ÎĤ		{ a		Œi€ì	Ϊ	ËHĚĞ	Ï	ÈE€H	Ì	ËÈĞH	ì	ÌŒ€Ï	ì
ÎΗ		{ æ¢	Ó	HĚŒ	Ϊ	ËFG	Ϊ	FÈ€J	G	GÈÌ	F	HÈHF	G
Îl€		{ a		ŒÊ	G	ËHĚĞ	O	ÈE€H	Ì	ËÈĞH	ì	ÌŒ€Ï	Ì
ÎIF	ÚFÏÌ	{ æ¢	V	HÈÌJG	G	ĖÎÎ	G	FÈGF	Ï	FЀÏ	F	ŒÌJÌ	Ï
ÎIG		{ a		⊞ÎG	Ϊ	ËHÈGH	Ϊ	€	Ì	€	ì	ÈE€H	Ì
ÎН		{ æ¢	Ó	HÈJG	Ϊ	ËÎÎ	Ϊ	FÈGF	G	FЀÏ	F	Œ JÌ	G
ÎH		{ a		⊞ÎÎG	G	ËHÈGEH	G	€	Ì	€	ì	ÈE€H	Ì
ÎIÍ	ÚFÏ J	{ æ¢	V	Œ∄ÏF	G	ÈF	G	FÈHÏ	Ϊ	GÈGHG	F	ŒHF	Ï
ÎIÎ		{ a		ŒŒJ	Ϊ	ËŒÎÌI	Ϊ	È€€G	Ì	Ш́Н	ì	È€€H	ì
ÎIÏ		{ æ¢	Ó	ŒËÏF	Ϊ	ÈF	Ϊ	FÈHÏ	G	GÈGHG	F	ŒHF	G
ÎlÌ		{ a		L€ T ⊞	G	ËGËÌI	G	È€G	Ì	ЩН	ì	È€€H	ì
ÎIJ	ÚFÌ€	{ æ¢	V	GÈÎÎ	Т	ÈEIÎ	Т	FÉFÍ	J	GÈŒJ	Н	OÈÍÏ	J
ÎÍ€		{ a		⊞€ÍI	J	ËŒÌH	J	È€Í	ì	ŒHÌ	T	È€€J	ì
ÎÍF		{ æ¢	Ó	Q È ÎÎ	J	ÈEIÎ	J	FÉFÍ	Т	GĚ€J	Н	OÈ Í Ï	
ÎÍG		{ a	_	⊞eí I	Ī	ËŒÌH	Ī	È€Í	ì	Œ ⊕ Ì	J	È€J	ì
ÎίΗ	ÚFÌ F	{ æ¢	V	ŒĚÍΪ	Т	ÈJÎ	ı	FÈEIÌ	J	GÈ€FH	Н	CHÌ Í	J
ÎÍI		{ a		∰JÌ	J	ËŒĴŮ	J	ÈF	ì	iii í		È€FÌ	ì
îíí		{ æ¢	Ó	СЕŤÍÏ	J	ÈJÎ	J	FÈEIÌ	Т	GÈ€FH	Н	CHÈÌÍ	
îíî		{ a	_	∰JÌ	Ī	ËŒĴŮ	Ī	ÈF	ì	iii í	J	È€FÌ	ì
ÎÍÏ	ÚFÌ G	{ æ¢	V	ŒÏÎÎ	Т	ÈΗ	ı	FÈJG	J	FÈ€	Ϊ	OEÊ OH	J
îíì		{ a		⊞GÏ	J	ËGË FF	J	ÈF	ì	ÈEÏG		È€FJ	ì
ÎÍJ		{ æ¢	Ó	ŒÎÎ	J	ÈΗ	J	FÈJG	Ť	FÈ€	G	OÊ OH	
îî€		{ a		ËĠΪ	Ī	ËGËFF	Ī	È€F	ì	È€ÏG	J	È€FJ	ì
ÎÎF	ÚFÌ H	{ æ¢	V	ΙĖĠ	G	FĚÎ	G	FĚÌ	Ï	GEGI G	Н	ΙÈÎΪ	ΤÏ
ÎÎG		{ a	-	ËÉÎG	Ï	ËËŒ	Ï	È€Î	ì	ΞÎĴJ	F	È€FF	ì
ÎÎH		{ æ¢	Ó	ΙĖĠ	Ï	FĚÎ	ï	FĚ Ì	G	GEGI G	Н	I ÈÎÏ	G
ÎÎI		{ a		ËĚÎG	G	ËËG	G	È€Î	ì	ΞÎĴ	F	ÈFF	
ÎÎÍ	ÚFÌ I	{ æ¢	V	I È JÌ	G	FĚ€	G	FÉ FG	Ϊ	FÈG	Ϊ	HÈÌÍ	Ï
<u> </u>	J	{ a		ËÈJ	Ï	ËĚFÍ	Ϊ	È€H	Ì	⊞ J		È€Î	
ÎÎÏ		{ æ¢	Ó	ΙĖJÌ	Ï	FĚ€	Ï	FĚ FG	G	FÈG	G	HÈÌÍ	G
îîi		{ a		ËÈJ	G	ËĚFÍ	G	È€H	ì	<u>⊞</u> J	J	È€Î	ì
ÎÎJ	ÚFÌ Í	{ æ¢	V	GÉ FG	G	€	ì	F É GÍ J	Ï	GÉÍF	F	Œ FÏ	i
ÎÏ€		{ a		È€€G	F	ËĐĚ FÎ	Ϊ	€	ì	⊞ G	İ	È€€G	
		(7						_					

	Ú æe^		Ù*¦æ&^	Ùãt{æFÆX•ãa	ŠÔ	Ùãt{æG4Št∙ãa	ŠÔ	Væ ÁTæçÆŽ•ãa	ŠÔ	OB;* ^AŽianåá	ŠÔ	X[}ÁTãi^•ÁŽÈ	ËŠÔ
ÎÏF	·	{ æ¢	Ó	ĠĚ FG	Ϊ	€	Ì	FÈGÍJ	G	GÈÍF	F	GĚFÏ	G
ÎÏG		{ a		È€G	F	ËGËFÎ	O	€	Ì	⊞G	J	È€G	Ì
ÎΪΗ	ÚFÌ Î	{ æ¢	V	GÉGÍÎ	1	ËŒÎ	ĺ	FÈÏÎ		FËFI	Ï	GÈH€J	J
ÎÏI		{ a		È€G	ì	EGÉGÎ I	7	È€	Ì	ËÍJ	Н	È€Ï	Ì
ÎÏÍ		{ æ¢	Ó	GÉGÍÎ	J	ËŒÎ	ĺ	FÈÏÎ	J	FËFI	G	GÈH€J	
ÎÏÎ		{ a		È€G	Ì	EGÉGÎ I		È€	<u> </u>	ËΪÍJ	Н	È€Ï	ì
ÎÏÏ	ÚFÌ Ï	{ æ¢	V	HÈIÎ		ÈÍΗ	1	FÈHFÌ	J	GÈĖÏI	Н	HÈÎI	J
ÎÏÌ		{ ā		⊞ÏG	J	ËHĚ€Ì	J	È€FÎ	Ì	ÈEIF	1	ÈHF	ì
ÎÏJ		{ æ¢	Ó	HÈIÎ	J	ÈÍΗ	J	FĖHFÌ		GÈĖÏI	Н	HÈÎ	1
îì€		{ a		⊞ÏG		ËHĚ€Ì	1	È€FÎ	Ì	È∃F	J	ÈHF	Ì
ÎÌF	ÚFÌ Ì	{ æ¢	V	HÈÎ		ÌΪĠ	1	F È ĠÏÍ	J	FËÎI	Ϊ	HÈIJ	J
ÎÌG		{ a		ËÜF	J	ËHĚG	J	È€FH	Ì	ÈEÏÍ	I	ÈEGÍ	Ì
ÎÌΗ		{ æ¢	Ó	HÈÎ	J	ÌΪÌ	J	F È ÖÏ Í		FĖΪ́Ι	G	HÈIJ	
ÎÌI		{ a		ËΪF	1	ËHĚG	1	ÈFH	—	ÈEÏÍ	J	ÈEGÍ	ì
îìí	ÚFÌ J	{ æ¢	V	GÈÏF	G	Ĥ	G	FÈ€IG	G	FĖĖIÏ	ΙÏ	O ÌH €G	G
ÎÌÎ		{ a		⊞UG	Ï	ËĐÈÍÏ	Ϊ	ÈEEÌ	—	⊞HJ	Н	ÈFH	ì
ÎÌÏ		{ æ¢	Ó	GÈÏF	Ï	Ĥ	Ϊ	FÈ€IG	Ϊ	FĖΪΙΪ	G	O ÌH €G	Ϊ
ÎÌÌ		{ a		⊞ŪG	G	ËĐÈÍÏ	G	ÈEEÌ	—	⊞HJ	Н	ÈFH	ì
ÎÌJ	ÚFJ€	{ æ¢	V	GÉGÏ H	G	ÈÏI	G	₿FÌ	Ϊ	FÈIG	Ϊ	GÈ€JG	Ï
ÎJ€		{ a		⊞IF	Ϊ	ËGËGË	Ϊ	È€J	Ì	⊞G	1	È€FÏ	Ì
ÎJF		{ æ¢	Ó	GÉGÏ H	Ϊ	ÈÏI	Ϊ	₿FÌ	G	FÈG	G	GÈEJG	G
ÎJG		{ a }		⊞ÌIF	G	ËĢĖĞÏ	G	È€J	Ì	ËĞ	J	È€FÏ	Ì
ÎJH	ÚFJF	{ æ¢	V	FË FI	G	ÈFÍ	G	È€l	Ï	FĚÏF	Н	FĒÎÍ	Ï
ÎJ		{ a		⊞ ` €Ì	Ï	ËËF	Ï	È€G	F	⊞jjJ		Ì€€I	F
ÎJÍ		{ æ¢	Ó	FË FI	Ï	ÈFÍ	Ï	È€	G	FĚÏF	Н	FĒÎÍ	G
ÎJÎ		{ a		ŒŢ€Ì	G	ËËFÏ	G	Œ€G	F	<u></u>	J	È€I	F
ĴJÏ	ÚFJG	{ æ¢	V	FĚÎÎ	1	ËE€G	1	ËÌÎ	Ļ	<u>FËÍÏ</u>		FĚÏF	Į
ÎJÌ		{ a		€	Н	ËËÏG	ĺ	È€F		ΞÍΪ	Н	È€G	
ÎJJ		{ æ¢	Ó	FĚÎÎ	J	ËE€G		ĔÌÎ	Ĺ	<u>FËÍÏ</u>	G	FĚÏF	Į į
Ï€		{ a		€	Н	ËĚÏG		È€F		<u> </u>	H	ÈE€G	
Ï∉F	ÚFJH	{ æ¢	V	FËÍ		<u>È</u> É G	<u> </u>	ÈÍÏ	J	<u>FÈÌF</u>	1	FËIÍ	J
Ï€G		{ a		⊞É F	J	ËËÏÍ	J	ÈEFF À (ï		⊞Ì(Н	È€G	
Ï∉H		{ æ¢	Ó	FËÍ	J	<u>È</u> ÉÍ G	J	ÈÍÏ	l ì	FÈÌF	G	FËIÍ	1
Ï€	r'ır u	{ a	\ /	ËÉÉ F				ÈFF Èï.	+	<u> </u>	H	ÈEG	
Ï€Í	ÚFJI	{ æ¢	V	FÊÏG ⊞TIÏ		ÈÍJ ËÈJÍ	1	ËÏI	J	FË€G	1	FÊĞ	J
Ï∰		{ a	Ó	<u>⊞</u> II FÊÏG	J	E(J	J	<u>E</u> F ĔÏI	-	EÜ (C)		<u>È</u> EFÌ FÈÈGÏ	-
		{ æ¢	<u> </u>		J		J	_	ì	FË€G	G		1
I€	ÚFJÍ	{ ā	V	<u>H</u> ÎÎÎÎ	+	EFĒJÍ EGJÍ	l l	ÉF ÈΩ.		<u>⊞</u> HU FÈHÎÌ	J	<u>E</u> FÌ ÈïH	
Ï€J	UFJI	{ æ¢	V	HIG G	<u> </u>	<u> </u>	-	<u>É</u> HGH È€F	ì		1	<u> </u>	G
Ï F€ Ï FF		{ ā	Ó	ÈÌÌ	G	<u> </u>	G	EHGH	+	FEHÎ Ì	G	<u>E</u> IH	+
ÏFG		{ æ¢		EEG G	ï	<u>⊞</u> ï	ï	<u>E</u> F	J		J	<u>E</u> FÌ	
Ï FH	ÚFJÎ	{ æ¢	V	ËÏÏ	+	<u>щ</u> Н	ï	EGH EGH	J	GÉHÍ G	G	<u>E</u> II	+
ΪFI	UFJI	{ ā	V	<u> </u>	G	⊞ GÍ	G	E€FH	ì	<u>Œil</u>	ı	ŒGÎ	
ΪFÍ		{ æ¢	Ó	ĖÏÏ	G	<u>щ</u> б	G	EGH E		GÉHÍ G	÷	ÊÏI	G
ÏĤ		{ a	<u> </u>	⊞í I	ï	⊞ǵ	ï	ŒFH		<u>GENG</u>	J	<u>ш</u> п	ì
ΪFΪ	ÚFJÏ	{ æ¢	V	ĒΗ	G	EG H	G	<u>È</u> H€Î	J	F EH H	J	ËlÍ	i i
ÏĤ	01 01	{ a	V	EEGHÌ	Ï	⊞H	Ï	È€Î	ì	<u> </u>	G	<u>E</u> F	
ΪFJ		{ æ¢	Ó	ĒН	İ	EGÍ H	ï	<u>È</u> H€Î		<u> </u>		ËlÍ	G
ÏŒ		{ a		HEGHÌ	G	<u>⊞</u> H	G	È€Î	ì	<u> </u>	İ	<u>E</u> F	ì
ΪŒ	ÚFJÌ	{ æ¢	V	Ε̈́ÍG	Ī	ĖIÌ	Ī	<u>È</u> H€H	J	FÈ€	J	ÈJF	J
ÏŒ		{ a		⊞i J	J	ΞÍΙ	J	€	F	ŒJ	G	È€G	F
		(7											

30] 1	· COID OITHE							, ,	× .	~	× .	, , ,	
<u>ت م را</u>	Ú æe^	Ι.	Ù"¦æ&^	Ùãt{æFÁX.•ãa		Ùãt{a69—ÃX•ãã		Væ ÁTæçÁŽ•ãa	<u>so</u>	OB;*ŅĀŽæåá		X[}ÁTã^•ÁXÈ	ESO_
ΪŒΗ		{ æ¢	Ó	ËÍG	J	ĒŢŢ.	J	ÈH€H		FÈ€	<u>LL</u>	ÊJF	
ΪĠ	,	{ a		<u>⊞</u> j J		ĦÍI		.€	F	È.		È€G	F
ÏĞ	ÚFJJ	{ æ¢	V	Ë	J	<u>EG</u> F	J	<u>É</u> Î	Ģ	<u>G</u> ÈÎ	J	ÊFI	Í
ΪĜ		{ 3}		⊞gí		∰ìì ``		E €J	<u> </u>	⊞ġ	Н	ÈEFÎ	
ΪĞ		{ æ¢	Ó	Ë	1	ĖĢĘ		ΪĐĴ	Ĺ	ŒÈÎ		ΪĦ	Ļ
ΪĠ	,	{ a		EG Í	J	Η̈́ÌÌ	J	Œ€IJ		⊞ġ	Н	ÈEFÎ	1
ΪGJ	ÚG€€	{ æ¢	V	ÈĠ	J	<u>İ</u> ĞFH	J	ĚΗΪ	Ģ	GEÎÎ		ËÎÍ	II.
ÏH€		{ a	,	∰ì Ì	-	⊞lF	1	Œ€IJ	<u> </u>	ÈÌÎ		È€FÎ	1
ΪÆ		{ æ¢	Ó	ÈĠ	I	ÈGFH	1	ÈΗΪ	Ţ	GEÎÎ	G	ËÎÍ	Ţ
ΪHG		{ a		<u></u> i i	J	⊞IF	J	Œ€J		ΗÎ	J	ŒFÎ	1
ΪHΗ	ÚGGÍ	{ æ¢	V	È€G	G	iii€€I	Ï	È€	G	O∰GÍ		È€Ï	
ΪΗ		{ a	,	€	Ĩ	ŒŒÏ	I	È€G	Ĩ	FĚ⊕H	J	È€	Ĩ
ΪΉ		{ æ¢	Ó	È€€G	Ϊ	Œ€	G	È€E	Ï	OÉEGÍ	J	È€Ï	J
ΪĤ		{ a		€	G	ŒŒÏ	J	ÈE€G	G	FĚ€H	1	È€I	G
ΪΗ̈́	ÚGĞ	{ æ¢	V	È€H	J	Œ€ì	J	È€Í	J	GÉGÎ F	1	È€F	J
ΪĤ		{ a		ËŒF	-	ŒŒJ	1	È€	1	FÐĴĴ	J	È€J	G
ΪHJ		{ æ¢	Ó	È€€H	ı	Œ€ì	I	È€Í		GHÉGÎ F	J	È€F	1
Ïl€		{ a		ËŒF	J	ËE€J	J	È€	J	FÐÎÎ	I	È€J	Ϊ
ΪΙF	ÚGĞ	{ æ¢	V	È€E	J	Щ €F	J	ÈE€Ï	J	G Ì l GÏ	G	È€FG	J
ΪΙG		{ a		ËE€H	-	ËŒFG	1	È€Í		描lí	1	ÈFF	ì
ΪΙΗ		{ æ¢	Ó	È€EI	- 1	⊞€F	1	È€Ï		G Ì I GÏ	ΙÏ	È€FG	
ΪΠ		{ a		ËE€H	J	ËŒFG	J	È€Í	٦	描lí	J	ÈFF	ì
ΪΙÍ	ÚŒÌ	{ æ¢	V	ÈE€H	J	⊞€FI	ì	È€J	J	GÌHÍ	G	ÈEFÏ	J
ΪΙÎ		{ a		ËE€G	I	ŒFÍ	J	È€Î		ĦÏÏ	I	ÈEFI	G
ΪΙΪ		{ æ¢	Ó	ÈE€H	I	⊞€FI	ì	È€J	T	GÈHÍ	Ï	È€FÏ	
ΪΙÌ		{ a		ËE€G	J	Œ€FÍ	I	È€Î	J	ŒΪΪ	J	È€FI	Ï
ΪIJ	ÚGGJ	{ æ¢	V	€	J	Œ€FÍ	J	È€È	J	GÈGFI	T	È€FÎ	J
ÏÍ€		{ a		⊞€€Í	-	Œ€FÏ	1	È€Î	Т	FÈÌH	J	È€FÍ	ì
ΪÍF		{ æ¢	Ó	€	Т	Œ€FÍ	I	È€È	Т	GÈGFI	J	È€FÎ	
ΪÍG		{ a		⊞€€Í	J	Œ€FÏ	J	È€Î	J	FÈÌH	T	È€FÍ	ì
ΪÍΗ	ÚGH€	{ æ¢	V	€	J	ËEG	ì	È€FG	J	GÈ€IÍ	П	È€GH	J
ΪÍΙ		{ a		⊞€€Í	I	⊞EGÍ	Н	ÈF	Т	FÈIH	J	ÈEGG	ì
ΪÍÍ		{ æ¢	Ó	€	ı	ËEG	ì	È€FG	T	GÈ€IÍ	J	È€GH	
ΪÍÎ		{ a		ËE€Í	J	ËEGÍ	Н	È€F	J	FÈIH	T	ÈEGG	ì
ΪÍΪ	ÚGHF	{ æ¢	V	ÈÍ G	Ï	€	ì	È	Ϊ	ÈΙΗ	J	ÈÌ	ΤÏ
ΪÍÌ		{ a		È€Î	ì	<u>⊞</u> 1 I	G	È€€H	Ì	ΞÏÍΙ	G	È€Î	ì
ΪÍJ		{ æ¢	Ó	ÈÍG	G	€	ì	È	G	ÈΙΗ	Ī	ÈÌ	G
ïî€		{ a	-	È€Î	ì	⊞ 1 I	Ï	È€€H	ì	ЩΊΙ	Ϊ	È€Î	ì
ΪÎF	ÚGHG	{ æ¢	V	Ê١	Ϊ	€	ì	ÈHÍF	G	ΗÎĠ	Ιï	ĒΪG	ΤÏ
ΪÎG		{ a		È€FG	ì	⊞HF	G	È€Î	ì	Ë		ÈEFG	ì
ΪÎΗ		{ æ¢	Ó	ĒΙ	G	€	ì	ÈHÍF	Ï	ΗÎĠ	G	ĒΪG	G
ΪÎΙ		{ a		È€FG	ì	⊞HF	Ï	È€Î	ì	ΞĤ	J	ÈEFG	ì
ΪÎÍ	ÚGHGŒ	{ æ¢	V	ÈÍΓ	Ϊ	ËE€G	ì	È€J	G	FÈH€J	J	ÈÎÏ	T
ΪÎÎ		{ a		È€È	ì	iii i	G	È€Í	ì	iii î	G	È€€J	
ΪÎΪ		{ æ¢	Ó	ÈÍ F	G	ŒŒG	ì	ŒJ	İ	FÈH€J	Ī	<u>Ē</u> Î Ï	G
ÏÎÌ		{ a		È€È	ì	<u>⊞</u> i ï	Ï	È€Í	ì	EGÎ	İ	Ì€€J	ì
ΪÎJ	ÚGH	{ æ¢	V	ÈÏH	İ	È€G	İ	Ì G€H	T	FÊ F	ΤĖ	Hì Ï	
ÏÏ€	33.1	{ a		€	G	⊞H H	G	Æ€J	Ì	È€Ï	i	ÈFÎ	
ΪΪF		{ æ¢	Ó	ÈΗ̈́Η	G	ÈG	G	ÈG€H	J	FÊF	G	HÌ Ï	J
ΪΪG		{ a		€	Ï	⊞H H	Ï	È€J	ì	È€Ï	J	ÈFÎ	Ť
ΪΪΗ	ÚGHŒ	{ æ¢	V	<u>E</u> ÏÎ	J	⊞€€G	i i	<u>E</u> EIÎ	G	FË FÎ	Ϊ	<u>E</u> ií	G
ÏÏI	- CG I IOL	{ a		È€Ï	Н	i i i	i	È€Í	Н	ÈG€G	İ	Ì€€Ì	Н
		1 9											

<i>30) 1</i>	····	•		o on igg i					×A		×A		
777	Ú æ¢^		Ù*¦æ&^_	Ùãt{an€AŠt•ãa	<u>so</u>		ŞO	Væ ÁTæçÁŽ•ãa	<u>\$0</u>	OB;* ^AŽanåá		X[}ÁTã ^•ÁXÈ	Œ\$O
ÏÏÍ		{ æ¢	Ó		<u> </u>	ŒŒG		ÈEIÎ		<u>FË FÎ</u>	G	<u>E</u> Í	1
ÏÏÎ		{ a		È€Ï	Н	EE Ï	J	È€Í	Н	ÈG€G	J	È€Ì	Н
ÏÏÏ	ÚGH	{ æ¢	V	<u>È</u> Í F		<u>Æ</u> G	G	ÈÉÎ G	ļ.	<u>FÐ</u> FÌ	Ĵ	ÈHU	1
ÏÏÌ		{ a	4	EEE Í		∰H_	Ĵ	È€Î	1	ı iii □ i		ÈFG	
ΪĮ̈́J		{ æ¢	Ó	ĖĹF	J	<u>i</u> ۓ G	1	È G	J	<u>FÐFÌ</u>		ÈHU	Í
ïÌ€	,	{ a		ÉÉÍ	G	⊞H		È€Î	G		G	ÈFG	
ΪÌΕ	ÚGH Œ	{ æ¢	V	<u></u> Œij J	J	€	Н	Œ H		<u>ĘĖÏ</u>	J	<u>E</u> Ì G	J
ΪÌG		{ a	,	È€Í	Н	ËΞΘΪÍ		È€€H	Н	<u> </u>	G	È€Í	Н
ΪÌΗ		{ æ¢	Ó	Ĭ,		€	Н	È H	J	<u>F</u> ÈÏ	l l	<u>È</u> G	\perp
ÏÌŢ	, /	{ a		Œ€Í	Н	iiii í	J	Œ€H	H	<u> </u>		Æ€Í	H
ΪÌĹ	ÚGHÍ	{ æ¢	V	<u>È</u> JÎ	G	ÈEHG	<u> </u>	È	1	<u>FÈĴÏ</u>	J	ÈJÏ	\perp
ïÌÎ		{ a		ËEGÎ	Ĵ	∰JI		È€F	Н	⊞Í.	G	Æ€H	Н
ΪÌΪ		{ æ¢	Ó	Ţ		ÈEHG	J	È	G	<u>F</u> ÈĴÏ	l l	ÈJÏ	G
ÏÌÌ	, ,	{ a		ËEĞ		⊞∃JI	G	Œ€F	Н	<u> </u>		Œ€H	Н
ΪÌͿ	ÚGHÍ Œ	{ æ¢	V	ÈHÌ	J	€	Н	ŒJF	1	<u>FÈ</u>	J	ÈÎÍ	\perp
ÏJ€		{ a		È€Í	Н	<u> </u>		È€H	Н	ÈĮ	G	È€Í	Н
Ï JF		{ and	Ó	ĖΗ̈́		€	Н	ŒJF	J	<u>FÈ</u>	l l	Ėĵį	J
Ï JG	, A	{ a		Œ€Í	Н	<u></u>	ĺ	Æ€H	Н	<u>Èl</u>	l l	Œ€Í	Н
ΪJH	ÚGHÎ	{ æ¢	V	<u> Ĥ</u> Į	Ĺ	ŒŒŒ		ÉG€	Ģ	<u>F<u>i</u>È€F</u>		<u>Ė</u> J į	Ļ
Ï Jļ		{ a	,	Œ€Ì		<u></u>	ĺ	Œ€Í	Ţ	∰G	Н	È€Ì	1
ÏJĺ		{ and	Ó	<u> Ĥ</u> Ĺ	Ļ	ËË€€G		ÉG€	Ĺ	F <u>i</u> È€F	G	ĖijŲ	Í
ΪJÎ		{ a		È€Ì		⊞ĤÌ	ĺ	Œ€ĺ		ŒĢ	Н	È€Ì	1
ΪJΪ	ÚGHÎ Œ	{ æ¢	V	ĖΗ̈́	Ĺ	€		ĺĹ ∌ Í	Ţ	Œij	J	ÈÏ	1
Ï JÌ		{ a		È€Î		⊞HÎ	Ĺ	Æ€H		ÈĺÏ	Н	Ì € €Î	1
ΪJJ		{ æ¢	Ó	ĖΗ̈́	Ţ	€		ĺĹ ∋ £	Į	<u> GiĞi İ</u>		ÈÏ	Ţ
Ì€	, "	{ a		È€Î		∰HÎ	ĺ	Æ€H		ŒίΪ	Н	È€Î	1
Ì∉F	ÚGHÏ	{ æ¢	V	ĚÎÌ	Ĺ	<u>⊞</u> €€I		ĖHÍ	Ţ	<u>QEFÌÌ</u>		ĒĠ	\perp
Ì€G		{ a		È€È		∰ïî	Ĺ	È€Ĵ		ÈŲΪ	Н	ŒF	1
Ì∉H		{ æ¢	Ó	ĚÎÌ	Ţ	iii€€[ĖHÍ	Į	ŒÈÌÌ	G	ĖĠ	Ų
Ì€	,	{ a		È€È		∰ïî	J	È€Ĵ		<u><u></u>ĚIJÏ</u>	Н	ÆF	1
Ì€	ÚGHÏ Œ	{ æ¢	V	È€HG	Ĺ	ËE€G	Н	È€GÍ	Į	<u>GÌ lG</u>	G	È∃I	J
Ì€Î		{ a		ͺ€		<u>⊞</u> H		€		<u> </u>	l l	ÈE€G	Н
Ì∉ï		{ æ¢	Ó	È€HG	Ļ	ŒŒG	Н	ÈEGÍ	Ļ	<u>ÇÎH</u> Ğ		<u>E</u> II	
Ì€Ì		{ a		€	Ţ	⊞ G H	ĺ	€	Ţ	<u> </u>	J	È€G	H
Ì€J	ÚGHÌ	{ æ¢	V	<u>È</u> ÎÎ	Ļ	€		Œ Í	Ļ	<u>È</u> Jì	J	ÈF	ĮĮ.
ÌF€		{ a	,	È€G		⊞eî∣	G	Œ€F		ijί	G	È€G	1
ÌFF		{ æ¢	Ó	ÈÎÎ	G,	€	Ţ	È Í	Ģ	ÈJÌ	l l	ÈF	Ğ
Ì FG		{ a		Æ€G		⊞GÎ I		Œ€F		<u>⊞ìi</u>		Æ€G	
Į FH	ÚGHÌ Œ	{ æ¢	V	ŒI H	J	€	F	ÆGJ	J	<u>F</u> ĚÎÍ	J	ÈÉÍ G	J
ÌF		{ a	,	ͺ€	Н	⊞⊞H		ĺ€	Н	<u> </u>	G	€	Н
ÌFÍ		{ æ¢	Ó	ŒI H	1	€	F	ŒGJ	1	<u>F</u> ÈÎÍ	l.	ÈÉÍ G	\perp
ÌFÎ	,	{ a		Ţ	Н	⊞e H	ĺ	(€	Н	<u> </u>		,€	Н
ÌFÏ	ÚŒHJ	{ æ¢	V	ÈÉÎG	J	ŒŒF		È€HÍ	J	<u>F</u> ÈG	J	ÈÎÎ	J
<u></u> Ì FÌ		{ a	,	Œ€H	G	<u>⊞</u> €Í J	Ĺ	Œ€G	Н	⊞̇́€G	G	È€I	Н
Ì FJ		{ æ¢	Ó	ŒÎ G	<u> </u>	ŒŒF	-1	ÆHÍ		<u>F</u> ÈG	<u> </u>	È Î	
ÌŒ	,	{ a		È€€H	Ï	⊞€Í J	J	È€G	Н	⊞i€G	Ĭ	È€I	Н
) Œ	ÚGHJŒ	{ æ¢	V	È	J	.€	Н	ÈEGG	J	FĚ	J	È∃G	J
ìœ		{ a		€	Н	iii e	1	Į€	Н	<u>He</u> í	G	,€	Н
ÌОН		{ æ¢	Ó	È		€	Н	ÈEGG		FĚ		ÈEIG	
ÌŒ		{ a		€	Н	iii€	J	€	Н	Ë€ÍÍ	Ϊ	€	Н
ÌĠ	ÚGI€	{ æ¢	V	ŒÏG	J	Œ€F	Н	ΕEIH		<u>F</u> ÈH G	J	ŒÏJ	J
ÌĜ		{ a		Œ€	Н	⊞€Ï		ÈE€G	Н	⊞GFG	G	È€	H

<i>30</i>] 1	· ·			o di iggi				((Y	v .	~	٧.	, ,,	
7 20	Ú æe^		Ù"¦æ&^	Ùãt{aaFÁŽ•ãã	80	Ùãt{ <u>a</u> eGAŽ•ãã		Væ`ÁTæçÁŽ•ãa		O5;* <u> </u> ^AŽanåá	<u>so</u>	X[}ÁTã:^•ÁŽÈ	ESO_
ÌĞ		{ æ¢	Ó	<u>E</u> Ï G	1	<u>⊞</u> EEF	Н	ŒI H	J	FÈH G	L.	<u>E</u> Ï J	
ÌÀ	,	{ a		Œ€	Н	ŒŒ	J	ÈE€G	Н	⊞GFG		Æ€I	Н
į GJ	ÚGI €Œ	{ æ¢	V	ÈF	J	€	F	ŒGG		FĒ G	J	ÈEIG	J
ÌH€		{ a		,€	Н	⊞ 	ı	€	Н	ÌŒ€J	G	,€	Н
ÌΗ		{ and t	Ó	ŒIF		€	F	ÈEGG	J	F <u></u> ÈG	<u> </u>	ÈEIG	
Ì HG	,	{ a		€	Н	Ë	J	Ų€	Н	Œ€J		É	Н
ÌНН	ÚG F	{ æ¢	V	<u>E</u> ÏF	J	€	Н	ŒII		FĚÍΙ	J	ÈÈÌF	
ÌΗ		{ a	,	ÈE€H	Н	⊞GF		È€G	Н	ĖJ	G	È€I	Н
ÌH		{ æ¢	Ó	ΕÏF	1	€	Н	ŒII	J	FĔÍI	<u> </u>	ÈÈF	J
ÌĤ	,	{ a		Æ€H	Н	ËÉ F	J	È€G	Н	ÈΊ		È€I	Н
ÌΗ̈́	ÚGI FŒ	{ æ¢	V	EEI I	J	€	Н	ÈEGJ		FÈÏI	J	ÈÉÍ G	
ÌĤ		{ a	,	Œ€F	Н	⊞ G	1	,€	Н	€	Н	È€F	H
ÌΗ		{ æ¢	Ó	<u>E</u> II		€	Н	È€GJ	J	FÐÏI		ÈÉÍG	J
Ìl€		{ a		Œ€F	Н	⊞E G	J	€	Н	€	Н	È€F	Н
ÌIF	ÚGI G	{ æ¢	V	<u>E</u> ÎF	J	€	Н	È€HÎ		FÐJ	J	ÈÉÎÏ	1
ÌIG		{ a		Œ€H	Н	⊞ É Î	1	ÈE€G	Н	È	G	ÈE€H	Н
ÌΙΗ		{ æ¢	Ó	ÈÉÎF	1	€	Н	È€HÎ	J	FÐJ	1	ÈÉÎÏ	J
ÌH		{ a		È€H	Н	Ê	J	È€G	Н	È	Ï	È€€H	H
ÌIÍ	ÚGI GŒ	{ æ¢	V	È€HÍ	J	€	Н	ÈEGÍ		GÈHF	Ï	ÈI	J
ÌIÎ		{ a		ÈE€H	Ι	Ë⊕F		È€F	Н	ĦÎΗ	J	È€€H	H
ÌIÏ		{ æ¢	Ó	È€HÍ	_	€	Н	ÈEGÍ	J	GÈHF	G	ÈI	1
ÌÌÌ		{ a		ÈE€H	Н	Ë€HF	J	È€F	Н	ËÌΗ	1	È€€H	Н
ÌIJ	ÚG H	{ æ¢	V	ÈÉÎG	J	€	Н	ÈÍ		GEGÍJ	J	ÈÏJ	
ìí€		{ a		È€Í	Н	⊞eíJ	ı	È€G	Н	ÈÉÎÌ	Н	È€Í	Н
ÌÍF		{ æ¢	Ó	È€ÎG	ı	€	Н	È€IÍ	J	GÉGÍ J	Т	È≣ÏJ	J
ÌÍG		{ a		È€Í	Н	⊞eíJ	J	È€G	Н	ÈÉÎÌ	Н	È€Í	Н
ÌÍΗ	ÚGI HŒ	{ æ¢	V	È€Ì	J	⊞€€Í	Н	ÈF	Т	GÉGÎ H	Т	È€FÌ	
ÌÍI		{ a		€	Ì	ŒFÎ	T	È€€H	Н	ÈIJ	Ϊ	È€Í	Н
ÌÍÍ		{ æ¢	Ó	Ì E €Ì		⊞€€Í	Н	ÈF	J	GÉGÎ H	J	È€FÌ	J
ÌÍÎ		{ a		€	Ì	ŒFÎ	J	È€€H	Н	ÈΙJ	G	È€Í	Н
ÌÍÏ	ÚGI	{ æ¢	V	È€G	J	ËE€	Н	È€FÎ	T	FË∉F	Н	È€H	
ìíì		{ a		€	ì	ËEG	Т	È€€G	Н	ΞÏÍÎ	G	È€EI	Н
ÌÍJ		{ æ¢	Ó	È€G	T	ËE€	Н	ÈEFÎ	J	FË∉F	Н	È€H	J
ìî€		{ a		€	ì	ËEG	J	È€€G	Н	ËΪÍÎ	Ï	È€EI	Н
ìîF	ÚGIIŒ	{ æ¢	V	È€FH	J	ËE€Í	ì	ÈFF	Т	GÈEHÏ	Н	ÈEGF	
ÌÎG		{ a		€	ì	ÏÌ J	I	È€€H	ì	Ш̈́ÌІ	G	È€É	ì
ìÎΗ		{ æ¢	Ó	È€FH	Т	ËE€Í	ì	È€FF	J	GÈ€HÏ	Н	ÈEGF	J
ÌÎI		{ a		€	ì	ËŒFJ	J	È€€H	ì	Ш̈́ÌІ	Ï	È€É	ì
ìîí	ÚGIÍ	{ æ¢	V	È€GF	J	ËÈ€H	ì	È€FH	Т	FÈÎH	Н	ÈEGÍ	
ìîî		{ a	-	€	ì	ËEG	Ī	È€F	ì	⊞́€G	G	È€€H	
ÌÎÏ		{ æ¢	Ó	ÈEGF	$\overline{}$	ËË€H	Ť	E FH	J	FÐÎΗ	Н	È€GÍ	J
ìîì		{ a		€	ì	ËEG	J	È€F	Ì	⊞́€G	Ϊ	È€€H	ì
ÌÎJ	ÚGIÍŒ	{ æ¢	V	<u> </u>	J	<u>⊞</u> €€Í	Ï	<u>E</u> FF	J	GEÏH	Н	ÈEFJ	J
ÌÏ€		{ a		⊞€H	G	lle fî	Ī	È€€H	Ì	<u>⊞G</u> Ï	G	È€Î	Ì
ÌÏF		{ æ¢	Ó	ŒFÍ	Ī	<u>⊞</u> €€Í	G	E FF	Ť	GEÏH	Н	È€FJ	Ti-
ÌÏG		{ a		<u>⊞</u>	Ï		J	ÈE€H	ì	ii ii ii ii ii ii ii ii ii ii ii ii ii	Ï	È€Î	ì
ìΪΗ	ÚGIÎ	{ æ¢	V	ÈEGÎ	J	<u> </u>	Ť	<u>E</u> FÏ	J	GÈ€GJ	Ϊ́	ÈEH	J
ÌÏI	331	{ a }	,	€	Ť	⊞EGÌ	İ	È€F	Ť	⊞G J	G	Ì€€H	Ť
ìïí		{ æ¢	Ó	<u> </u>	i		ì	<u>E</u> FÏ	i	GÈEGJ	ì	ÈEH	
ìïì		{ a		€	ì	⊞EGÌ	J	È€F	ì	<u>⊞</u> G J	Ϊ́	ÈE€H	†
1 11	ÚGIÎŒ	{ 38¢	V	ŒFÍ	J	<u>⊞</u>	ì	<u>E</u> FF	J	GEEH	i i	È€G	J
111	3314	{ a	V	⊞EG	G	<u>iii</u>	i	È€	ì	⊞G F	G	È€Î	
111		19		ш.С		ш.		<u> </u>		ш,			

	-	Ú æ^		Ù"¦æ&^	Ùãi{æFÆX•ãa	ŠÔ	 ŠÔ	VæiÁTæçÁŽ•ãa	ŠÔ	OE}* ^AŽanåá	ŠÔ	X[}ÁTãi^•ÁŽÈ	<u> </u>
11 11 12 12 13 13 15 15 15 15 15 15	ÌÏJ		{ 200¢			I	ì		ī		l ì		
						Ï	J		ì		Ï		ì
11 1		ÚGLÏ		V		J	 ì		J		Ť		J
				•		ì	İ		ì		G		ì
				Ó		i	ì		i		ì		Ti-
						ì	i.		ì		Ϊ́		ì
		ÚGLÏŒ		V		.i	ì		j.		i.		
		00.02		·			i		ì		_		ì
				Ó		Ī	ì		i		Ĭ		Ti
1 1 1 1 1 1 1 1 1 1						İ	i.		ì		İΪ		ì
J.G.		ÚG Ì		V		J	ì		ij		Ť		i.i
J. F. (asc				•		ì	İ		ì		G		ì
1				Ó		i	ì		i		ì		Ti-
						ì	i.		ì		İΪ		ì
JI		ÚGÌŒ		V		J	ì		J		ij		J
1 1 1 1 1 1 1 1 1 1		00.02		•			İ		ì				ì
1 1 1 1 2 2 2 2 2 2				Ó		i	ì		i		Ĭ		Ti-
1 1 1 1 2 2 2 2 2 2						H	i.		ì		İ		ì
1		ÚGL		V			ì		.i.		i.		
1		<u> </u>		•			i						
Jee				Ó		ï	Ť		ï		Η̈́		
Jef						H	i.		Н		Н		H
JeG		ÚGLIŒ		V		ï	ï		ï		Η̈́		
Jeh		0000		•		Ė	i		İ		i		Ϊ́
Jef				Ó		.i	G		.i.		_		
Jef ÚGÍ € {æ¢ V ÉEGÍ J ÉÉGÍ H ÉEGÍ I CÉEFI I ÉEFH I Jef {æ² Ó ÉEGÍ I ÉÉEGÍ H FÉEGÍ J ÉÉEGÍ H FÉEGÍ J ÉÉEGÍ H FÉEGÍ J ÉÉEGÍ H FÉEGÍ J ÉÉEGÍ H FÉEGÍ J ÉÉEGÍ H FÉEGÍ J ÉÉEGÍ H FÉEGÍ J ÉÉEGÍ H FÉEGÍ J ÉÉEGÍ H ÉÉEGÍ J ÉÉEGÍ											ĭ		
Jei { ag 6 ì ÉEEF G I ÉEEH H H FÉT J ÉEEÍ H J ÉEEÍ H J ÉEEÍ H J ÉEFH J J<		ÚGÍ€		V			_		ĭ		Ħ		ī
Jei (asc Ó EEE I EEE J EEE J EEE J EEE H EEE J EEE H FEE H		<u> </u>		•		ì	 Ť		Н		i		H
Jel (a) € i HEFFG J HEEH H FHI I HEEG H JEEG H FHI I HEEG H HEEG I JEEG I JEEG I JEEG I JEEG I JEEG I JEEG I JEEG I JEEG J JEEG				Ó		i	H				_		
J€U ÚG €CE €æ¢ V ÈE€E J ÈE€E J ÈE€E I GÈEJJ H ÈEFG I JFF {æ¢ Ó ÈE€E I ÈE€E I ÈE€E I ÈE€E I ÈE€E I JFG {â € J ÈE€E I ÈE€E J CÈEJJ H ÈEFG J JFG {â € J ÈE€E J ÈE€E I ÈEÉE I ÈEÉE G JFH ÚG J LEEFH J ÈEÉE J CÈEJJ H ÈEFH I JFH ÚG J LEEFH J ÈEÉE J CÈEJJ H ÈEFH I JFH {æ¢ Ó ÈE€E J ÈEEE J CÈEJJ H ÈEFH J JFH (â EEEE J ÈEEE J CÈEJJ H ÈEFH J JFH (â EEEE J ÈEEE J CÈEJJ H ÈEFH J JFH (â EEEE J ÈEEE J CÈEJJ H ÈEFH J JFH (â EEEE J ÈEEE J CÈEJJ H ÈEFH J JFH (â EEEE J ÈEEE J CÈEJJ H ÈEFH J JFH (â EEEE J ÈEEE J CÈEJJ H ÈEFH J JFH (â EEEE J ÈEEE J CÈEJJ H ÈEFH J JGE (â EEEE J ÈEEE J CÈEJJ LEEE J JGH (â EEEE J ÈEEE J CÈEJJ LEEE J JGH (â EEEE J ÈEE J CÈEJJ LEEE J JGH (â EEEE J ÈEE J CÈEJJ LEEE J JGH (â EEEE J ÈEE J CÈEJJ LEEE J JGH (â EEEE J ÈEE J CÈEJJ LEEE J JGH (â EEEE J ÈEE J CÈEJJ LEEE J JGH (â EEEE J ÈEE J CÈEJJ LEEE J JGH (â EEEE J ÈEE J CÈEJJ LEEE J JGH (â EEEE J ÈEE J CÈEJJ LEEE J JGH (â EEEE J ÈEE J CÈEJJ LEEE J JGH (â EEEE J ÈEE J EEE J CÈEJJ LEEFT LEEF						Ť					ĭ		
JFE		ÚGÍ €Œ		V		.i			ï		H		
JFF {aac Ó ÉEEI I ÉEEI I ÉEEI J GEEI J		00 00		•		ĭ	 ĭ		ì		_		T i
JFG				Ó		i	i		J		_		J
JFH ÚGÍF { ags V EEEÎ J EEEÎ J EEEÎ I CAEÎ J H EEFH I I I I I I I I I						J	J		ì		Ï		_
JFI {â} € G HEFH I HEEG Î HIEG		ÚGÍF		V					i		H		ī
JFÍ {æ¢ Ó ÈEÉÎ I ÉÉÉÎ I ÈÉÉÎ J GÂÎ € I ÉÉÉFH J ÉÉÉÎ I ÉÉÉÎ I ÉÉÉÎ I ÉÉÉÎ I ÉÉÉÎ J GÊÉÎ I ÉÉÉÎ J GÊÉÎ J				-			Ī		ì				
JFÎ {â} € Î ÎÊFH J ÎÊEÎ Î ÎÊÊÎ Î ÎÊÊÎ Î ÎÊÊÎ Î ÎÊÊÎ Î ÎÊÊÎ Î ÎÊÊÎ Î ÎÊÊÎ Î ÎÊÎÎ Î Î ÎÊÊÎ Î ÎÊÊÎ Î ÎÊÊÎÎ Î ÎÊÊÎÎ Î ÎÊÊÎÎ Î				Ó	È€Î	Ť	Ť		J				J
JFI ÚGÍ FŒ {æ¢ V È€ÉÎ J ÈÉÉL J ÈÉÉL J ÒÉFF J ÒÉFF J ÒÉFF L J EÉÉL J	_					Ϊ	J	•	ì		Ϊ		ì
JFI { a} IEEEH I IEEH I IEEE G IEIÍI G IEEF IIEE		ÚGÍ FŒ		V		J			J		Н		J
JFJ { agc Ó Ree I Ree				-		Ī	 Ť				_		ì
JŒ {a} IIEEH J IIEH J IEE I IIIII II II IIIII II IIIII II IIIII II IIII				Ó		Ť	Ť		Ĭ		_		
JGF ÚGÍG {æ¢ V ÌE€€J J İE€€Î Ï ÌE€ÊÎ J GEÊÊÎ H ÌEÊÎHÎ G ÌEÊ€J Î J						J	J		Ϊ		ΪÏ		ì
JGG { a} HEEEF G HEEFÍ I HEEÉÍ Ì HH ÎH G HEEÉJ Ì JGH { agc Ó HEEEJ I HEEÉÍ G HEEÉÍ I CHEÉÍ J CHEÉÍ J HEEFÍ J HEEEJ Ì HEEFÍ J HEEEJ J CHIFT J CHIFT J LEEFÍ J J LEEFÍ J J LEEFÍ J LEEFÍ J J LEEFÍ J J LEEFÍ J		ÚGÍ G		V			Ï		J		Н		
JGH { asc Ó ÈE€J I ÉÉEÉÎ I CÀFÊÎ H ÈEFÎ J JG { âj ÉEEF Î ÊEFÎ J ÈEÊÎ J ÊEÊJ J ÎÊÊE J J CÊHÎ F I ÊEÊ J J CÊHÎ F J ÊEFÎ J J CÊHÎ F J ÊEFÎ J J CÊHÎ F J ÊEFÎ J J EÊÊÎ J J ÊÊÊÎ J J ÊÊÊÎ J J EÊÊÎ J J ÊÊÊÎ J J EÊÊÎ J J ÊÊÊÎ J J EÊÊÎ J J ÊÊÊÎ J J ÊÊÊÎ J J ÊÊÊÎ J J ÊÊÊÎ J D </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td> İ</td> <td></td> <td>ì</td> <td></td> <td></td> <td></td> <td></td>							 İ		ì				
JG {a} IIEEEF IIEEF JEEF IIEEF IIEEF IIEEF IIEEF IIEEF IIEEF JEEF </td <td></td> <td></td> <td></td> <td>Ó</td> <td></td> <td>ı</td> <td> G</td> <td></td> <td>ī</td> <td></td> <td>_</td> <td></td> <td>J</td>				Ó		ı	 G		ī		_		J
JG ÚGÍ COE { agc V ÌEEEÎ J İEEFF J ÌEEEJ J CHÎH F I ÌEEFÍ J JG { agc Ó ÌEEEÎ I İEEFF I ÌEEEÎ I ÇEEÎ I ÇEÎH F J ÌEEFÍ J JG { agc V ÌEEFF J İEEEJ J ÇEÊÎ G J ÇEÎÎ H I ÌEEFH J JGJ ÚGÍ H { agc V ÌEEFF J ÜÉEELJ Ì ÌEEFF J ÇEÊÎ G Ì ÌEEFJ J						Ϊ			ì		Ϊ	_	
JĜ {a} EEEEH I EEEFÍ I EEEÎ I FBÍH J EEFH Ì JG {ac Ó EEEÎ I EEFF I EEEÎ J CÊHIF J EEFÍ I JG (GÎH (AC) V EEFF J EEEE] J EEFF J CEEÎG J EEFJ J		ÚGÍ GŒ		V		J		_	J				J
JG {æ¢ Ó ÉE€Î I ÉÉFF I ÉE€J I GÊHF J ÉEFÍ I JG ÚGÍH {æ¢ V ÉEFF J ÉÉE€J Ì ÉEFF J GÉÏG Ì ÉEFJ J						I			Ī		J		
JG {ã} EEEE JEEEÍ JEEEÎ JFBÍH IEEFH I JGJ ÚGÍH {æ¢ VEEFF JEEEEJ IEEEEJ IEEFF JCEEÏG IEEFJ J				Ó		T	T		П				
JGJ ÚGÍH {æ¢ V BEFF J BEEF J GAEÏG Ì BEFJ J						J	J		J		Ī		ì
		ÚGÍH		V			ì		-		T		J
						-	-				G		

30) 1	CUID OITH			o Gringgi					¥ 4		¥ 4	(())	× a
	Ú æ^		Ù"¦æ&^	Ùãt{æFÁX.•ãa	ŠÔ	Ùãt{æ£AÃX.•ãã	ŞO	Væ ÁTæçÁŽ•ãa	80	OB;* ^AŽanåá	<u> </u>	X[}ÁTãi^•ÁXÈ	<u>#</u> 80
JHF		{ æ¢	Ó	<u>È</u> FF	<u> </u>	Œ€J	<u> </u>	ÈFF → ~ ·	ļ.	GEEÏ G	ļ.	ŒFJ	<u> </u>
JHG		{ a	.,	ŒŒ!	J	<u>⊞</u> G	J	È€H	1.	曲íí ·		Œ€J	1
JH	ÚGÍ HŒ	{ æ¢	V	È€Î	J			<u>È</u> FF	J	GÈFF	Щ	<u>E</u> FJ	J
JH		{ a		iiie۔ → -â		<u> </u>	J	È€		GEFH	J	ÈFG	
JH		{ æ¢	Ó	È€Î		<u> </u>	J	<u>È</u> FF		GÈFF	J	ÈFJ	\perp
JĤ		{ a }		⊞EÎ	J	<u> </u>	ı	È€	J	GEFH		ŒFG	J
JҢ	ÚGÍI	{ æ¢	V	<u>.</u> €F	J	<u>⊞</u> eeì		È€F	J	ŒÉ€Ĩ		ŒFÌ	J
JH		{ a }	,	ŒŒÏ		<u> </u>	J	.€		FÈÎÎ		È€Ì	G
JHJ		{ æ¢	Ó	ÈF		<u>iii</u>	J	ÈF	1	Œ <u>Ť</u>	J	<u>È</u> FÌ	<u> </u>
JI€		{ a }		<u>⊞</u> EEÏ	J	<u>⊞</u> FF	ı	€	J	FÈÎÎ	G	È€È	
JIF	ÚGÍIŒ	{ æ¢	V	ÌŒ€H	J			ÈF	J	FÐG	J	ÈFÌ	J
JIG		{ a }	,	ÜŒH		<u> </u>	J	È€Í		FĒÌG		ÆFḤ	1
JIH		{ æ¢	Ó	È€H			J	ŒF		FÐĠ	Ш	ŒFÌ	
JII		{ a }		ËE€H	J	<u> </u>	Ĺ	Œ€Í	J	FÈÌG	J	ÆFH	J
JIÍ	ÚGÍÍ	{ æ¢	V	ÌŒ€Ï	J	ŒŒï		Œ€J	J	Gŧ€HÎ	J	ŒFĺ	Í
JIÎ		{ a	ļ.,,	Œ€F	G	EE FF	Í	Œ€	G	FŒF		È€Ì	1
JΙΪ		{ æ¢	Ó	È€Ï		ŒŒï		Œ€J		GÉEHÎ		ŒFÎ	1
JIÌ	, , ,	{ a		⊞€F	Ĺ	EE FF	Ĺ	Œ€		FŒFI	J	È€Ì	1
JJJ	ÚGÍÍŒ	{ æ¢	V	€		<u> </u>		Œ€Ï	H	ÈHGJ	H	ÆFI	H
JÍ€		{ a	ļ.,,	€	H	<u> </u>	H	È€Ï		ÈHGÎ		ÈEFI	1
JÍF		{ æ¢	Ó	€		ËŒFI .		È€Ë	Н_	ÈG	H	È€FI	H
JÍG		{ a		€	Н	ËŒFI	Н	È€Ï	Ĺ	ÈţĠ	Ĺ	ÈEFI	ĺ
JÍΗ	ÚGÍÎ	{ æ¢	V	È€	J	ŒŒJ	J	Œ€Ï	Ĩ	GÈGIF	H	ÆFI	
JÍI		{ a		ËE€I		lle fî	-	È€Î	İ	ЩÌÍ		È€FF	J
JÍÍ		{ æ¢	Ó	È€		Œ€J		È€Ï	G	GÉGJF	Н	ÈEFI	J
JÍÎ		{ a		Œ€	J	lle fî	J	È€Î	Ì	ЩÌÍ	J	ÈEFF	1
JÍÏ	ÚGÍÏ	{ æ¢	V	È€	J	⊞€FF.	J	È€Ï	J	GÉGFF	Н	ÆFI	1
JĺÌ		{ a		ËŒH	1	lle fí	1	È€Î	G	⊞ÏlÍ	G	ÈEFG	Ì
JĺJ		{ æ¢	Ó	È€	1	⊞ FF	1	È€Ï		GÉGFF	Н	ÈEFI	J
J΀		{ a		ËE€H	J	lle fí	J	È€Î	Ï	Щ̈́Ιĺ	Ï	ÈEFG	Ì
JÎF	ÚGÍÌ	{ æ¢	V	È€H	J	ËFF	J	Œ€Ï	J	ĒΪÌ		ÈEFG	J
JĴG		{ a		ŒŒH	1	Œ€FG	1	È€Í	1	ÈUÍ	J	ÈEFF	Н
JÎΗ		{ æ¢	Ó	È€H	1	<u>⊞</u> FF	1	Œ€Ï		ĒΪÌ	J	ÈEFG	1
JÎI		{ a		ŒŒH	J	ÉÉ FG	J	Œ€Í	J	ÈΨĺ	1	È€FF	Н
JÎÍ	ÚGÍ J	{ æ¢	V	È€H	J	Œ€ì	J	Œ€Í	J	G É GÀ		ŒF	J
JÎÎ		{ a		ŒŒG	1	ŒŒJ	1	Œ€	1	F₿ÍG	J	È€J	G
JÎÏ		{ æ¢	Ó	È€H	1	ËE€Ì	1	È€Í		G É GÀ	J	È€F	1
JÎÌ		{ a		ËE€G	J	ŒŒJ	J	È€	J	FÐÍG	1	Œ€J	Ï
JĴJ	ÚĠ΀	{ æ¢	V	€	<u>H</u>	Œ€	<u>H</u>	ÈE€G	Ì	FÐJG	H	È€Í	Ì
JÏ€		{ a		€	Ì	Œ€í	Ì	ÈE€G	H	FÐÎÌ	Ì	È€	Н
JΪF		{ æ¢	Ó	€	Н	Ë E	Н	ÈE€G	Ì	FÐJG	Н	È€Í	Ì
JΪG		{ a		€	Ì	Œ€Í	Ì	È€G	Н	FÐĴÌ	Ì	È€	H
JΪΗ	ÚĠÎF	{ æ¢	V	€	ì	Œ€	Н	ÈE€G	Ì	GÈÈÌF	Н	ÈE€I	Ì
JÏI		{ a		€	Н	Œ€	Ì	È€G	Н	GÈÉÎG	ì	È€	H
JΪÍ		{ æ¢	Ó	€	ì	ËŒ	Н	È€G	ì	GÈÈÌF	Н	È€€I	⊥ Ì Ū
JÏÎ		{ a }		€	Н	ËŒ	ì	È€G	Н	GÈÉÎG	ì	È€€I	Н
JÏÏ	ÚGÎ G	{ æ¢	V	È€F	J	ËŒÈ	J	È€Í	J	GÉIÌ		È€J	J
JÏÌ		{ a }		ËE€G	1	ËŒJ	1	È€€I	1	FÐÍÌ	J	È€È	Н
JÏJ		{ æ¢	Ó	È€F	I	ËE€Ì	1	È€Í	I	GÈÈIÌ	J	Ľ ∋ €J	
JÌ€		{ a		ËE€G	J	ËŒJ	J	È€	J	FÐÍÌ		È€Ì	Н
JÌF	ÚGÎ H	{ æ¢	V	È€G	J	Ë€FF	J	È€Î	J	GÉFÌ		ÈEFG	J
JÌ G		{ a }		ËE€H	1	ËŒFG	1	È€Í		FÐÍ	J	È€FF	Н

30) 10	. CITO OITIAD	<u> </u>		o on igg i									
	Ú æe^		Ù~¦÷æ&^	Ùãt{æFÁŽ•ãã	ŠÔ	Ùãt{æ€AXo•ãa	ŠÔ	Væ`ÁTæçÁŽ•ãa	ŠÔ	OB;* ^AŽ(æåá	ŠÔ	X[}ÁTã~•ÁXÈ	ÈŠÔ_
JÌΗ	{	æ¢	Ó	È€G		⊞€FF		È€Î		GÉGFÌ	J	È€FG	1
JÌI	-	{ a		⊞E€H	J	ËŒFG	J	È€Í	J	FÐÍ		ÈFF	H
JÌÍ	ÚGÎ I {	æ¢	V	€	J	ËŒFG	J	È€Î	J	ÈÎ		ÈEFH	
JÌÎ		{ a		ËE€Ï	Ī	⊞ €FÍ	Ī	È€€I	G	ÈĤÍ	J	ÈEFG	ì
JÌÏ	{	æ¢	Ó	€		ËŒFG	i	È€Î	Ĭ	ÈÎ	J	ÈFH	J
JÌÌ		{ a		ŒŒÏ	J	EE FÍ	J	È€€I	İ	<u> </u>	ī	ÈFG	ì
JÌJ	ÚGÎÍ {	æ¢	V	ÈĠÌ	ĭ	€	ì	ÈÍF	J	FÈG	i	<u>E</u>	J
JJ€	J	{ a	V	€	Н	⊞GÌ	J	€	î	€	F	€	î
JJF	ſ	æ¢	Ó	<u>E</u>	J	€	ì	ÈÍ F	+	FÈG	G	<u>E</u>	
JJG	1	_ { a}	0	€	Н	——e ⊞Gì	1	€	î	€	F	€	Î
JJH	ÚGÎÎ {		V	<u> </u>	- 11	€	F	ΗÍ	+	— E	G	<u> </u>	++-
	UGII {	æ¢	V		í	——€ ∰ÎÎ		€	í		ì		+ -
JJI	1	{ a	Á	<u>€</u> ĚÎÏ	-		J		+		7	€	
JJÍ	{1	æ¢	Ó		J	€ ∰îî	F	ΗÍ	J	<u>GÉGIÌ</u>	 	ĒНÏ	J
JJÎ	· · · · · · · · · · · · · · · · · · ·	{ a		€	ų.		Ų.	€	+	<u> </u>	<u> </u>	€	
JJÏ	ÚGÎÏ {	æ¢	V	ÈÏJ		<u>È</u> ÎH		ÈÏF	 	<u>FÐÏĴ</u>	<u> </u>	<u>È</u> (ì	G
JJÌ		{ a	4	⊞eÎG	G		G	€	1	<u><u> </u></u>	Ĵ	€	1 1
JJJ	{	æ¢	Ó	<u>È</u> ÏJ	G	<u>E</u> Î H	G	ÈÏF	Ž	<u>Ē</u> ÐÏĴ		<u>È</u> ÍÌ	<u> </u>
F€€€		{ a		Œ€ÎĢ		<u> </u>		.€	<u> </u>	<u> </u>	i i	<u>,</u> €	I.
F€€F	ÚGÎÌ {	æ¢	V	<u>Q</u> EGÎ Í	G	ÈHG	G	FŒÏF	Ţ	GÈFF		Q E GFF	
F€€G	1	{ a	,	∰;HF			<u> </u>	È€G		⊞̈́G	F	<u>Ì</u> €€H	1
F€€H	{	æ¢	Ó	gjedî (ÈHG		FÈEÏF	G	GÈHFF	G	<u>QÊ</u> FF	G
F€		{ a		∰;HF	G	EGEÖÜL	G	È€€G	İ	⊞̈́GJ	F	Ì€€H	İ
F€Í	ÚGÎ J {	æ¢	V	HĒGÍ H	G	ËЭН	G	FĖĠÏ	J	<u> GÉGHF</u>	Ï	GĖÏJ	Ï
F€Î		{ a		Ħ̈̈́Ġ̈	Ϊ	ËHÈĞÏÍ	Ï	È€	Ì	⊞ÌF	Н	È€È	Ì
Fۆ	{	æ¢	Ó	HÈGÍH	Ϊ	ĒĠΗ	Ϊ	FÈGIÏ		GÈGHF	G	GÈÏJ	G
F€ÈÌ		{ a		Ħ̈́Ġ	G	ËHÈĞÏÍ	G	È€	ì	ËÌF	Н	È€È	Ì
F€U	ÚGÏF {	æ¢	V	GĚH	G	ÈÉÎG	G	F Ì GÍÎ	Ϊ	FÈ Œ	J	GĚIH	Ï
F€F€	1	{ a		⊞ÉÎF	Ϊ	ËGĚÏG	Ï	ÈE€H	Ì	Ш̈́Í	ì	È€Í	ì
F€FF	{	æ¢	Ó	GĚHI	Ϊ	ÈÉÎG	Ï	F È ĞÎ	G	FÈŒ		GĚIH	G
F€FG	1	{ a		⊞ÉÉF	O	ËGĚÏG	G	È€H	Ì	Ш̈́Í	ì	È€Í	ì
F€FH	ÚGÏG {	æ¢	V	HÈÌI	G	FĚÎJ	G	FÈ€ÍÍ	J	GÈGHG	Î	HÈ€IÍ	Ϊ
F€FI	-	{ a		ËĒÎI	Ϊ	ËHĚ€J	Ϊ	È€Ï	ì	⊞G	ì	ÈFG	ì
F€FÍ	{	æ¢	Ó	HÈÌI	Ϊ	FĚÎJ	Ϊ	FÈ€ÍÍ	П	GÈGHG	Î	HÈ€IÍ	G
F € FÎ	-	{ a		ËFĚÎI	G	ËHĚ€J	G	È€Ë	ì	⊞̈́G	ì	ÈFG	ì
F€FÏ	ÚGÏ H {	æ¢	V	FÈÌ	J	ÈÍ	J	ĚFÌ	T	GÌHGÏ	ĺ	FÈFÌ	
F€FÌ		{ a		ii r⊞	Ì	許的	Ī	È€F	ĺ	⊞ HF	Î	È€G	Í
F€FJ	{	æ¢	Ó	FÈÌ	Т	ÈÍ	Т	ĚFÌ	J	G Ì I GÏ	ĺ	FÈFÌ	J
F€G€		{ a		<u> </u>	J	臣主门	J	È€F	Í	# HF	Î	È€G	Í
F€Œ	ÚĠÏ I {	æ¢	V	FÈÏ	Ī	ŒŒG	F	ÈFÌ	Ť	GÈHÍ	Î	FĚÎ	Ti-
F€GG		{ a	-	€	F	ËËÏF	J	€	F	Œ GH	G	È€F	F
F€GH	{	æ¢	Ó	FÈÏ	J	ËE€G	F	ÈFÌ	J	GÈÍ	î	<u>FĚÎ</u>	J
F€G		{ a		€	F	ËÈÏF	i	€	F	ŒEGH	i	Æ€F	F
F€GÍ	ÚĠĬÍ {	æ¢	V	HÈ€ÎÎ	÷	ĖĠ	i	FÈÏ F	J	<u>G</u> ÉÌG	F	<u>Œ</u> ÎH	J
F€GÎ		(a	V	⊞ HI	J	<u> </u>	J	È€Í	í	<u>⊞</u> FF	ĺ	È€Ì	Ť
F€GÏ	5	æ¢	Ó	<u>uu, ii</u> HE€ÎÎ	J	ĖĠ	J	FÈÏ F		ŒÈÌ G	F	<u>Œ</u> ÎH	
F€G	1	 { a}	<u> </u>	HH	J _	<u>⊞E</u> ïÎ	ı	È€Í		<u>⊞</u> FF	ĺ	EE€Ì	
F€GJ	ÚGÏÏ {	æ ¢	V	FĚHÎ	G	€	î	ËÏÍ		<u>шгг</u> Эї	J	FĚ H	G
F€H€	OG I	_ 	V	EE€G	Н	ËĚH	Ï		Н	<u>⊞</u> GH	G	EE€G	Н
F € F			Ó	FĚĤ	ï	€	î	ĔÏÍ	J	<u>шы</u> Вї	ı	FĚ H	ï
F€HG	1	æ¢ { ā	J	<u>r∎n</u> E €€G	Н	— € ËÉH	G	€	Н	<u>⊞</u> GH	ï	<u>r∎n</u> ÈE€G	Н
F€H	ÚGÌ€ {		V	I₿Ġ	1	<u>EE</u>	ı	FËG		<u> </u>	+	<u>EEG</u>	
	001 E {	(a	V	<u> </u>	1	ËĐG	1	FEG E€€H	J F	FEII FFI	L	<u> El</u>	F
F€H		{ a			J	ᄪᆸᅜᆁ	J	Œ€H	Г	mr!	Н	ŒEI	

Upar Utar Utar Utar Sch Var Ansile Sch Var Ansile Sch Car Var Sch Var Februar Febr	30) 1	ca i D Oili#D	•	Di jovga										
Feel		Ú æe^		Ù`¦æ&^	Ùãi{æFAXo•ãni	ŠÔ	Ùãt{æGÁŽt∙ãã	ŠÔ		ŠÔ	OE;* ^AŽtæåá			<u>È</u> ŠÔ_
Feb. UG F Case V FE F	F€HÍ		{ æ¢	Ó		7	FÈÏÌ	J	FË G			G	l ÈHÌ	1
Feb	F €H Î		{ a		ËEÈÌF	1	ËÈGJ	1	ÈE€H	F		Н	È€Í	F
Feb	F€HÏ	ÚGÌ F	{ æ¢	V	FË FI	1	ËŒF	Ŧ	FÈ€HG			ΙÏ	F₿FH	1
FeU (as 0 FÉR J FÉR J FÉR F FÉR G J FÉI G FÉR H J FÉ FÉ F ÚG G (as V ŒÌ G I ÉÉ J J FÉÉ I G ŒÈ F ÉÉ F ÉÉ F ÉÉ F ÉÉ F ÉÉ F ÉÉ F ÉÉ F	F€HÌ		{ a			F	ËËFH	J	È€F	F	⊞€	Н	È€G	F
Fei F				Ó		J		F	FÈ€HG	J				J
Feb UG G (ast V Câi G I Éi J J Féài I G Câi G H Câi G G Fè H F Eèce F Fè H F Eèce F Fè I I G Câi G G Ei J Fè I I G Câi G Fè I I Fè I I G Câi G Fè I I Fè I I G Câi G Fè I I Fè I I G Câi G Fè I I								T						F
Feg G		ÚGÌ G		V		Ť		J						
Fei		00.0				i								
Fei (a)				Ó				ī		ij				T i
Fei UGi0E fame V fili G ffeeG F fili G GtS G Fried G Fei G GtS G Fried G Fei G GtS G Fried Fei G GtS G Fried Fei G GtS Fried Fried G GtS Fried Fried G GtS Fried Fried G GtS Fried Fried G GtS Fried Fried G GtS GtS Fried Fried Fried G GtS								i		F				F
Feii		rigi) re		V		_		F						
Feii		oara		V		7		ï						
Fei (a)				Ó		÷		Ė		÷		ï		†
FeJ UGJ (30 V FÉIF G ÉÉÉG F ÉFÍ G GÉÓ H H FÉF G FÉ FÉ FÉ FÉ FÉ FÉ FÉ FÉ FÉ FÉ FÉ FÉ FÉ				0		ì						<u>'</u>		+
Fe Fe Fe Fe Fe Fe Fe Fe		ĽOL		1/										
FEI F. (UGIJ		V				T T				_		
Fe G { â € F ĒfĒ! G GĒEH F ĒĪ! F ĒĒG F Ē F ĒĒĒ F ĒĒGG F ĒĒG F ĒĒG F ĒĒG F ĒĒG F ĒĒG F ĒĒG				Ó		Ţ		-		Ţ				+
Féi H ÚGJ€ {æg V QÉF I ÉEJG I FÉHH Í QÉFG H QÉJH Í Féi I (ag Ó QÉF J ÉEJG J FÉHG J ÉÉEG FÉHG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG J ÉÉEG FÉHG				U				-	•					+-
Féil (a) ÉEGI J ÉEGI F ÉÉGI BÉÉGI H ÉÉGI BÉÉGI H ÉÉGI BÉÉGI H ÉÉGI BÉÉGI H ÉÉGI BÉÉGI BÉÉGI H	-	l'iore				<u> </u>		G		F		-		F
Féil (æc Ó GÉF J ÉEUG J FÉHÍ G GÉFG H GÉJH G FÉGÍ F HÉGÍ F GÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ F BÉGÍ H BÉFH G GÉ H BÉFH G GÉ H BÉFH G GÉ H BÉFH G GÉG H BÉFH G GÉG H BÉFH G GÉG H BÉFH G GÉG H BÉFH G GÉG H BÉFH G GÉG H BÉFH G BÉGH H BÉH J GÉG H FÉHJ J BÉGH H PÉHJ J BÉH <td></td> <td>UGJ€</td> <td></td> <td>V</td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		UGJ€		V				1						
Féi I (a) ÉÉLI I létéGF I ÉÉEI F ÉÉI G F ÉÉEI F ÉÉI G F ÉÉEI F ÉÉI G F ÉÉEI F ÉÉI G JEÉEF F ÉÉEF F ÉÉEF F ÉÉEF F ÉÉEF F ÉÉEF F ÉÉEF G ÉÉEF G ÉÉEF G ÉÉEF G <td></td> <td></td> <td></td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>				4										
Féiï ÚGJ€Œ {æg V filf G filter F fild J QtBi H filf I Féi I {æg Ó filf I filf I € F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer F filf I deer I deer I deer				0		J		J						
Féi I {a} € i ffilh i i € ffire f ff		,								F				F
Fé J {æ¢ Ó fÉ IF I fÉEGF F ÉHHG I GÉG H ÉFH G FÉ FÉHG I ÉÉEFF F FÉHG I ÉÉEFF F FÉHG I ÉÉEFF F FÉHG I ÉÉEFF F FÉHG I ÉÉEFF F FÉHG I ÉÉEFF F FÉHG I ÉÉEFF F FÉHG I GÉEG H FÉIJG J FÉEGH H ÉÉHUI F ÉÉEGH F ÉÉHIT J ÉÉEG F ÉÉHUI F ÉÉEGH H ÉHUI F ÉÉEGH F ÉÉHT I ÉÉEG F ÉÉHUI F ÉÉEGH F ÉÉHT I ÉÉEGH H ÉHUI F ÉÉEGH F ÉÉHT F ÉÉEGH F ÉÉEGH F ÉÉEGH F ÉÉEGH F ÉÉEGH F ÉÉEGH F ÉÉEGH F		UGJ€Œ		V		G		F						
Féi € {â € i fffi in the control of the control o			{ a			Ì		Ï		F				
Fé F ÚGJF {æg V FÉ é I ÉÉECH H ÉÉH J CÉEG F ÉÉHI FÉECH F ÉÉECH F FÉÉH J ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉÉCH F ÉÉÉCH F ÉÉÉCH F ÉÉÉCH F ÉÉÉCH F ÉÉÉCH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F ÉÉECH F			{ æ¢	Ó	ĚÌF	Ï		F	ÈHG			Н		
Fe G { â } € F ÊFÊ H J ÊEEG F ÊÊH I F ÊEH F F ÊÊH I F ÊEH I </td <td>F€Î€</td> <td></td> <td>{ a</td> <td></td> <td></td> <td><u> </u></td> <td></td> <td>G</td> <td></td> <td>F</td> <td>⊞FG</td> <td></td> <td></td> <td>F</td>	F€Î€		{ a			<u> </u>		G		F	⊞ FG			F
Fef H {as Ó FÉÉ B J ÉÉECH H ÈH I CÉE B H FÉÉ J I CÉE B H FÉÉ J FÉÉ B I FÉÉ B	F€ÎF	ÚGJF	{ æ¢	V	FĚ€Ì		ËE€H	Н	ÈΗ	J		Н	F Ě JG	J
Fef H {as Ó FÉÉ B J ÉÉECH H ÈH I CÉE B H FÉÉ J I CÉE B H FÉÉ J FÉÉ B I FÉÉ B	F€Î G		{ a		€	F	ËĚFI	٦	ÈE€G	F	⊞̈́UΪ	F	È€H	F
Féil (a) € F ÉFÉR I ÉEGG F ÉÉUIT F ÉÉGH F Féil ÚGJG {aag V HÉGJH I ÉÉGJ F ÉÉITÍ F ÉÉGG F ÉÉTÍÍ F ÉÉGG F ÉÉTÍÍ F ÉÉGG F ÉÉTÍÍ F ÉÉGG F ÉÉTÍÍ F ÉÉGG F ÉÉTÍÍ F ÉÉGG F ÉÉTÍÍ F ÉÉGG F ÉÉTÍÍ F ÉÉGG F ÉÉTÍÍ F ÉÉGG F ÉÉTÍÍ F ÉÉGG F ÉÉTÍÍ F ÉÉGG F ÉÉTÍÍ F ÉÉGH F ÉÉGH F ÉÉTÍÍ G GÉGH F ÉÉTÍÍ G GÉGH F ÉÉTÍÍ G GÉGH F ÉÉTÍÍ G GÉGH F ÉÉTÍÍ G GÉGH F ÉÉTÍÍ G GÉGH F ÉÉTÍÍ G GÉGH	F€Î H		{ æ¢	Ó	FĚ€Ì	J	ËE€H	Н	ÈΗ	T		Н	FĚ JG	
Féií ÚGJG {æg V HÈEJH I ÉÉU I FÉHÍF Ï FÉHÍF J ÉÉEG F ÉÉTÍ G GÉFÍ I FÉEG F ÉÉTÍ F ÉÉEG F ÉÉTÍ F ÉÉEG F ÉÉTÍ I CG F ÉÉTÍ I CG FÉÉG F ÉÉTÍ I CG F ÉÉTÍ I CG F ÉÉTÍ I G GEÉG F ÉÉTÍI F ÉÉEG F FÉÉI G GEÉG F FÉÍT G GEÉG F FÉÍT G GEÉG F FÉIT G GEÉG F FÉIT F ÉÉEH F ÉÉEH F ÉÉEH F ÉÉEH F ÉÉEH F ÉÉEH F ÉÉEH F ÉÉEH F ÉÉEH F ÉÉEH F ÉÉEH F ÉÉEH F ÉÉEH F ÉÉEH	F€ÎI				€	F	ËĖF	1	È€G	F	ËΉUΪ	F	È€H	F
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		ÚGJG		V	HÈ€JH	ı		ı		ï		G		J
Féli {æc Ó Hègh J Fèli G Fèlé ï Càfí I Félì {æc Ó Hègh I Hègh I Lègg F Hàií F Lègg F Hàií F Lègg F Hègg F						J		J		F				
Feii {a tite tite				Ó								Ï		T
FêJ ÚGJCOE { asp. V FIÉ G ÉBEEG F FIÉGÍ G CÁCÍI G GÉFÍ G FIÉ G ÉBEEG F FIÉGÍ G CÁCÍI G GÉFÍ F ÉÉFÍ F ÉÉFÍGI F ÉÉFÍGI I CÁCÍI I GÉFÍGI I GÉFÍGI G GÉFÍGI						Ī		Ī				F		F
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		ÚGIGŒ		V		G		F						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		<u> </u>		•				İ						
Feig				Ó	FĚ	ij		F		ij		i		T i
F\(\begin{array}{cccccccccccccccccccccccccccccccccccc						F		-		F		F	_	F
		ЦСІН		V										_
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		odin		V		ì		i i						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				Ó		+				Ţ		T T		+ -
F€Ï ÚGJHŒ {æ¢ V ŒÊGJ G Ě€€H Ì FÉÌJ Ï ŒÊGJ Ğ ŒÉ€H Ì FÉÌJ Ï ŒÉ€J F ÉÉ€J				U		ì						1	_	+
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		LÍOIL IOT		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				U		Ţ				<u> </u>
		UGHUE		V				<u> </u>		_				+-
				<u> </u>		H.		ļ				ļ.		_
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				U										
							_	Ğ						_
FeÌH { as¢ Ó FÈLEU Ï ÈEEF Ì FÈGIÌ Ï FÈDJÎ Ï GÈCH Ï FEÌI { â ÈEEG H ËFÈT G ÈEEG Ì ÈËÏÎ H ÈEEI Ì FEÌÍ ÚGJIŒ { as¢ V GÈÌH G ÈEEI Ì GÈTÌI G G G HÈTÀ Ï		UGJI		V				<u> </u>		Ğ				G
FeÌI {ã} ÉÉEG H ÉFÉT G ÉEEG Ì ÉÉIÌ H ÉEEI Ì FEÌÍ ÚGJIŒ {æ¢ V GÉÌH G ÉE€I Ì GÉÈI G G HÉTÀ Ï			{ a			Н		Ţ				Н		
Felí ÚGJIŒ {æ¢ V GÉLÌH G ÈE€I Ì GÈÈÌI G G HÈLFÌ Ï				Ó		Ï		Ì		<u> </u>		Ï		Ţ
			{ }			Н	ËÈF	G		Ì	ЩΪÎ	Н		Ì
		ÚGJIŒ	{ æ¢	V		G		Ì	Q I ÈÌ I	G			HÈFÌ	Ϊ
	F€ÎÎ		{ }		ËE€J	Н	ËŒ €	Ϊ	È€Í	Ì	⊞ïG	F	ÈFH	Ì

30) 1	Carb Onne			o di iggi				((Y	٠.		٠.	, , ,	
_ 2 "	Ú æe^		Ù"¦æ&^	Ùãt{æFÁX.∙ãã	<u>\$</u> 0_	Ùã!{ æ€ÆX•ãã	<u></u> \$0	Væ ÁTæçÆŽ•ãã	ξO	OB;* ^AŽanåá	<u> </u>	X[}ÁTã^•ÁŽÈ	
F€ÌÏ		{ æ¢	Ó	<u>ĢĒ</u> ÌH	1	È€E	l	Œ <u></u> ji	Ĺ	G		HÈFÌ	Ğ
F€ÌÌ		{ a		Œ€Ú	Н	ËŒ €	Ğ	È€Í		⊞ïG	F	ÈFH	1
F€ÌJ	ÚGJÍ	{ æ¢	V	GÈFÌ	G	Œ€F	l l	FĚÎJ	Ģ	FÈÍÏ	G	HÈFH	Į į
F€J€		{ a		ŒŒÎ	H	ËŒHGJ	Ĺ	È€	<u> </u>	∰ÌJ	H	È€Ï	
F€JF		{ æ¢	Ó	GÈFÌ		ËË€F		FįĖΪ́J	Ļ	<u>FÈ</u> ÍÏ		HÈFH	Ğ
F€JG		{ a		ŒŒÎ	Н	ËŒHGJ	G	È€E	Ţ	∰ÌJ	Н	È€Ï	
F€JH	ÚGIÍ Ó	{ æ¢	V	HÀÎG	1	ĖĠ	1	Œ€		FĖ̈́Jĺ		HĎ€J	J
F€JÍ		{ ā	,	⊞HÍ	J	ΙΪŒΉ̈̈́ΞΙ	J	È€	Н	ÈlÎ		Ì€€Ï	Н
F€JÍ		{ æ¢	Ó	HĐÎG	J	ĖĠ	J	Œ€	G	FĖ̈́Jĺ	G	HЀJ	
F€JÎ		{ a }		Œ;HÍ		<u> </u>	ĺ	È€	Н	ÈlÎ	J	È€Ë	H
F€JÏ	ÚGJÎ	{ æ¢	V	GÉÌÏ	G	ŒŒ	İ	ŒFÍ	G	GÌHEÌ	Н	H Ē ÌG	G
F€JÌ		{ a		Œ€ì	Н	ËŒĴĖJÎ	Ï	È€Í	Н	⊞̈́Fl	F	ÈEFG	F
F€JJ		{ æ¢	Ó	OEÈÌÏ	Ï	ŒŒÏ	Ì	Q Ì FFÍ	Ï	GÈHEÌ	Н	HĒÌG	Ϊ
FF€€		{ a		ËE€Ì	Н	ËŒĴŪ	G	È€Í	Н	Η̈́FI	F	È€FG	F
FF€F	ÚGJÏ	{ æ¢	V	QEÈÌÏ	G	Œ€	Ì	Q È IF	G	FÈΪÌ	Ï	HĒĖ	Ï
FF€G		{ a		⊞€FG	Н	ËQ Ë G€	Ï	È€Î	Ì	ÈĠF	1	È€FF	Ì
FF€H		{ æ¢	Ó	ŒÈÌÏ	Ϊ	Œ€	Ì	GÈIF	Ï	FÈÏÌ	G	HËE	G
FF€I		{ a		⊞€FG	Н	ËŒE	G	È€Î	Ì	ÈĠF	J	È€FF	Ì
FF€Í	ÚGJÌ	{ æ¢	V	OÈGHÍ	G	È€€G	ì	GÈGHF	G	GÈHÍÎ	1	HÈÌÍ	G
FF€Î		{ a		ÏÌ 	Ι	EGEGÍ H	Ï	ÈE€G	—	笛ĺ	G	È€É	ì
FF€Ï		{ æ¢	Ó	GÉGHÍ	Ϊ	È€G	Ì	GÈGHF	Ϊ	GÈHÍÎ	J	HÈÌÍ	Ϊ
FF€Ì		{ ā		lle f	Н	ËGËGÍ H	O	ÈE€G	Ĺ	儠ĺ	ΙÏ	È€Í	ì
FF€J	ÚGIJ	{ æ¢	V	ŒĽJÎ	G	ËŒFH	F	GÈÈÌI	G	FÈIF	ΙÏ	HĒTÏ	Ϊ
FFF€		{ a		⊞E€J	Н	ËŒF	Ϊ	È€G	Н	ÈHF	I	ÈEFG	Н
FFFF		{ æ¢	Ó	ŒĽJÎ	Ϊ	ËŒFH	F	GÈÈÌI	Ï	FÈIF	G	HÊTÏ	G
FFFG		{ a		⊞E€J	Н	ËŒF	G	È€G	Н	ÈCHF	J	È€FG	Н
FFFH	ÚH€€	{ æ¢	V	ŒÈG		ËE€Í	ì	FĒÍG	Ϊ	GÈÖÏ	ì	ŒÌ JG	Ϊ
FFFI		{ a		⊞€€Í	Η	ËËHF	J	È€F	Н	⊞GF	J	È€€Í	F
FFFÍ		{ æ¢	Ó	ŒÈG	J	ËE€Í	ì	FĒ Í G	G	GĚĞÏ	ì	ŒÌ JG	G
FFFÎ		{ a		⊞€€Í	Η	ËËH	1	È€F	Н	⊞GF	T	È€€Í	F
FFFÏ	ÚHŒF	{ æ¢	V	FËŒ	П	È€F	ì	FĚÏG	G	GÈ€Í	G	ŒÏ G	G
FFFÌ		{ a		ËE€G	Н	ËËG	J	€	F	ËEGÏ	ì	È€F	F
FFFJ		{ æ¢	Ó	FËŒ	J	È€F	ì	FĚÏG	Ϊ	GÈ€Í	Ï	ŒÏ G	Ϊ
FFŒ		{ a		ËE€G	Н	ËËG	I	€	F	⊞GGÏ	ì	È€F	F
FFGF	ÚH€G	{ æ¢	V	HÈEIF	Ï	FÈÍ	J	FÈEIÏ	Ï	FÐF	ì	ŒÎ JÎ	G
FFGG		{ a		許住()		ËHÈEIG	G	€	F	Η̈́ÎF	Ϊ	È€€G	F
FFGH		{ æ¢	Ó	HÈEIF	G	FÈÍ	Ī	FÈEIÏ	G	FÐF	ì	GÊ JÎ	ΤÏ
FFG		{ a	-	ËÈÍI	J	ËHÈEIG	Ï	€	F	Η̈́ÎF	G	È€€G	F
FFG	ÚHŒH	{ æ¢	V	ÈÍI	J	ËE€F	Н	ÈĠ I	Т	FÈEÏÎ	Ϊ	ÈJÎ	
FFG		{ a		È€F	Н	Ш́ÍÏ		È€F	Н	⊞̃€G		È€€G	Н
FFG		{ æ¢	Ó	ÈίΙ	T	Œ€F	Н	EGÎ I	J	FÈEÏÎ	G	ĖJÎ	J
FFG		{ a		È€F	Н	Η̈́ÍΪ	J	È€F	Н	⊞ĭ€G	J	È€€G	Н
FFGJ	ÚH€	{ æ¢	V	ÈÌÌ	J	ÈHF	J	<u>E</u> H€Ï	G	FEGÏ Ì	J	ÈÍÎ	G
FFH€	<u> </u>	{ a		⊞ GG	Ī	⊞JF	Ī	Œ€H	Н	Щ̈́G̈́	ì	È€Î	Н
FFHF		{ æ¢	Ó	ÊÌÎ	ī	ÈHF	i	ÈH€Ï	Ť	FÉGÏÌ	T T	ÈÍÌ	T
FFHG		{ a		⊞ GG	J	⊞JF	J	È€H	Н	⊞Ğ	i	Ì€€Î	H
FFHH	ÚHÉÍ	{ æ¢	V	FÊÏG	Ī	E€JJ	Ī	ËJF	J	GEGÎ I	H	FÊH	J
FFHI	5.15	{ a		i EEJÏ	J	ËÈÌ	J	È€G	Н	<u> </u>	G	È€H	Н
FFHÍ		{ æ¢	Ó	FÊÏG	J	ÈEJJ	J	ĔJF	i	GEGÎ I	Н	FÊH	T.
FFHÎ		{ a			Ĭ	ËË)	Ī	È€G	Н		i i	È€H	H
FFHÏ	ÚH€Î	{ æ¢	V	<u> </u>	Τ̈́	€	ì	ÈHG	G	GE H	Τ̈́	Ê€Ì	G
FFHÌ	O. IG	{ a		Œ€F	ì	ΞΪÎ	G	€	ì	⊞GG		È€F	Ť
		1 9							•				

FR-10	<i>30) 1</i> (o di iggi									
Fine		Ú æ^		Ù″¦æ&^_	Ùãt{æFAŠČ∙ãã	ŠÔ		ŠÔ		ŠÔ	Οξ}* ^AŽtæåá			ÊŠÔ
FFF UH6				0		G						G		Į.
FRI			{ a			İ		Ĩ		İ		İ		İ
FFF		ÚH€Ĩ		V		Ĩ		Ï		G		Ų		G
FRI			{ a	,						İ		İ		<u> </u>
FFI UHG Case V CâT G ÉHH G FÉGH T FÉGF J CâT G FFI FFI CâT G FFI CâT G FFI CâT G FFI FFI CâT G FFI CâT G FFI FFI CâT G FFI FFI CâT G FFI				Ó		G		G		Ţ		Ļ		Ĩ
FRI			{ a			Ï		Ï		Ì		Ì		Ì
FRI		ÚH€Ì		V		G		G		Ï		J		Ţ
FFI			{ a			Ï		Ï		Ì		Ì		Ì
FFI				Ó		Ĩ		Ï		G		<u> </u>		G
FFI			{ a				_			Ĺ		ĺ		<u> </u>
FFI G		ÚHFÍ		V		G		G		Ţ		Ţ		Ĩ
FFI			{ a	,		Ĩ		Ĩ		ĺ		ĺ		İ
FFI				Ó		Ï		Ĩ		Ğ		Ĺ		G
FFI		, ,						G		<u> </u>				l l
FFI		UHFI		V						1		_		
FFF				,		J								_
FFI				0				-				F		
FFI		,						Ğ		F		1		F
FFI J (280		UHFI		V				Ţ				_		Ш
FFÎ € (a) ÉÉÉEG H ÉÉÉEG G ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉEG F ÉÉÉIF G ÉÉÉIF G ÉÉÉIF F ÉÉÉIF G FÉÉIF G ÉÉÉIT G FÉÉIF G FÉÉIF G FÉÉIF G FÉÉIF G FÉÉIF G FÉÉIT G FÉÉIT G FÉÉIT G FÉÉIT G ÉÉÉIT G ÉÉÉIT G ÉÉÉIT G ÉÉÉIT G ÉÉÉIT G ÉÉÉEG H ÉÉTIG H ÉÉTIG H ÉÉTIG H ÉÉTIG H ÉÉTIG H ÉÉTIG H ÉÉTIG H ÉÉTI	,			,		H		ĺ				_		
FFÎ F ÚHRÎ { ag. V FIÊ G ÉEEG F FÊJF Î FÊJF F CÂBÎÎ Î F CÂBÎÎ Î F CÂBÎÎ Î F FÊJF F ÊÎFF G EÊGÎ F FÊJF F ÊÎFF G EÊGÎ F FÊJF G EÊGÎ F F F FÊJF G FÊJF F ÊÎFF G EÊGÎ F F F F G F FÊJF G FÊJF G FÊJF G FÊJF G F FÊJF J FÊGÎ J FÊGÎ J FÊBÎ J FÊBÎ J FÊBÎ J FÊÎ J FÊ H HÊJÎ J FÊĞÎ J FÊBÎ J FÊĞÎ J FÊĞÎ J FÊĞÎ J FÊĞÎ J FÊĞÎ J FÊĞÎ J FÊĞÎ J J FÊĞÎ J J </td <td></td> <td></td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>F</td> <td></td> <td></td>				0								F		
FFÎ G (â € F ÉFÉ EG Î € F ÉÉFÉ EG F ÉÉFÉ EG F ÉÉFÉ EG F ÉÉFÉ EG F FÉÉFÉ EG F FÉÉFÉ EG F FÉÉFÉ EG F FÉÉFÉ EG G FÉÉFÍ FÍ FÉÉFÍ FÍ FÉÉFÍ J FÉ		·/>								Ę				F
FFÎ H {asp. Ó FIÉ Î ÉEEGG F FIÉJF G FIÉJF F CRÉIF G FFÎ I (â) € F FIÉJF I EEGG F FFÎ I ÚHRÎ CE (asp. V HEREG I ÊÉFÎ I I FEBRIF J J FEBRIF J I EEGG H CÂL JI J FEBRIF J I EEGG H CÂL JI J FEBRIF J		UHFI		V				F				_		4
FFÎ I { a} € F ÉFÉ €G G € F ÉÉF J Ï ÉÉEG F FFÎ Î ÚHRÎ CE { asc V V HÊGÎ J J ÉÉEH H HÊTJ G ÉÉÉÎ H FÊÎÎ G H GÊÎ J J FÊÎ H J FÊÊÎ G H GÊÎ J I FÊÎ G H GÊÎ J I FÊÎ G H GÊÎ J I FÊÎ G H GÊÎ J I FÊÎ G H GÊÎ J I FÊÎ G H GÊÎ J I EÊÊ H H ÊÊÎ J I EÊÊ H H ÊÊÎ H GÊÊ H J FÊÎ H J FÊÎ H J FÊÎ H J FÊÎ H J<						F					<u>⊞ FJ</u>			_
FFÎ Î ÚHRÎ CE {ast V HÊGÎ I ÎÎ FÎ I FÊJÂÎ J FÊÎ ÎG H QÊ ÎJ J FÊÎ ÎG J ÊE ÎG H ÊÊÛ H <t< td=""><td></td><td></td><td></td><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>F</td><td></td><td></td></t<>				0								F		
FFÎÎ {â HÊTÎ J HÊTÊG J HÊTÂ H HÊTÎ H HETÎ H HETÎ H HETÎ H						F		G				1		
FFÎ Î {ast Ó HÈEG J ÊFÎ J FÊSPÎ I FÊĞPÎ J FÊŞPÎ I FÊĞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I FÊŞPÎ I H H H H H GÊŞPÎ H H H GÊŞPÎ H H H GÊŞPÎ H H H GÊŞPÎ H H H GÊŞPÎ H		UHFI Œ	<u> </u>	V		<u> </u>		<u> </u>						
FFÎ Î {â HÎ FÎ I HENEG I LÊEH H HÊTJ Î LÊEG H H FFÎ J ÚHFJ {ast V CÂÊÎÎ G ÊEJ I FÊÊÎ Î CÂÊÎ H CÂÊÎ H CÂÊÎ Î Î CÊE H H HÊB J J BÊB J J BÊB J J BÊB J J FÊÎÎ Î G CÊEÎ H H HÊB J G CÊE H H HÊB J G CÊEÎ H H CÊE H H CÊE H H CÊE H H CÊE H H CÊE H H H FÊTH J J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J FÊÎÎÎ Î J H				<u> </u>						H		_		H
FFÎ J ÚHFJ {aag V GÉEÎÎ G ÈEJ I FÊEÎ I GÉEÎ H GÊTÎ I GÊTÎ I FÊEÎ J JEDÊLIJ Î € H HEÎD-II G ÈEEF H FÊTÎ G GÊEF H H HEÎD-II G DÊEF H <td></td> <td></td> <td></td> <td>O</td> <td></td> <td>J</td> <td></td> <td>J</td> <td></td> <td>1</td> <td></td> <td>H</td> <td></td> <td>1</td>				O		J		J		1		H		1
FFÏ € {â ÉÉÉJ J J ÉÉÉJ Ï Î ÉÉJ J FÉÉ G CÆ H ÉÉH G ÉÉEF H FFÏ F {æ¢ Ó CÆÏÎ Î Î ÉEJ J FÉÉ G CÆ H ÉÉH Î Î ÉEFF G FFÏ G (â) ÉÉÉJ I Î ÉÉÉG H ÉHÎ Î FÊĞ H ÇÊFF H FFÏ H ÚHO€ {æ¢ V FÊÉ G ÉÉÉG H ÉHÎ Î ÊÉEG H ÉĞ H ÉÉH I FÊĞ H EÉEH H FFÏ Î H ÇÂ € F ÊFÊĞ Î ÊÊEG H ÊĞ H ÊĞ H ÊĞEH H FFÏ Î H ÇÂ € F ÊFÊĞ Î ÊĞEG H ÊĞ H ÊĞ H ÊĞEH H FFÏ Î ÛHOF {æ¢ V Ê Î H G ÊĞEF H ÊĞÎ Î CÆ ÊĞ H ÊĞÎ G H ÊĞEH H FFÏ Î ÛHOF {æ¢ V Ê Î H Î ÊĞEF H ÊĞÎ Î CÆ FÎ ÊĞÎ Î EĞEG F FFÎ Î H ÊĞEH J J ÊĞEF H ÊĞÎ Î Î ÊĞEG F FFÎ Î Î ÊĞEH J J ÊĞE Î Î ÊĞEF Î Î ÊĞEF Î Î ÊĞEF Î Î ÊĞEF Î Î ÊĞEF Î Î FFÎ Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î		r'n re r		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		<u> </u>				H				ΗŢ
FFÏ F		UHFJ		V				ı T		1				
FFÏ G { ā } ∰ÊÛ J I ÜBÊU J G € H ∰ÛH I Ï ÉÉ€F H FFÏ H ÚHQ€ { aæ¢ V FÊĒ Ġ G ∰ÉE€G H ∰Î H Ï FĒĒ Ĥ J FĒĒ Ĥ J FĒĒ Ĥ J FĒĒ Ĥ H J FĒĒ Ĥ J FĒĒ Ĥ H J FĒĒ Ĥ H J FĒĒ Ĥ H J FĒĒ Ĥ H J FĒĒ Ĥ H J FĒĒ Ĥ H J FĒĒ Ĥ H H J FĒĒ Ĥ H H J FĒĒ Ĥ H H J FĒĒ Ĥ H H J <				Á		J		-						
FFÏ H ÚHŒ {aac V FĒLÉ G ĒĒEGG H ĒHÏ Ï FĒLÎ I FĒLÎ				0								H		
FFÏ I {â € F ÉTÊT Í Ï ÉE€G H ÉÉÍG		ÚLICE		1/						- 				H
FFÏ Í {æ¢ Ó FÈE € Ï ÉEEG H ÉIHÍ G FĒFÎ I FÈIÎ G FFÏ Î {â} € F ÊHÊ F H ÊHÎ Ï GÊE H H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G H ÊHÎ G ÊÊ G F ÊHÎ G ÊÊ G F ÊHÎ G ÊÊ G F ÊHÎ G ÊÊ G F ÊHÎ G Î ÊÊ G F ÊHÎ G Î ÊÊ G F ÊHÎ G Î ÊÊ G F ÊHÎ G Î ÊÊ G F ÊHÎ G Î ÊÊ G Î ÊÊ G Î ÊÊ G Î ÊÊ G Î ÊÊ G <t< td=""><td></td><td>Unde</td><td></td><td>V</td><td></td><td></td><td></td><td>ï</td><td></td><td>-</td><td></td><td>_</td><td></td><td>L</td></t<>		Unde		V				ï		-		_		L
FFÏÎ {a} € F ÊFÊF G ÊE€G H ÊÊĞ <t< td=""><td></td><td></td><td></td><td>Ó</td><td></td><td>Ţ.</td><td></td><td></td><td></td><td></td><td></td><td>П</td><td></td><td></td></t<>				Ó		Ţ.						П		
FFÏ I ÚHŒF { aæ V ÊH B G ÉÉEFF H ÈH B I CÀTIJ H ÊÏ H I FEEG F EÏ I H I G EEEG F F EÏ I H G GET J H LÊI H G GET J H LÊI H G GET J H LÊI H G GET J H LÊI H G GET J H LÊI H G GET J H LÊI H G GET J H LÊI H G GET J H LÊI H G GET J H LÊI H G GET J H LÊI H G GET J H LÊI H G GET J J LÊI H J LÊI H J LÊI H J LÊI H J LÊI H J LÊI H J LÊI H J LÊI H J LÊI H J LÊI H J LÊI H J LÊI H L LÊI H L LÊI H			_	0		<u> </u>						<u>'</u>		
FFÏ I {a} € Î ÎÎÎ IF Ï € F ÎÎÎ ÎÎ G Ê€€G F FFÏ J {a¢ Ó ÎÊ HÎ Î ÎÎÎ IF G CÂÊÎ J H ÎÎ ÎÎ H G CÂÊÎ J H ÎÎ ÎÎ H G CÂÊÎ J H ÎÎ ÎÎ H G CÂÊÎ J H ÎÎ ÎÎ H G CÂÊÎ J H ÎÎ ÎÎ H G CÂÊÎ J H ÎÎ ÎÎ H ÎÎ ÎÎ H G CÂÎÎ ÎÎ ÎÎ ÎÎ H ÎÎ ÎÎ ÎÎ ÎÎ ÎÎ ÎÎ ÎÎ ÎÎ ÎÎ ÎÎ ÎÎ ÎÎ ÎÎ		ÚHŒ		W						7				+
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		UNG		V		ì		ï		Ė				F
FFÌ € { â } € Ì ∰ÎIF G € F ∰ÍÍÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎ				Ó		÷		Н.				_		
FFÌ F ÚHG Œ { æ¢ V FĒFJ I ĒĒI I ĒÎÎ J FĒHÎ J FĒFF J FFÌ G { â} ÊĒHU J ĒĒI J ĒÎÎ I FĒHÎ I FĒFF I FFÌ H { æ¢ Ó FĒFJ J ĒĒHH I ĒĒĒI I FĒHÎ I FĒFF I FFÌ I ÚHG { æ¢ V FĒÎ G ĒĒFÏ G ĒĞ G Ï CĒFIJ Ì FĒÎ G Ï FFÌ I { æ¢ Ó FĒÎ I Ï ĒĒFF Ì € I ĒĒG G Ì FFÌ I { æ¢ Ó FĒÎ I Ï ĒĒFĪ Ï ĒĞ G CĒFIJ Ì FĒĒG Ì FFÌ I { æ¢ Ó FĒĒÎ I Ï ĒĒFF Ì € J ĒĒĒG Ì FFÌ I { æ¢ V CĒĒFI G ĒĒFĪ G ĒĒFF Ì € J ĒĒĒG G Ì FĒĒG Ì F						<u> </u>						i i		
FFÌ G { â} ÉÉEHU J ÉÉÉHU J ÉÉÉI Ì ÉÉÐHF G ÉÉFG Ì FFÌ H { agc Ó FÉÉFJ J ÉÉII J ÈÍIÎ I FÉÍIÎ I FÉÉFG Ì FFÌ I { agc V FÉÉI G ÉÉFÏ G ÉÉG Ï GÉFIJ Ì FÉÉG Ï FFÌ Î { agc Ó FÉÉI Ï ÉÉFÏ Ï ÉÉGFF Ì € I ÉÉGG Ì FFÌ Î { agc Ó FÉÉI Ï Ï ÉÉFF Ï É I ÉÉGG Ì FFÌ Î { agc Ó FÉÉI Ï Ï ÉÉFF Ï E I ÉÉGG Ì FFÌ Î { agc Ó FÉÉI Ï Ï ÉÉFF Ï E J ÉÉGG Ì FFÌ Î { agc Ó FÉÉI Ï G ÉÉFF Ì E J ÉÉGG Ì FFÌ Î H B EÉFG Ì B EÉFF Ì E J ÉÉGG Ì FFÌ Î H B B B EÉFF I B <		ÚHG Œ		V		i		ī						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		OI KI CL		V		<u> </u>		<u>'</u>		ì		_		ì
FFÌ I { â} ÉÈEHU I ÉÈÉI I ÈÉEI I ÈÉEI I ÈÉEI I ÈÉEI I ÈÉEI I ÈÉEI I ÈÉEI I EÉEI I <td< td=""><td></td><td></td><td></td><td>Ó</td><td></td><td></td><td></td><td></td><td></td><td>i</td><td></td><td>ī</td><td></td><td>H</td></td<>				Ó						i		ī		H
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						ī		ī		Ì		Ϊ́		
FFÌ Î { â} ÉÉEFJ Ï ÉÉÉE Î ÈÉEF Î € I ÈÉEG Î FFÌ Ï { agc Ó FÉLÍ Ï ÉEFÏ Ï ÈG G GEIJ Î FÉLÍ G FFÌ Ì { â} ÉÉEFJ G ÉFÉLÍJ G ÉEEF Î € J ÉEEG Î FFÌ J ÚHGÎ { agc V GÈHGF G ÉLFÎ G ÉJÎ Ï GÊHEJ F GEÎLÍ Ï		ÚHG		V		G		G		Τ		Ϊ́		Τ̈́
FRÌ I {æ¢ Ó FLÈÍ I LÈEFI I LÈG G CLÈIJ Ì FLÈÍ G FRÌ I {ā} LÈEFJ G LÈFLÍJ G LÈEFF Ì € J LÈE€G Ì FRÌ J ÚHGÎ {æ¢ V CLÈHGF G LÈFLÎ G LÀTÎ I CLÈHEJ F CLÈTÍ I		<u> </u>		-		Ï		Ϊ		Ì		i		
FFÌÌ { a} EÈEFJ G EFÈLÍJ G ÈE€F Ì € J ÈE€G Ì FFÌJ ÚHGÎ { æ¢ V GÈHGF G ÈEFÎ G ÈÐÎ Ï GÈE€J F GÈEÍÍ Ï				Ó		Ï		Ϊ		G		ì		G
FFÌJ ÚHGÎ {ão¢ V GÀÈHGF G LÈFÎ G LƏÎ Ï GÀÈH€J F GÀÈÍÍ Ï						G		G		ì		J		ì
		ÚHGÎ		V						Ϊ		_		Ϊ
	FFJ€		{ a		⊞FG	Ϊ	ËŒHF	Ϊ	È€	ì	⊞̈́J	ì	Ì € €Ï	ì

<i>90) 1</i>	Ca i D Unit#9	<u> </u>	Di jovyo	o Gringgi	y n	CDIJDI TA	_						
	Ú æe^		Ù″¦æ&^	Ùãt{æFÁŽt∙ãã	ŠÔ	Ùãt{æG—ŽXi∙ãã	ŠÔ	Væ`ÁTæçÆŽ∙ãa	ŠÔ	OB;* ^ <i>A</i> Žtæåá	ŠÔ	X[}ÁTã~•ÁŽÈ	ĚŠÔ
FFJF		{ æ¢	,	G Ì I GF	Ϊ	ÈFÎ	Ϊ	ÌΪ	G	G Ìl €J	F	GÈÍÍ	G
FFJG		{ a		⊞FG	G	ËŒHF	G	È€E	ì	⊞̈́J	ì	Ì€€Ï	ì
FFJH	ÚHGÎŒ	{ æ¢	V	ĚÌH	Ϊ	ÈFÍ	J	ÈGIÍ	G	FÈÎ	Ï	ĚÌÎ	G
FFJI		{ a		⊞€J	T	⊞ÌF	G	È€Î	Н	iiii î	Т	È€FF	Н
FFJÍ		{ æ¢	Ó	ĚÌH	G	ÈFÍ	ī	ÌĐÍ	Ϊ	FÈÎ	G	ĚÌÎ	ΤÏ
FFJÎ		{ a		⊞€J	J	⊞ÌF	Ï	È€Î	Н	iiiii î	J	ÈFF	Н
FFJÏ	ÚHŒ	{ æ¢	V	Èïí	G	ÈGF	G	ÈGHF	Ϊ	FÈF	Ï	È€G	Ï
FFJÌ		{ ā		⊞GFÌ	Ϊ	Η̈́ì	Ϊ	È€F	ì	€	i	ÈE€G	ì
FFJJ		{ æ¢	Ó	ĒΪÍ	Ï	ÈGF	Ï	ÈGHF	G	FÈF	G	È€G	G
FŒ€		{ a		EEGFÌ	G	Ξì	G	È€F	ì	€	J	ÈE€G	ì
FŒF	ÚHĠ	{ æ¢	V	ĚÌF	Ï	EG I	ï	EEGF	Ť	FÈEG	Ï	Ě€Ì	J
FŒG	UC	{ a		⊞G F	G	Ξ̈́ΪΗ	G	È€G	ì	⊞EÌ	Н	È€	ì
FŒH		{ æ¢	Ó	<u>Ē</u> ÌF	G	ÈGI	G	ÈGF	J	FÈG	G	Ě€Ì	Ħ
FŒ		{ a		⊞G F	ï	ΞΪΉ	ï	ÈE€G	ì	III €Ì	Н	È€	i
FŒÍ	ÚHGÌ Œ	{ æ¢	V	<u> Hii</u>	J	⊞€€F	Н	ÈG I	i	FË JÏ	Ϋ́	ÈIÍ	Ti-
FŒÎ	OI KI GL	{ ā	V	ÈE€G	ì	⊞ìÎ	1	È€G	F	ÈÌÍ	Ė	È€	F
FŒÏ		{ æ¢	Ó	<u>ECC</u>	i	⊞€F	H	EG I	J	FË JÏ	G	ÈIÍ	J
FŒÌ		{ a		ÈE€G	ì	iii) î	J	ÈE€G	F	ÈÌÍ	J	È€	F
FŒJ	ÚHGJ	{ æ¢	V	<u>ECC</u>	ij	<u>⊞</u> ij	J	<u>E</u> EHÏ	÷	GE J	ï	È€Î	+
FŒ	OI Kab	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	V	<u>⊪ug</u> ⊞éjJ	+	<u>⊞</u> FÏ	G	EF	ì	€	H	ÈE€G	
FŒF		\ <u>9</u> {æ¢	Ó	EGF	G	<u>щіі</u> Ē ÍJ	_	Œ€i	G	GE J	G	Œ€Ğ	G
FŒG		\		<u>⊪ug</u> ⊞éjJ	J	⊞FÏ	<u> </u>	<u>E</u> F	ì	€	J	ÈE€G	ì
FŒH	ÚHH€	<u>\9</u> {æ¢	V	EIÏ	ï	€	ì	EGÎ Ì	G	GEGI G	ì	ĖJJ	G
FŒI	Unine	{ a	V	<u>EII</u> E€€G	ì	⊞IJ	G	E€€F	ì	⊞JH	F	EE€G	1
			Ó	<u>EEG</u>	G	€	7	EGÎ Ì	+	— ⊞J⊓ ŒGIG	ļ ļ	ÈJJ	++-
FŒÎ		{ æ¢	U	<u> </u>	ì	⊞IJ	ï		ì	<u>GE</u> JH	F	E€€G	
FŒÏ	ÚHH€Œ	{ a	V	<u>Œ€G</u>	-	ШIJ Ělì	-	<u>E</u> €F FEJÍ	÷	<u>ш</u> јн FĚÏG		Œ€G	-
FŒÎ	UHHEUE	{ æ¢ { ā}	V	<u>GEII</u> ⊞ÍG		EGÐ FÏ		<u>F</u> Œ€Ï	1		J G	EFI	J
FŒ			Ó	<u>⊞iG</u> GÈÌÌ	J	<u>E</u> E I Ì	J		Н	∰j Eřïo	G	ŒFI	H
FŒJ		{ æ¢	U		J		J	FÈJÍ	G	FĚÏG	+		
FŒ€	r'u n =	{ a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<u>⊞ÍG</u>	<u> </u>	ËŒ	ì	ÈEEÏ ⊏Èùï	H	⊞ij ⊏itā d		ÈEFI OŤ LE	H
FGF	ÚHF	{ æ¢	V	<u>GÊÏF</u>	G	⊞EEG	 	FÈÌÏ	1	FÊ€	Н	Œ HF	
FŒG		{ a	Ó	<u>⊞He</u> í GÉÌÏF	H	<u>ÜÊÜ</u>	1	€ chùï	<u> </u>	⊞HJ ⊑È d	G	ÈE€G	
FCGH		{ æ¢	Ó		1	ËE€G	<u> </u>	FÈÌÏ	G	FÈ€	H	Œ HF	G
FCG	ÚUUD	{ a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	EE€Í	Н	EGÊÌÍ	G	€ EÈE	+	⊞HJ EÀU	Ļ	ÈE€G	-
FŒ	ÚHHG	{ æ¢	V	HÈ€F	G	<u>ÀÌÎ</u>	G	FÈ FÏ	1	FÀH	F	HÈHU	
FŒÎ		{ a	á	<u>⊞JH</u>	-	ËHÈ Ĝ	Ų.	ÈE€G	<u> </u>	⊞GJ	<u> </u>	È€I	<u> </u>
FŒÏ		{ æ¢	Ó	HÈ€F	<u> </u>	ÈÌÎ	<u> </u>	FÈ FÏ	G	FÀH	F	HÈHU	G
FCG	·′·· • • • • •	{ a		<u>⊞JH</u>	G	ËHÈ Ĝ	G	Œ€G	Ų.	⊞GU	1	EEEI	<u> </u>
FŒJ	ÚHHGŒ	{ æ¢	V	<u>GÊÍÍ</u>	G	ÈlÏ	ļ.	FŒÎÎ	1	FË FF	H	QÊ Î G	1
FGH€		{ a			J	ËŒÏG	<u> </u>	ÈE€H	Н	⊞G H	G	È€Ï	H
FGHF		{ æ¢	Ó	<u>GÉÍÍ</u>		ÈlÏ	J	FÈÈÌÎ	G	FË FF	H	QÈÏ G	G
FGHG	,	{ a		<u></u> i		ËŒŢG	G	È€EH	H	⊞G H		È€Ï	H
FGH	ÚHH	{ æ¢	V	<u>Œ, H</u>	G	Èĺ	<u> </u>	FÉG	Ļ	FÊ H	Н	QĚFÏ	
FGH		{ a	,	<u></u>	J	ËŒĮĘ		È€€H		⊞ j €í	G	È€EI	
FGHÍ		{ æ¢	Ó	<u>GĚ H</u>		<u>È</u> ()	J	FÉG	G	FĒΉ	Н	QĚ FÏ	G
FGHÎ	,	{ a		<u> </u>		ËŒĴĹF	G	Œ€H	<u> </u>	⊞∰€Ì		E€€I	
FGHÏ	ÚHH	{ æ¢	V	<u>ĢĚ FÌ</u>	G	<u>Ē</u> ļÏ	<u> </u>	FEGF	Ļ	FĒ€	F	ŒŧjJ	Ï
FGHÌ		{ a			J	ËŒH	Ï	È€H	İ	∰Ĵ	G	È€Ï	İ
FGHJ		{ æ¢	Ó	<u>QĚFÌ</u>	Ï	ÈŢÏ	J	FEGF	G	FÊ€	F	Q I ÌJ	G
FG €		{ a		<u> </u>	1	ËĢĚHH	G	È€€H	Ì	ËĤĴ	Ϊ	È€Ë	Ì
FG F	ÚHH Œ	{ æ¢	V	F Ě ÎG	G	Œ€	1	ÈFJ	Ϊ	GÈÏÎ	Н	FÊ€	ΙÏ
FG G		{ a		€	F	ËËÏF	Ï	È€H	F	⊞FÏ	G	È€Í	F

30) 10	, a i D Oiline			io di iggi									
	Ú æe^		Ù″¦æ&^_	Ùãt{æFAŠt∙ãã	ŠÔ	Ùãt{_æGÆX•ãã		Væ`ÁTæ¢ÁŽ•ãa		OB;* ^AŽ(æåá		X[}ÁTãa^•ÁŽÈ	
FG H		{ æ¢	Ó	FĚÎG		Œ€	J	ÈFJ	G	<u>Ģ</u> ĒÏ į̇́	Н	FÊ€	G
FG I		{ a		€	F	ËŢĚÏF	G	È€€H	F	Η̈́FÏ	Ï	Ì€€Í	F
FG Í	ÚHH	{ æ¢	V	FÊGH	G	È€HÌ	1	ÈÎG	Ï	<u>FÈÌÌ</u>	Н	FÊÌ	Ĩ
FG Î		{ a	,	<u>⊞</u> EHÌ	J	ËĘĒĻG	Ï	È€€H	F	Η̈́FF	G	Ì E €Î	F
FG Ï		{ æ¢	Ó	FËGH	Ï	È€HÌ	J	ÈÎG	G	<u>FÈÌÌ</u>	Н	FÊÌ	G
FG Ì		{ a }		ËŒHÌ.	1	ËŢĒHG	G	Ì€€H	F	Ë∯FF	Ï	È€Î	F
FG J	ÚHHÎ	{ æ¢	V	FÈH	G	È€H	Ì	FÈ€H	Ï	FĚÏF	F	FÐÎÏ	Ï
FǴ€		{ a }	,	ŒŒÍ	Н	ËÈIÎ	Ï	Œ€H	F	Щ̈́ίί	Ĺ	È€Í	F
FG F		{ æ¢	Ó	FÈH	Ï	Ì€€H	İ	FÈ€HÍ	G	FĚÏF	F	FÐÎÏ	G
FG G		{ a		ËE€Í	Н	ËÈIÎ	G	È€H	F	ΞĬÍÍ	Ĺ	È€Í	F
FG H	ÚHHÎŒ	{ æ¢	V	ÈÏÍ	G	ŒŒG	F	ÈJΪ	Ĩ	GEEÌ	Н	₿IF	Ĩ
FĠĮ		{ a	,	€	F	Η̈́ÏÏ	Ï	.€	F	Щ̈́(ĵ	G	È€G	F
FG Í		{ æ¢	Ó	ÈÏÍ	Ï	ËE€G	F	ÈJΪ	G	GÈ	H	₿IF	G
F G Î	,	{ a		€	F	ШÏÏ	G	€	F	<u> </u>		È€G	F
FĠΪ	ÚHHÏ	{ æ¢	V	FÈÌÎ	G	ËE€G	F	ËÍG		<u>FÐÍÏ</u>	H	FÈHÏI	I
FG Ì		{ a	,	€	F	生生		€	F	⊞ÎÎÎ	G	È€G	F
F G J		{ æ¢	Ó	FÈÌÎ		ËË€€G	F	Ε̈́ÍG	G	<u>FÐÍÏ</u>	H	F È IÏ I	G
FĜ€		{ a		€	F		G	,€	F	<u> </u>		ÈĘ€G	F
FĜ F	ÚHHÌ	{ æ¢	V	FÈ€Í	G	ËËŒG	F	FŒF		<u>FËÏG</u>	Н	FĒ JJ	
FĜ G		{ a	,	€	F	ËÈ€Ï		€	F	<u>Ë</u> ÏG	G	È€G	F
F <u>Ĝ</u> H		{ æ¢	Ó	FÈ€		ËE€G	F	FÈF	G	<u>FËÏG</u>	H	FË JJ	G
FĜŢ		{ a		€	F	ËÈ €Ï	Ģ	€	F	⊞ÏÏG		È€G	F
FĠÍ	ÚHHÌŒ	{ æ¢	V	H ÌĠ	Ţ	⊞EEG		ĚII	ļ	<u>Œ</u> II	Ţ	FÈH	
FGÎ		{ ā		È€F		<u> </u>		ÈE€G		ÈFI		ÌŒ€H	
FĠΪ		{ æ¢	Ó	ΒĺΗ	ļ	⊞EEG		ĚII	Ţ	Ğ <u></u>	ļ	FÈH	J
F G Ì		{ a		È€F		<u>Ë</u> Î	J	ÈE€G		<u>È</u> FI		Æ€H	
FĜ J	ÚHHJ	{ æ¢	V	FÈ€G	J	ÈJG	J	ÈÎÏ	ļ	<u>ŒĘį i</u>	J	FÉG H	
FĞ€		{ a	<u> </u>	ĦÏÏ		ËÈFF		È€H		ÈÌ.	G	È€Î	
FĞ F		{ æ¢	Ó	FÈ€G	<u> </u>	ÈJG	<u> </u>	ÈÎÏ	J	G <u>É</u> ÌÌ	ļ.	FÈG H	J
FĞ G	L'II II C	{ }		HÌ Ï Ï	J	ËÈFF	J	È€H	<u> </u>	ÈÌ	+	È€Î	-
FĞ H	ÚHI €	{ æ¢	V	GÈÍH	G	ÈG ÖÖÜ	G	₿Ġ	1	<u>FĚÏÏ</u>	J	GÈ€H	1
FĞ I		{ }	Á	⊞G OÈ(U	<u> </u>	ËŒFÏ F	l ï	È€G		<u>⊞</u> TG	G	È€H	1
FĞ Í		{ æ¢	Ó	GÈ (H		ÈG	<u> </u>	₿Ġ	G	FĚÏÏ	l l	GÈ€H	G
FĞ Î	1'11 II E	{ a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<u>⊞</u> HG HÈLÍ	G	EGÊFÎF FÊFÎÎ	G	ÈE€G FÈÍ	-	<u>⊞</u> FIG FÊÏÎ	-	<u>LEE</u> €H HLĚEF	
FĞ Î FĞ Ì	ÚHI F	{ æ¢	V	HE I I	<u> </u>	ËEJ	G	EE€G	J	<u>FEII</u>	J	HEE€	J
FG J		{ a} { aac	Ó	HÈIÍ	+	FÈÍÎ	J	FÈÍ	+	FÊÏÎ	ı	HĚ€	
FG 5		{ a		ËĖ	G	ËEI	1	EE€G			<u> </u>	<u>F</u> €€I	
FG €	ÚHI G		V	GEGÏ	G	EFGÎ	ı	FEH	÷	FÊÍÎ	F	GEG	++
FG G	UTIG	{ æ¢ { ā}	V	⊞EGH	J	ËEGÍ	i i	È€	ì	— FILIT		Œ€	
FG H		{ æ¢	Ó	GEGÏ	ï	ÈĠ	J	FÈH	G	FÊÍÎ	F	ŒĠ	G
FG I		{ ā	0	⊞GH	<u> </u>	ËEEJÍ	G	È€	ì	<u>⊞</u> H G		Œ€Ì	ì
FGÍ	ÚHI H	{ æ¢	V	FÈ I Ï	G	€	ì	F E GÎ	÷ ·	FË G	F	GEG I	†
FĠ Î	OFFIT	{ a	V	⊞€€H	Н	ËÈÍÎ	i	È€	F	<u> </u>	G	Œ€Ï	F
FĠ Ï		{ æ¢	Ó	FÈIÏ	Ţ,	€	ì	FEGÎ	G	FË G	F	GEG I	G
FG i		{ ā		⊞E€H	Н	ËÈÍÎ	G	È€€	F	<u> </u>	l i	Œ€Ï	F
FG J	ÚHII	{ æ¢	V	FÈJ	G	⊞E€G	F	FEG	G	FÊJÎ	F	ŒÎ H	G
FGJ€	O 1	{ a		€	F	ËÈJG	Ï	È€F	F	<u> </u>	G	È€G	F
FGJF		{ æ¢	Ó	FÈJ	Ï	⊞E€G	F	FÈG	Ï	FÊJÎ	F	ŒÎ H	İ
FGJG		{ a		€	F	ËÈJG	G	È€F	F	<u> </u>	İ	È€G	F
FGJH	ÚHIÍ	{ æ¢	V	ÈĠ	T	⊞E€G	Н	EG I	J	FÈIG	li	ĚFH	J
FGJI		{ a		€	ì	⊞GJ	J	€	Н	Η̈́ΪΪ	Ϊ	È€€G	Н

	Úlæ?^		Ù`¦æ&^	Ùãi{æFÁX.∙ãa	šô	Ùãi{æĐÃŽ•ãã	šĥ	VæiÁTæçÁŽ•ãã	ŠΛ	OB;* ^AŽanåá	ŠΛ	X[}ÁTã^•ÁŽÈ	— ∰š^î
FGJÍ	U Jates .	{ æ¢	Ó	EGÍ	J	Ua { aessa • aa	H	EG I	<u>3</u>	FEIG	J	<u> Ě</u> FH	
FGJÎ		{ a		€	ì	⊞G	1	€	Н	<u> </u>	G	È€G	Н
FGJÏ	ÚHIÎ	{ æ¢	V	FÉGÍÌ	÷	<u>⊞</u> €Î	Н	<u>Ë</u> F	J	FΕ̈́ÌΪ	ı	FÈH F	J
FGJÌ	OFF	{ a	V	€	Н	ËËËF	J	Œ€H	Н	EEG Í	<u> </u>	EE€Î	Н
FGJJ		{ æ¢	Ó	FĚGÍ Ì	J	<u>⊞</u> €Î	Н	ËF		FËÌÏ	J	FÈHÍ F	111
FH€€		{ a	0	€	Н	ËËËF	11	Œ€H	Н	EEG Í	G	EE€Î	Н
FH€F	ÚHIÏ		V	ŒĴ		ÈGÎ	-	FÈÉÍ	J	FĚÏG	1	GÊÊÎ I	J
FH€G	UHIT	{ æ¢	V	∰GH	J	ËGËGH	J	FŒI	Н	<u>F⊞IG</u> JF	i i	E€FG	Н
FH€H			Ó	<u>⊞</u> G⊓	J	<u>E</u> GÎ	J	FÈ€Í		FĚÏG	J	GÊFÎ I	
FH€I		{ æ¢	0	∰GH	J	ËGËGH	J	FŒ	Н	<u>F⊞IG</u> JF	G	ŒFG	Н
FH€Í	ÚHIÌ		V	<u>ш</u> сл HÈ I Í	+	ÈÌÌ	-	FÈÍ	J	FÈÎG	ı	HĚ€F	J
FH€Î	UHIT	{ æ¢	V	<u>⊓⊞</u> Ì J	J	<u> </u>	J	FŒT	Н	FEIG EG	i i	HEG	Н
rnei FH€Ï			Ó	HÈ I Í	J	<u>EE</u> J	J	FÈÍ		FÈÎG	J	HĚ€	+
rnei FH€Ì		{ æ¢		<u>⊓⊞</u> Ì J	J	<u> </u>	J	EI	Н	FEIG EG	G	EEG	Н
FH€J	ÚHI J	{ ā	V	FÈÌÌ	+	ÈÍ G	+	ÈÏÎ		FĚÍÌ	G	FÈ HG	
	Uni J	{ æ¢	V	<u> </u>	+	ËÈÈ€G	-	ŒII	J H	<u>r⊞ii</u> ⊞GH	+	EE€J	J
FHF€			Ó	FÈÌÌ	J	ÈÍ G	J	ÈÏÎ		FĚÍÌ	-	FÈHG	
FHFF		{ æ¢	0		J	ËÈÈ€G	J	Œ€Í	Н	<u>r⊞ii</u> ⊞GH	J	EE€J	H
FHFG	ÚHÍ€	{ a	V	<u>⊞</u> l FÈ€G	+	ÈJG	+	ÈÎÏ		<u>B</u> JI	ì	FEG H	
FHFH	U⊓I€	{ æ¢	V	<u>re 45</u>	J	ËĒFF	J	ŒÎ	Н	<u>□</u> IF	+	FEG F	1
FHFI			Ó	<u>⊞II</u> FÈ€G	+		1	ÈÎÏ		<u>⊞IF</u>	<u> </u>	FEGIH	H
FHFÍ		{ æ¢	0	117 11 11		È JG		ııı E€€Î	J	⊞IF	G	FEG H EF	J
FHFÎ	ÚHÍ F	{ a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		J	ËÈFF	J		Н				H
FHFÏ	UHIF	{ æ¢	V	<u>ÀÍH</u>	J	EE)Î	Н	ĚH		<u>FÌG€H</u> ⊞ÌÍI	H	FÈ€H È€€Í	1
FHFÌ		{ a	Ó	<u>E</u> E€G ÈDÍH	Н	EEU EEU	1	<u>È</u> €H ĚII	H	EEH	-		H
FHFJ		{ æ¢	0		1		Н		J		Н	FÈH	J
FHŒ	1'11 16 1	{ 4		ÈE€G	Н		J	ÈE€H Èú	H		G	È€Í	H
FHGF	ÚHÍ J	{ æ¢	V	ÈÏÏ	G F	⊞E€G ⊞ìF	H	ÈÚ	J	<u>FËÎI</u> ⊞ïH	J	Ì€J	J
FHGG		{ 4	Á	<u>€</u> Èïï	F		1	€ ÈHÍ	Н	<u>шін</u> FËÎI	G	ÈE€G	H
FHGH		{ æ¢	Ó			⊞E€G ⊞ìF	Н		-	<u>FEII</u>	1	Ê€J	
FHG	ı'ıı î c	{ a		€	F		G	€	Н			ÈE€G	H
FHG	ÚH΀	{ æ¢	V	ÊÎΗ	G	<u>⊞</u> €€G ⊞iìì	H	ÈFÌ		GÈH Èciï	G	ËΙF	1
FHG		{ a	Á	<u>€</u> ÈÎH	F		1	€	F	È JÏ	<u> </u>	<u>È</u> E€G ÈIF	H
FHG		{ æ¢	Ó		F	⊞ E EG ⊞iìì	Н	ÈFÌ	J F	<u>G</u> ÈH È€JÏ	1		G
FHG	ı'ıı îi 🗁	{ a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	€ ÈIH			G	€	Ţ		J	ÈE€G	H
FHGJ	ÚHÎ F	{ æ¢	V		G	ŒŒG	Н	ĚIH		G Ìl €	G	ΒÌJ	+-
FH€		{ 4}	Á	ËŒF	F	⊞ l Ì	1	€	F	ÈHÎ	<u> </u>	ÈE€G ÈÌÌJ	F
FHF		{ æ¢	Ó	ÈIH		⊞EG	Н	ĚIH	G	G Ì l €	1		G
FHIG	I'ILÎ C	{ ā	17	<u>⊞</u> €€F FE€FÎ	F	⊞lÌ iirec	G	€ ĒÌG	F	ÉHÎ CÎC JÍ	J	Æ€G	F
FHH	ÚHÎ G	{ æ¢	V		G	ŒÈ€G	H			ŒÚÍ	G	FÉGJ	+-
FHI		{ a	Á	<u>⊞</u> EEF	F	ËFÈ€G	1	€ ÈÌG	F	€ O'ÈUÍ	F	È€G	F
FHÍ		{ æ¢	Ó	FÈ€FÎ		ËE€G ËFÈ€G	Н		G	ŒÚÍ	<u> </u>	FÉGJ	G
FHÎ	1/11 1 1 1 1	{ 4}		ËE€F	F		G	€ rtrî	F	€ OÙ.CT	F	ÈE€G	F
FHI	ÚHÎ H	{ æ¢	V	FÈÏ	G	ËŒH ŒÈï⊙	F	ÈFÎ	G F	G Ì IC	G	FÈÍÌ	G
FHI		{ 3	Á	ËE€F	F	ËËG		€ rtrî	Ţ	⊞IH	F	ÈE€G	F
FHU		{ æ¢	Ó	FÈÏ		EEEH EEET C	F	ÈFÎ		G Ì (F		FÈÍÌ	-
FH €	ı'ıLıî ı	{ a	1//	ËEF ⊏È⊪Ì	F	ËË G	G	€	F	⊞IH ϝu	F	È€G	F
FH F	ÚHÎ I	{ æ¢	V	FÈH Ì	G	ŒŒG	F	ΒÏ	G	GÌHÍ IÌÈ IÏ	G	FË GG	G
FH G		{ ā	Ó	€	ı ı	ËHJ		€	F		T T	ÈE€G	F
FH H		{ æ¢	Ó	FÈH Ì	ì	ŒŒG	F	ÌΪ	F	GÌHÍ IÏÈI I		FË GG	
FHI	I'ILIÎ Î	{ ā	17	€		ËHJ	G	€			J	ÈE€G	F
FHİ	ÚHÎÍ	{ æ¢	V	FÈÎH	G	ËŒG	F	FĚĤ	G	GÎH Î	G	FÀJI	G
FH Î		{ a		€		ËÈÌI		È€F	F	⊞÷JÎ		ÈE€G	F

30) 1				o on igg i									
	Ú æz^		Ù`¦æ&^	Ùãt{æFÁŽt∙ããa	ŠÔ	Ùãt{a€AXo•ãã		Væ ÁT,æ¢ÁŽ•ãa	ŠÔ	ΟΕ}* ^ΑΣξααåά	ŠÔ	X[}ÁT¸ãr^∙ÁŽÌÈ	ĚŠÔ
FH Ï		{ æ¢	Ó	FÈÎH	Ļ	ŒŒG	F	FÈH		<u>ĢĦ Ï</u>		FÐJI	
FH Ì		{ a		€	İ	ËÈÌI	G	È€F	F	<u> </u>	J	È€G	F
FH J	ÚHÎÍŒ	{ æ¢	V	F İ ĞÏ H	1	Œ€Í	Н	Ë€J	J	FĒÍÏ	J	FÈHÍÏ	J
FH €		{ a	,	€	Н	ËÈ Í	J	È€G	Н	ĤŢ	G	È€Í	Н
FH F		{ æ¢	Ó	F Ì ĠÏ H	J	Œ€Í	Н	Ë€J		FÈÍÏ	<u> </u>	FΗ̈́Ϊ	
FH G		{ a		€	Η	ËÈÌÍ	1	È€G	Н	⊞įFl	Ï	Ì€€Í	Н
FH H	ÚHÎÎ	{ æ¢	V	FÈÏ F		Œ€	Н	ÊÌF	J	FÊIJ	J	FÉGÌ F	J
FH I		{ a		⊞E€G	Н	ËÈÌF	J	È€F	Н	⊞ॅ́€Î	G	È€H	Н
FH Í		{ æ¢	Ó	FÈÏ F	J	ËŒ	Н	ÊÌF		FÊIJ	1	FEG F	1
FH Î		{ a		ËE€G	Н	ËÈÌF		Œ€F	Н	⊞ॅ́€Î	Ĩ	Œ€H	Н
FH Ï	ÚHÎÏ	{ æ¢	V	F <u>İ</u> ĞI Ï	-	Œ€	Н	ËÎÍ	J	FÊH	J	FÈ FH	J
FH Ì		{ a	,	ËE€G	Н	ËĖ	J	€	Н	⊞jìG	Н	È€H	Н
FH J		{ æ¢	Ó	F <u>i</u> ÈGI Ï	J	⊞€E	Н	ĔÎÍ	1	FËH		FÈ FH	1
FĤ€	({ a		ËE€G	Н	EE EE I		Ţ€	Н	<u>⊞jiG</u>	Н	È€EH	Н
FHÎ F	ÚHÎÌ	{ æ¢	V	F <u>i</u> ÉĞÏ I	1	ŒŒH	F	È€Î	J	<u>FĚÏF</u>	F	FÈΪÍ	J
FHÎ G		{ a	,	ËŒH	F	ËÈ	J	Ţ€	F	⊞JG	Н	È€H	F
FH H		{ æ¢	Ó	<u>F</u> ĖĞ I	J	ŒŒH	F	È€Î		<u> FĚÏF</u>	F	<u>F</u> ÈÏÍ	
FĤŢ		{ a		ŒŒH	F	ËÈ	Ĺ	.€	F	⊞į́JG	Н	Œ€H	F
FĤÍ	ÚHÎ J	{ æ¢	V	<u>F</u> È H	G	ËË€€H	Ţ	ĖΙΪ	Ģ	Ğ <u>F</u> H	Н	F <u>Ě</u> ÌG	Ğ
FĤÎ		{ a	,	⊞ŒG	F	ËÈIG	Ĺ	Œ€F	Ţ	⊞̈́Ğ	G	Œ€H	l l
FΗĴΪ		{ æ¢	Ó	FÈH		ËË€€H		ÈIÏ	Ĺ	<u>ČĘ</u> HŮ	H	F <u>Ě</u> ÌG	Į
FĤ Ì		{ a		ËE€G	F	ËÈIG	G	È€F		⊞̈́Ğ		ÌŒ€H	
FĤ J	ÚHÏ €	{ æ¢	V	<u>FĚ Ĝ</u>	G	ŒH		₿FÍ	G	<u>G</u> EÌ Ï		FÊ JÌ	G
FḦ́€		{ a }		ËEEI 	H	ËË GJ		È€H	Ĥ	<u>⊞</u> iï	G	È€Í	
FH F		{ æ¢	Ó	<u>FĚ Ĝ</u>	1	⊞€€H		₿fĺ	1	<u>G</u> EÌ Ï	Ļ	FÊ JÌ	
FH G		{ a		<u>⊞e</u>	Н	ËË GJ	G	È€H	Н	<u> </u>		È€Í	
FH H	ÚHÏ F	{ æ¢	V	FÊJ	G	ŒŒG	l i	FŒH	G	<u>FÈ JÏ</u>	F	FÌ€	G
FHII		{ a	<u> </u>	Œ€Î	H	ËĒJÎ	ļ	È€H	F	ĦŢŢŢ	<u> </u>	È€Ï	F
FHÏÍ		{ æ¢	Ó	FÊJ	1	⊞EG	<u> </u>	FEH	Ļ	FÈJÏ	F	FÌ€Ï	-
FHÎ	ÚU II FOE	{ a		ËE€Î	H	ËĒJÎ	G	ÈE€H	F		-	È€Ï	F
FHÏ	ÚHÏ FŒ	{ æ¢	V	FÀIÌ		ÈJF Ö		ÈÌJ	J	FÊÏÍ	J	FÈÌF	J
FH Ì		{ a	<u> </u>	<u>⊞JG</u>	J	苗道	J	ÈE€Í	Н	EÈ Ï	G	<u>È</u> FF	H
FH J		{ æ¢	Ó	FÀIÌ	J	ÈJF Ö	J	ÈÌJ	1	FÊÏÍ 	ı ı	FÈÌF	1
FHÌ €	L'ILIÏ O	{ a		ŒFJG GÈF		ËÐÏ		È€Í	Н	FÊÏ	-	<u>E</u> FF	H
FH F	ÚHÏ G	{ æ¢	V	<u>GE</u> F	1	€ ËGËG	G	FÈEÏF ÈE€I	J H	<u>F⊞I</u> ⊞GJJ	J	Œ€J	J
FH G FH H		{ a} { æ¢	Ó	GÊF	H J	€	J	FE F		<u> </u>	ı	ŒEH ŒE	H
FH I		{ a	0	<u>GE</u> F	Н	ËŒ	1	rŒir Œ €	Н	<u>r⊞</u> j ⊞gjj	l l	Œ€J	Н
FH Í	ÚHÏ H	{ æ¢	V	FÐÏ F	1	<u>⊞</u> €	Н	FÈG	J	FÊ€	J	ŒEG	J
FH Î	OFFIT	{ a	V	<u>FBIF</u>	Н	ËBÏJ	J	EE€G	Н	⊞G	G	<u>GE</u> €Î	Н
FH Ï		{ æ¢	Ó	FÐÏ F	J	<u>⊞</u>	Н	FÈG		ΕÊ€	ı	ŒĒĠ	
FH Ì		{ a	0	<u> </u>	ЭН	ËĐÏJ		ÈE€G	Н	⊞G	i i	Œ€Î	H
FH J	ÚHÏ I	{ æ¢	V	FÈÌÌ		<u>⊞</u>	÷	FÈ€		FĚÏF	J	<u>G</u> EÎJ	J
FHJ€	OTHI	{ a	V	⊞E€H	F	ËÈJÍ	J	€	F	<u>⊞</u> Ĥ H	G	È€€H	Ť
FHUF		{ æ¢	Ó	FÈÌÌ	J	EE€	ì	FÈ€	J	FĚÏF	ī	GEÎJ	
FHJG		{ a		⊞E€H	F	ËËJÍ	i	€	F	<u> </u>	l i	Œ€H	
FHJH	ÚHÏÍ	{ æ¢	V	FÈÏF	i	EE€	Ì	FÈG	J	GÉHFJ	F	ŒĠ	J
FHUI	OT II T	{ a	V	<u> </u>	Н	ËĐÏJ	J	ÈE€H	ì	HF HF	H	Œ€Í	Ť
FHJÍ		{ æ¢	Ó	FÐÏ F	J	<u>⊞</u>	ì	FÈG	i	GÊHFJ	F	ŒĠ	
FHJÎ		{ a		ËÈ€	Н	ËĐÏJ		È€H	ì	#HF	Н	Œ€Í	
FHUÏ	ÚHÏÎ	{ æ¢	V	ŒFÎ	G	ÈEFG	G	FE F	J	GEGIÏ	Ti.	ŒH	J
FHIÌ		{ a		⊞€GÏ	Ï	ËŒ	J	È€Î	F	<u> </u>	G	ÈF	

30) 1	· ·			o di iggi					~ .			, ,,,	
	Ú æ•^		Ù <u>`</u> ¦æ&^	Ùãt{æFÁŽt∙ããa	ŠÔ		ŠÔ	Væ ÁT æg ÁŽ ∙ãa	ŠÔ	OB;* <u>(</u> ^AŽ <u>r</u> æåá	_ŠÔ_	X[}ÁT_ã^•ÁXÈ	ÊŠÔ
FHJ		{ æ¢	Ó	ŒFÎ	-	È€FG		FŒÏF		GĖĞJÏ		GÈH	L.
FI€€		{ a		ËEGÏ	G	ËÇËG		È€Î	F	<u> </u>	Ï	È€F	ĺ
FI€F	ÚHÏÏ	{ æ¢	V	ŒÈ€J	G	ÈJF		FŒF	<u> </u>	FÈIÏ	F	QÈ€ÏH	Ĭ
FI€G		{ a	,	⊞ĘJG	J	ËŒFGF	Ï	È€Î	ĺ	⊞ÏIH	ĺ	ÈFF	ĺ
FI€H		{ æ¢	Ó	ŒÈ€J	Ĩ	ÈJF	J	FŒF	G	FÈIÏ	F	ŒEÏH	G
FI€		{ a		⊞jG	1	ˌˌ	G	È€Î	Ì	ЩÏIН	Ì	È€FF	Ì
FI€Í	ÚHÏÏŒ	{ æ¢	V	HĚĮ	1	ÐFÌ		FÈH	J	FĚ€H	J	HÌÈGÌ	J
FI€Î		{ a		ËijFÌ	J	ËHĚÌÏ	J	È€FÍ	Н	⊞ǵì	G	È€GÌ	Н
FI€Ï		{ æ¢	Ó	HĚĮ	J	<u> </u>	J	FÈH		FĚ⊕H		HÌÈGÌ	
FI€Ì		{ a		ËΕŢ		ËHĚÌÏ		E FÍ	Н	ΕĞÌ	Ï	ÈEGÌ	Н
FI€J	ÚHÏÌ	{ æ¢	V	Q Ì Ġ		Œ€FG	Н	FĖĠĮĺ	J	FÈJG	J	Ģ Ľ G	J
FI F€		{ a	,	Œ€H	ĺ	ËŒH	J	È€Ï	Н	ËÜΪ	G	È€FI	H
FIFF		{ æ¢	Ó	Q Ì Ġ	Ţ	<u>⊞</u> G	Н	FĚGÍ		FÈJG		Q Ĭ G	
FI FG	, ,	{ a		Œ€H		ËŒÌIH	ĺ	È€Ï	Н	ËĞ		È€FI	Н
FLFH	ÚHÏ J	{ æ¢	V	FÐÎÌ		ŒŒÎ		FŒJI	ĺ	FĚ€J	J	Œ€jJ	Ţ
FIF		{ a	,	€	F	<u> ŢĠŢ</u>	ĺ	Œ€H		⊞ĜH	G	È€Î	1
FIFÍ		{ æ¢	Ó	FÐÎÌ	J	<u>⊞</u>		FįŒJI	Ļ	FĚ€J	<u> </u>	Œ€jĨ	Ļ
FI FÎ		{ a		€	F		Í	Œ€H		⊞GĤ		È€Î	1
FIFÏ	ÚHÌ €	{ æ¢	V	<u>FÈ I Ì</u>		ËË€€G		FÈ€ÎÍ	Ļ	<u>FĚÏF</u>	ĺ	ĞŒ€	Ļ
FIFÌ		{ a	,	ŒŒG	Н	ËÈÍF	ĺ	€		ЩjН		È€F	1
FIFJ		{ æ¢	Ó	FÈIÌ	J	ËE€G		FÈÍÍ	Ĺ	<u>F</u> ĚÏ F	Ļ	Çŧ€€	Ĺ
FI G€		{ a		ŒŒG	Н	ËÈÍF		,€		<u>∰</u> ÌH		È€F	
FIGF	ÚHÌ F	{ æ¢	V	FÈÎÌ	Ţ	<u>E</u> H	G	FŒJI	J	FÈHG	J	ŒĨJ	J
FIGG		{ a }		ŒijĠ		ËÐÏI	J	È€H	Н	Щ̈́ΪΗ	Н	Ì€€Ï	F
FIGH		{ æ¢	Ó	FÈÎÌ	J	È H		FŒJI		FÈHG	Ш	ŒÈÌJ	
FIG		{ a		⊞€JG	G			È€H	Н	Η̈́ΪΗ	Н	È€Ï	F
FIG	ÚHÌ G	{ æ¢	V	<u>Ģ</u> Ė Ģ	Ţ	<u>È</u> ÎÌ	G	FÈGI	Ţ	<u>G</u> ÉGI Ï	F	Q Ě G	J
FIG		{ a	4		<u> </u>	ËŒIH	J	È€Ï		Η̈́ÍF	Щ.	ÈFG	
FIG		{ æ¢	Ó	GÈ G	J	ÈÎÌ		FÈGÍ		GEGI Ï	F	QĚ G	1
FIG		{ a			G	ËŒIH	<u> </u>	È€Ï	4	⊞ÍF	Ļ	ÈEFG	+
FIGU	ÚHÌ H	{ æ¢	V	HĚI	<u> </u>	FÈJF	G	FÈH	J	GÈGG		HÈGĠ	J
FI H€		{ a	Á	<u>ËFË</u> GF H <u>Ě</u> I	<u> </u>	ËHĚ Ì Ï	J	È€J	-	∰G	G	ÈEFÏ UÈSSÌ	++-
FIHE		{ æ¢	Ó	HE I	J	<u>FÈJF</u> ËHĚÌÏ	1	FÈHÍ È€J	ì	<u>GÉGG</u> ∰G	<u> </u>	HÈGĠ È€FÏ	+
FIHG	ÚHÌ HŒ	{ a	\/	GÊJÎ	G	<u>⊞</u> EG	ì	FEETH	+	FÈÌÌ	+	GËHH	+
FIHH	Unitrice	{ æ¢	V	<u>Œ</u> fÎ	+	ËEEG	J	<u>rte</u> FÌ	J	<u>r⊞ïJ</u>	J	EEHF	J
FI HÍ		{ æ¢	Ó	GÊFJÎ		⊞EG	ì	FEGFH	+	<u>шіз</u> FÈÍÌ	ı	GËHH	++-
FIHÎ		{ ā	0	ŒFÎ	ì	ËEEG		EEFÌ	ì	ΞΪJ	+	<u>Œ</u> HF	+
FI HÏ	ÚHÌ I	{ æ¢	V	FËÏÎ	÷	<u>⊞</u>	+	F E ÊÎ G	J	FEŒ	J	FÐÏÌ	J
FIH	OTHI	{ a	V	È€	÷	ËËJ	J	Œ€Î	ì	⊞HJ	G	ÈFF	Ť
FI HJ		{ æ¢	Ó	FËÏÎ	J	<u>⊞</u>	ì	F E Î G	i i	FEŒ	ĭ	FÐÏÌ	Ti-
FII€		{ a		È€€I	Ť	ËËJ	i	È€Î		ЩHU	Ϊ́	ÈFF	
FIIF	ÚHÌÍ	{ æ¢	V	FÈGF	i	⊞€€H	i	È€Ï	J	FÈ	J	FĚ Ġ	J
FIIG	<u> </u>	{ a	,	È€G	i	ËÈĠ	J	È€G	ì	ÉĞÍ	G	È€	Ĭ
FIIH		{ æ¢	Ó	FÈŒ	J	ËË€H	ì	È€Ï	Ť	FÈ	Ĭ	FĚ Ġ	Ti-
FILL		{ a		È€G	Ĭ	ËÈĠ	İ	È€G	Ì	ÉĞÍ	Ï	È€	
FHÍ	ÚHÌ Î	{ æ¢	V	FÈHÍ	Т	È Î	G	ËΗ	J	GEGÌ I	ì	FÈ FÍ	J
FIIÎ		{ a		EE Î	Ϊ	ËÈÍÎ	J	€	F	⊞ J	G	€	F
FIIÏ		{ æ¢	Ó	FÈHÍ	J	EÌÎ	Ϊ	ĚΗ	I	GEGÌ I	ì	FÈ FÍ	
FIIÌ		{ a		i i	G	ËÈÍÎ	I	€	F	⊞ J	Ϊ	€	F
FIIJ	ÚHÌÏ	{ æ¢	V	FÈŒ	I	È€G	G	È€Ï	J	GÉGÌÌ	F	FĚ Ġ	J
FIÍ€		{ a }		⊞€F	Ϊ	ËÈĠ	J	È€H	Н	⊞ÏIJ	Ì	Ì€€Í	Н

90) 10				ù Giriggi					~ .				
	Ú æ²^		Ù`¦æ&^	Ùãt{æFAŠČ∙ãã			ŠÔ	Væ ÁTæçÁŽ•ãa	ŠÔ	Οξ}* <u>(</u> ^ÆŽ(æåá		X[}ÁT¸ãr∧•ÁŽÌÈÌ	ÈŠÔ
FLÍF		{ æ¢	Ó	FÈG	J	ÈEG		È€Ï		GEGÌÌ	F	<u>FĚ Ġ</u>	
FIÍG		{ a		⊞€F	G	ËÈĠ	1	È€H	Н	⊞ÏJ	İ	Ì€€Í	Н
FLÍH	ÚHÌ Ì	{ æ¢	V	FËÏÎ		<u>È</u> EL Ì	G	FÈEÎG	Ų	GEGÍ G	F	FÐÏÌ	J
FIŢ		{ a	,	EE F	Ĩ	ËΈJ	J	È€Î	ĺ	⊞̈́Ġ	İ	ÈEF	İ
FIII		{ æ¢	Ó	FËÏÎ	J	È	Ĩ	FÈÉÎG	Ţ	GEGÍG	F	FÐΪÌ	Ļ
FIÍÎ		{ a		⊞ F	G	ËΈJ	1	È€Î	Ì	⊞̈́GÌ	Ì	ÈEF	Ì
FLLT	ÚHÌ J	{ æ¢	V	ŒĖJÎ		ÈHGÌ	G	FEGFH	J	GÊH F	F	<u>QHH</u>	J
FLÍÍ		{ a }	,	⊞HEÏ	Ĩ	ËŒĞ	J	È€FH	ĺ	⊞̈́IG	ĺ	ÈEGG	İ
FIÍJ		{ æ¢	Ó	ŒĖJį̇̃	J	ÈHGÌ	Ĩ	FÈGFH	Ţ	GÈH F	F	Q<u>İ</u>HH	Į
FI΀		{ a }		ŒĤ€Ï	G	ËÇËCÌ		ÈFH	ĺ	⊞ÏIG	<u> </u>	ŒGG	İ
FIÎF	ÚHÌJŒ	{ æ¢	V	FÈHÎÌ	J	ÈFI	J	ÈÏÏ	J	ÈÌÎ	Ĩ	<u>F</u> ÈGFÍ	J
FIĴG		{ a }	,	⊞̈́ǵ	-	ËH	-	ÈEFG	Н	⊞ÌÌG		È€GF	Н
FIÎH		{ æ¢	Ó	F <u></u> ĤĴ	1	ÈFI		ÈÏÏ		ÈÌÎ	G	<u>F</u> ÈGFÍ	1
FIÎI	,	{ a		ÜĞ	J	ËÈ	Ĵ	ÈEFG	Н	⊞Ìg	Ĵ	ŒGF	Н
FIÏİ	ÚHJ€	{ æ¢	V	ЀÏ	Ţ	Œ€Î		Êŧ€Ï	ĺ	FÈ€€Í		FÈ€JÎ	Ĵ
FIÎÎ		{ a	,	È€Ï		⊞JFJ	Ĵ	È€Ï		⊞FF	G	EFF	1
FIĴÏ		{ æ¢	Ó	₿€ <u>ï</u>	Ĵ	Œ€Î		ĒĒ€Ï	Ļ	FÈ€€Í	l l	<u>F</u> È€JÎ	Ļ
FIĴÌ		{ a		Œ€Ï		ÜFJ		È€Ï		∰ FF		ŒFF	
FlÎJ	ÚHJF	{ æ¢	V	ÈÌG		ŒFH	G	Ě€J	ĺ	<u>FĚGÍÎ</u>	J	<u> </u>	Í
FIÏ€		{ a	,	É		ΗÌÍ	Ĵ	È€€H		<u> </u>	G	<u>Ì</u> €Í	
FLÏF		{ æ¢	Ó	ÈÌG	J	ŒFH		Ě€J	Ļ	<u>F</u> ÉGÍÎ	l l	Βįì	Į.
FIÏG		{ 3}		€	G	田) í		Œ€H		<u></u>	Ų	È€Í	
FIÏH	ÚHJG	{ æ¢	V	ËJÌ	ļ	<u>È</u> Ì H	G	ÈÌ.	Ţ	FÈ FÏ		ĚΪJ	J
FIÏŢ		{ a		Η̈́Ξ		ijIJΪ	Ĵ	È€G		€	Ğ	È€I	
FIII		{ æ¢	Ó	ĔJÌ	J	ÈÌ H		ÈÌ.	ļ	FÈ FÏ	Ļ	ĚΪJ	
FIÏÎ	······	{ a		⊞ H	G	Η̈́JÏ		ÈE€G		€		<u>Ì</u> €€I	
FIII	ÚHJH	{ æ¢	V	ÈÌG	ļ	<u></u> Œ1H	G	Ě€J	Ţ	GŒÎÍ		ΒĺJ	J
FIÏÌ		{ a	4	⊞ F	1	田) í	J	È€H		ÈFG		È€Î	
FIÏJ		{ æ¢	Ó	ÈÌG	J	<u>⊯</u> EJH		Ě€J		GÈÎÍ		ΒĺJ	1
FIÌ€	·····	{ a		⊞ F	G	⊞ìí		È€H	1	ÈFG	J	È€Î	<u> </u>
FIÌF	ÚHJI	{ æ¢	V	ЀÏ	<u> </u>	€	G	Ê€Ï	J	Ğ <u>Ç</u> ÜH		FÈ€JÎ	J
FI Ì G		{ a	<u> </u>	È€Ï	<u> </u>	⊞FJ	J	È€Í		ĚÌÌ	Ļ	È€J	
FI Ì H		{ æ¢	Ó	ЀÏ	J	€		Ê€Ï	ļ	ĞĞÜH	<u> </u>	FÈ€JÎ	1
FIÌI		{ a		È€Ű =÷ûì	<u> </u>	⊞FJ	1.	È€Í	<u> </u>	ĚÌÌ	J	È€J	
FIÌÍ	ÚHJÍ	{ æ¢	V	FÈĤ Ì	J	ÈFI	J	ÈÏÏ	J	<u>Ģ</u> ĒGÎ Ì	J	<u>FÉGFÍ</u>	Į
FIII		{ a	<u> </u>	⊞ǵ		ËH		È€È		∰IÏ o `` o``		<u>È</u> FI	
FIÌÏ		{ æ¢	Ó	FÈÎ Ì	<u> </u>	ÈFI	<u> </u>	ÈÏÏ	l ì	QÎGÎ Ì	1	<u>FÉ</u> FÍ	I I
FIÌÌ	·′·· · · · · · · · · · · · · · · · · ·	{ a		∰ǵ	J	ËH	J	È€Ì	<u> </u>	ĦŢŢ	G	<u>E</u> FI	
FIÌJ	ÚHJÍ Œ	{ æ¢	V	ÈÏÎ	J	III€€H	Н	ĖIH	J	FÈG	J	ÈÌF	J
FIJ€		{ a	Á	È€	-	∰ÏI	1	È€	Н	<u>⊞</u> FÌ	G	<u>Ì</u> E€Ï	F
FIJF		{ æ¢	Ó	ÈÏÎ	ì	<u>⊞</u> EEH	Н	ÈIH	1	FÈG	l T	ÈÌF	-
FIJG	ı'n ı ıî	{ a		È€EI		H II	J	È€	Н	<u>⊞</u> FÌ	-	<u>È</u> €Ï	F
FIJH	ÚHJÎ	{ æ¢	V	ÈUÎ	7	<u>⊞</u> €€F ∰ì	Н	ÈGÏ H	J	<u>FÈ</u> HÏ EÏÌÏG	Н	ÈÌÌ	J
FIJI		{ a	Ó	ÈEEÌ ÈUÎ			1	È€Í			G	<u>È</u> €J	
FIJÍ		{ æ¢	Ó	ÈUÎ ÈGÌ	ì	<u>⊞</u> €€F ∰ì	Н	ÈGÏ H	l ì	FÈH	H	ÈÌÌ	
FIJÎ	ÚLUÏ	{ a	\/	<u>E</u> E€Ì Èìí			J	È€Í ÈCÌ.C		⊞ÏÏG		<u>lÈ</u> €J LÉGÎ	
FIJÏ	ÚHJÏ	{ æ¢	V	<u>⊞</u> ::	l ï	<u>E</u> EGF ⊞iì	G	ÉGÌG È€€Í	J	GÈGÍ ⊞i⊔	G		J
FIJÌ		{ a	Ó	ÈÌÍ			J			⊞H CÀCÍÎ	ï	<u>E</u> F	
FIJJ		{ æ¢	U	<u>⊞</u> ::	J	<u>E</u> EGF ⊞iì		EG G	ì	<u>G</u> ÈGÍÎ EËH	1	LĚGÎ LÈF	1
<u>FÍ €€</u> FÍ €F	ÚHJÌ	{ a	V	EG	G	<u>шіі</u> Èìї		<u>E</u> €Í È€Í Ï		FÊG	J	EEF EGIÍ	
FÍ €G	UI DI	{ æ¢ { ā}	V		ī	EII EEGÎÎ	J	EEII	J	<u>F∎GG</u>	Ï	<u>EGII</u>	
ri C G		19		шп		III I	J	IECI		шП		Œľ	

	L'IlomA		Ù"¦æ&^	Ùãi{æFAŠČ∙ãa	ŠÔ	Ùãi{æ€ÁXoiãa	čΛ	VaěÁTaq¢ÁŽ•ãa	čΛ	 OB;* ^AŽanåá	čΛ	X[}ÁTãr^•ÁŽÈ	÷ôô
FÍ€H	Ú æz^	(~~	O : ABK	Ua{a⊕-A∆•aa ÈGÌ	SO	∪a {æe—x∡•aa ÈÈÌÏ		væ AlæçA∆.•aa ÈEÍÏ	50	FËEGG	∖SU	X[}Alan Ma∆⊞ ÈGIÍ	±30
FÍ€I		{ æ¢ { ã}	U	<u>⊞</u> îî	G	EII EGÎ	J	EEII	1	<u>F⊞US</u> ⊞FI	G	<u>E</u> F	ì
FÍ€Í	ÚHJJ	{ æ¢	V	ËЛ	G	EGI	G	EGÌ G	J	————— GEGÌG	J	<u>E</u> GÎ	J
FÍ€Î	ОГОЗ	{ a	V	⊞GFH	ï	⊞ÌG	ï	EE€	ì	<u>GEGG</u> ⊞ÍH	ī	E€€J	ì
FÍ €Ï			Ó	<u>E</u> JI	i i	<u>⊞</u> 1G	i i	EGÌ G	+	GEG G		ĚĠ	
FÍ€Ì		{ æ¢ { ā}	U	⊞GFH	G	⊞ÌG	G	EE€	ì	<u>GEGIG</u> ⊞ÍH	G	E€€J	+
FÍ€J	ÚI €€		V	<u> </u>		€	ì	EG! H	-	GEG		ÈÌÌ	
FÍ F€	UI EE	{ æ¢ { ā}	V	<u>E</u> UI	J ì	<u> </u> ∰		EE€H	J ì	<u>GEGG</u> ⊞HÎ	J	θ	J
			Ó	<u>E</u> UÎ	+	€	ì	EGÏ H		GEG	-	ÈÌÌ	
FÍ FF		{ æ¢	U	<u>E</u> UI	ì	€			ì	<u>GEGG</u> ∰HÎ	G	EII E€Î	<u> </u>
FÍ FG	Úl € F	{ ā	V	ÈÏÎ	-	€	J	<u>E</u> €H ÈIH	+	FÈFÌ		ÈÌF	
FÍ FH	UI C	{ æ¢	V		J	— € ⊞ÏI		Œ€H	J	<u> </u>	J	EIF	J
FÍ FI FÍ FÍ		{ ā	Ó	<u>E</u> €F Èïî	G		G		-	FÈFÌ	-	ÈÌF	
		{ æ¢	U		7	€ ∰ïI		ĖΙΗ	ì	<u> </u>	1		<u> </u>
<u>FÍ FÎ</u> FÍ FÏ	ÚIÎI	{ ā	\/	<u>E</u> €F ÐÏI	-		J	ÈE€H	+	GÈG	-	<u>ÌE</u> €Í FÈEÎÌ	
	ULLI	{ æ¢	V		J	ËEF ËJÏF	1	ĚÏG			J		
FÍ FÌ		{ ā	Á	<u>È</u> EÎ Bïl	<u>H</u>	<u>⊞</u> F	ì	ÈE€Í	F	<u> </u>	-	<u>È</u> €Î FÈÊÎ Ì	H
FÍ FJ		{ æ¢	Ó		1			ĚÏG	J	GÈG	ì		J
FÍ Œ		{ a	1/	È€Î	<u>H</u>	ËĴ F	J	ÈE€Í Èuï	F	EEF OFFO	-	È€È	Н
FÍ Œ	ÚIÎÍ	{ æ¢	V	FÈÍÏ	J	ÈÎÍ		ĖJÏ	ì	<u>QÊGÎ</u>	J	FÈFU	1
FÍ Œ		{ a	Á	<u>⊞</u> IF	G	ËÈ	<u> </u>	ÈEEÏ	+	ÈÏÌ	-	ÈFH FÌCE I	
FÍ GH		{ æ¢	Ó	FÈÍÏ	<u> </u>	ÈÎÍ	G	ÈJÏ	J	<u>QÊGÎ</u>	1	FÈFU	J
FÍ G	1/11 ↑↑	{ a	\ /	⊞IF œtio	<u> </u>	曲曲	J	È€Ï	+	ĖÏÌ	-	ÈEFH OÌC	+
FÍ GÍ	ÚIÎÎ	{ æ¢	V	GÈIG	G	ÈH I	G	Ì€Ï	1	<u>FĚJÎ</u>	J	CÌ€€	1
FÍ GÎ		{ 3	Á	⊞H)	<u> </u>	ËÇE G	Ţ	È€		⊞1 H	G	È€Ï	1
FÍ GÏ		{ æ¢	Ó	GÈI G		ÈH I		Ì€Ï	G	<u>FĚJÎ</u>	1	CÌÈ€	G
FÍ GÌ	.' î ï	{ a	\ /		G	ËĐÈ G	G	È€	4	<u>⊞</u> H	<u> </u>	È€Ï	
FÍ GJ	ÚIÎÏ	{ æ¢	V	HÈFÎ	ļ.	FÈIJ	G	FÈI	J	FÊÏJ	J	HÈÏF	J
FÍ H€		{ a	Á	许可	<u> </u>	<u>Ë</u> LÈ (Î	ļ.	ÈE€G	-		G	È€€H	
FÍ HF		{ æ¢	Ó	HÈFÎ	J	FÈIJ	ı	FÈI	 	FÊÏJ	ļ.	HÈÏF	1
FÍ HG	·′·· ↑)	{ a	\ /		G	ËHÈ (Î	G	ÈE€G	Ų.		<u> </u>	<u>E</u> €H	<u> </u>
FÍ HH	ÚIÎÌ	{ æ¢	V	GÉGÏ	G	ÈĞ	l Ÿ	FÈH	l ì	<u>FÊĞ</u>	F	QE)	1
FÍ HI		{ a	Á	⊞G	J	ËŒG	4	È€	<u> </u>	∰FÎ	<u> </u>	È€U	
FÍ HÍ		{ æ¢	Ó	GEG TETERON	<u> </u>	ÈĞ	J	FÈH	G	FÊ G	F	ŒĠ	G
FÍ HÎ	1/11 1	{ a	\ /	∰GÍ	<u> </u>	ËDÈGIG	G	È€€I	+	<u>⊞</u> FÎ	Ļ	È€U	+
FÍ HÏ	ÚIÎJ	{ æ¢	V	FÈIÏ	G	€	l Ÿ	FÉG J		FÊJF	F	QÈGÏ Í	
FÍ HÌ		{ a	Á	ËE€G	H	ËÈίî	ì	È€H	F	<u> </u>	G	È€Ë	F
FÍ HJ		{ æ¢	Ó	FÈIÏ	<u> </u>	€	ı	FÉG J	G	FÊJF	F	GÉGÏ Í	G
FÍI€	ı'ıı ï.c	{ ā	\ /	ŒŒG	H	ËÈÍÎ	G	È€H	F	<u> </u>	<u> </u>	<u>Ì</u> €€Ï	F
FÍIF	ÚIÏ€	{ æ¢	V	FÈJ	G	ÊE€G	F	FEG F	G	<u>FÊÏG</u>	F	QÈÎ H	G
FÍIG		{ 3	<u> </u>	€	F	ËÈJG	_	È€F	F	<u> </u>	G	È€€G	F
FÍIH		{ æ¢	Ó	FÈJ		ËE€G	F	FÈG F	_	<u>FÊÏG</u>	F	QÈÎ H	
FÍII	ú ï e	{ a	\ /	€ È.c⁄	F	ËÈJG	G	È€F	F	<u> </u>	-	ÈE€G	F
FÍIÍ	ÚIÏF	{ æ¢	V	ÈĠ	<u> </u>	ŒŒG	H	EGÎ H	J	FÈI	ļ.	Ě FF	J
FÍIÎ		{ a	<u> </u>	€	<u> </u>	⊞GU	J	€	Н	<u> </u>	Н.	ÈE€G	H
FÍIÏ		{ æ¢	Ó	ÈĠ	J	⊞EEG	Н	EGÌ H	1	FÈI	J	Ě FF	
FÍIÌ	ı'ıı ï o	{ 3	/	€ FÌX ï		⊞G		€ Ť.Ĉ	Н	<u> </u>	G	È€G	H
FÍIJ	ÚIÏG	{ æ¢	V	F É GÍ Ï	1	EEEÍ Œ ÀS	Н	Ë€Î	J	<u>FËÌG</u>	1	FÈH Î	J
FÍÍ€		{ 3}	<u> </u>	€ Fricti	H	ËË	J	ÈE€G	Н	EĞÎ	1	E €Í	H
FÍÍF		{ æ¢	Ó	F É GÍ Ï	J	EEÉÍ E÷òï	Н	Ë€Î	1	<u>FËÌG</u>	J	FÈH Î	
FÍ Í G	r'n Tee	{ a	/	€ 	<u>H</u>	ËË		È€G	H	<u>ËĞÎ</u>	G	ÈE€Í	H
FÍÍH	ÚIÏH	{ æ¢	V	GÈJG	<u> </u>	ÈĞ	<u> </u>	FÈEIÎ	J	<u>FĚÏF</u>	ļ.	GÊ Î	J
FÍÍI		{ a		⊞Œ	J	ËGËGFÌ	J	È€Í	Н	⊞GÌI		ŒF	Н

90) 1	·			o di iggi					~ .				
	Ú æg^		Ù.¦`æ&v	Ùãi{,æFÁX.∙ãã		Ùãt{æGÁX.∙ãã		Væ ÁT æ¢ÁŽ•ãa	ŚÔ	OB;* <u> </u> ^AŽtæåá		X[}ÁT¸ãr∧•ÁŽÌÈ	ÉŠÔ .
FÍÍÍ		{ æ¢	Ó	ŒĖJĢ	J	ÈĞ	J	FÈ€IÎ		FĚÏF	J	<u>G</u> ÉÍÌ	
FÍÍÎ		{ a		ŒŢĠ		ËÇEÇFÌ	1	È€Í	Н	⊞G I	G	ŒF	Н
FÍÍÏ	ÚIÏI	{ æ¢	V	HÈFÎ	-	ÈΪĺ	-	FÈI	J	FÈÍÌ		HÈÏF	J
FÍÍÌ		{ a		ËΪÍ	J	ËHÈÍI	J	È€J	Н	ËĠH	Ï	È€FÌ	H
FÍ Í J		{ æ¢	Ó	HÈFÎ	7	ÌΪÍ	J	FÈI		FÈÍÌ	J	HÈÏF	1
FÍ΀		{ a		ËΪÍ	1	ËHÈÍI	1	ÈŒ€J	Н	ËÈGÏH	G	ÈEFÌ	Н
FÍ Î F	ÚIÏÍ	{ æ¢	V	FÐFÏ	1	ÈJH	_	ÈÎΙ	٦	FĚ HÎ		FÈHG	J
FÍ Î G		{ a		⊞JH	J	ËÈG	J	È€Ï	Н	⊞GÍ	Ϊ	ÈFF	Н
FÍÎΗ		{ æ¢	Ó	FÐFÏ	J	ÈЛН	J	ÈÎI		FĚHÎ	J	FÈ HG	
FÍÎΙ		{ a		⊞∃H	Т	ËÈG	Т	È€Ï	Н	ËĞÍ	G	ÈFF	Н
FÍÎÍ	ÚIÏÎ	{ and	V	FÈÁ Ï	J	ÈÀÏ	J	ÈJΪ	T	FÈFF	Н	FÈFJ	
FÍÎÎ		{ a	_	ΞĤÍ	Ī	ËÈÌ	Ī	Ì€€Ì	Ì	ЩGJ	Ϊ	ÈFI	ì
FÍÎΪ		{ æ¢	Ó	FŒÍÏ	i	<u> </u>	Ť	ÈJΪ	J	FÈHFF	Н	F È FJ	J
FÍ Î Ì		{ a		iii í	J	ËÈÌ	J	È€È	ì	⊞G	G	<u>E</u> FI	ì
FÍ Î J	ÚIÏÏ	{ 28¢	V	ÐΪΙ	J	⊞E€G	Н	ĚÏG	i i	FĚÏF	Н	FÈ€ÎÌ	+ + -
FÍÏ€	0111	{ a	V	È€Î	ì	⊞Ï F	1	È€	ì	⊞ÍG	i i	È€Ï	
FÍÏ F		{ æ¢	Ó	₽ÏI	_	⊞E€G	Н	ĚÏG	J	FĚÏF	H	<u>EE</u> ÎÌ	J
FÍΪG		{ a		BTI	ì	EJÏ F	J	EE€	ì	⊞ÍG	G	<u>E</u> E∏	+ 5
FÍÏH	ÚIÏÌ		V	ÈÏÏ	G	⊞E€G	Н	HÎ	-	БĒÎG		<u>reel</u>	+-
	ULTI	{ æ¢	V			⊞ÌF	Π		J F		J		J
FÍÏI FÍÏÍ		{ a	Ó	<u>€</u> Èïï	F			€ rtuî	<u> </u>	<u>⊞</u> ïG FËÎG	G	<u>È</u> €G	H
		{ æ¢	Ó			⊞E€G	Н	ΗÎ			1 7	Ê€H	+
FÍÏÎ	./ v .	{ a		€ Tri o	F	⊞ÌF	G	€	F	ΞΪÏG	Ī	ÈEG	H
FÍΪΪ	ÚIÏJ	{ æ¢	V	ÊÎG	G	⊞EEG	H	ÈFG	J	GÈH	G	ĔI	
FÍÏÌ		{ a }		€	F	ĦÎÎÎ		,€	F	ÈĴÎ		È€G	F
FĺΪJ		{ æ¢	Ó	ÊÎG		⊞E€G	Н	ÈFG		ĠŢĤ		<u> </u>	G
FÍÌ€		{ a		ͺ€	F	ĦÎÎÎ	G	€	F	ĴĘĴÎ	J	È€G	F
FÍÌ F	ÚIÌ€	{ æ¢	V	ÈΙΗ	G	⊞E€G	Н	ĚΙG		Ġ <u>Ħ</u>	G	<u> </u>	
FÍÌ G		{ a	,	ËŒF	F	⊞ÌIÏ		€	F	È€HÎ		È€G	F
FÍÌ H		{ æ¢	Ó	ÈΙΗ	Ï	ËŒG	Н	ĚIG	G	GÈHEI	Ï	ΪÍĠ	G
FÍÌ I		{ a		ËE€F	F	⊞ÌIÏ	G	€	F	È€HÎ	J	È€G	F
FÍÌÍ	ÚIÌF	{ æ¢	V	FÈ€FÎ	G	ËŒ€G	F	ÈÌG	Ϊ	GÉGJÍ	G	F Ì GÌ	Ï
FÍÌÎ		{ a		ËŒ€G	F	ËFÈEFJ	Ϊ	€	F	€	F	È€€G	F
FĺÌΪ		{ æ¢	Ó	FÈ€FÎ	Ϊ	ËE€G	F	ÉÌG	G	GÉGJÍ	ΙÏ	F È GÌ	G
FÍÌÌ		{ a }		ËE€G	F	ËÈEFJ	G	€	F	€	F	È€€G	F
FÍ Ì J	ÚIÌG	{ æ¢	V	FÈÎJ	G	ËË€G	F	ÈFÎ	G	GÈH€F	G	FÈÍÏ	G
FÍ J€		{ a		ËŒF	F	ËΕΪG	Ϊ	€	F	ËGF	F	È€G	F
FÍJF		{ æ¢	Ó	FÈÎJ	Ϊ	ËE€G	F	ÈFÎ	Ϊ	GÈH€F	Ï	FÈÍÏ	Ϊ
FÍJG		{ a		ËE€F	F	ËÈÏG	G	€	F	⊞GF	F	È€G	F
FÍJH	ÚIÌH	{ æ¢	V	FÉH Ï	G	ËŒG	F	ÌΪ	G	GÈH	G	FË Œ	G
FÍJI		{ a	-	€	ì	ËÈIJ	Ï	€	F	ŒĴÎ	Ī	È€G	F
FÍJÍ		{ æ¢	Ó	FÈH Ï	Ï	ËE€G	F	ÌΪ	Ï	GÌHÍ	Ï	FË Œ	Ť
FÍJÎ		{ a		€	ì	ËH J	G	€	F	ŒĴÎ	J	È€G	F
FÍJÏ	ÚIÌI	{ æ¢	V	FÈÎH	G	⊞€€G	F	FÈHÎ	G	GHI Ï	G	FÐJI	G
FÍJÌ	OTT	{ a	V	€	ì	ËÈÌI	i	€	F	⊞-JI	ī	E€€G	F
FÍJJ		\ 9	Ó	FÈÎH	ï	⊞E€G	F	FÈHÎ	ï	OŒHIÏ	i	FÐJI	ij
FÎ €€		{ a	<u> </u>	€	ì	ËÈÌI	G	€	F	ŒIJ	J	<u>Fb3i</u> E€€G	F
F΀F	ÚIÌÍ	{ æ¢	V	F É GÏ G	1	<u>⊞</u> €€Í	Н	Ë€	J	FĒÍÍ	J	FÈH	J
FÎ €G	ULLI	{ a	V	€	H	ËË EGI H		E€G	Н	<u>F⊞II</u> ∰FH	G	<u></u>	Н
			Ó				J		П	FÊÍÍ	ı	<u>EEEI</u> FÈHÍ	
F΀H		{ æ¢	Ó	FÈGÏ G	J	EEEÉ	Н	Ë€	1		Ï		
F΀	1/11) î	{ a	17	€	<u>H</u> _	ËÈ H	1.1	ÈE€G	H	⊞ FH		<u>Ì€€I</u>	H
F΀Í	ÚIÌÎ	{ æ¢	V	FÈÏ G	1	ŒŒ!	Н	ÊÏÍ	J	FËÏJ	Н	FÉGÏ I	J
F΀Î		{ a }		€	Н	ËË È G	J	ÈE€G	Н	⊞́€Í	G	È€I	Н

	1'114		1,1,10V	i)arc -EMV =	čΑ	1)12*(-0/6* - 2	ŏô	\/-*\fr\fr*	ŏô	OT * I∧ Ã7-3 4	čô		~~~
F΀Ï	Ú æ^	(~~	Ù*¦æ&^ Ó	Ùãt{asFAŠt∙ãa FÈÈÏG	ŠÔ	Ùãt{æ©AX•ãa ####################################	ŠÔ H	Væ`ÁTæçÁŠt∙ãa ĒÈÏÍ	50	_0B;* ^A∑aoåá_ FĒËÏJ	<u>80</u>	X[}ÁTãi^•ÁXÈ FÈGÏI	ESO
F΀Ì		{ æ¢	U		J	ËË G		ETI	- 1	<u>r⊞</u> €Í	Ϋ́	<u> </u>	Н
	ÚIÌÏ	{ a	1/	€ FÉGIÍ	Н	EEE G	-	ĔÍÏ	H	OŒÉGÎ	-		
FÎ €J FÎ F€	ULTI	{ æ¢	V	<u>FEGI</u>	F	ËË Ë H	Н		J F	<u>GE</u> H	H	FÈEG ÈE€I	J
FI F€ FÎ FF		{ a	Ó	FEG Í			J	EE€G EIÍÏ		<u>⊞i⊓</u> GÈGÎ	Н	FÈ€G	Н
		{ æ¢	0	FEGI	J F	ËË Ë H	Н		F	<u>GE</u> H	T T		Н
FÎ FG FÎ FH	ÚIÌÌ	{ a	V	FEG F	<u> </u>		F	<u>È</u> E€G ÈİJÎ		<u>⊞i⊓</u> GEGÌÍ	H	<u>È</u> €I FÈÎF	
	ULTI	{ æ¢ { ā}	V	FEGF	F	EFEGÎ Î		€	J F	<u>GEGI</u> ∐∐ÌF	G	FEIF E€€H	J
FÎ FI FÎ FÍ			Ó	FEG F			J F	€ EtJÎ		<u>⊞ir</u> GEGÌÍ	_	FÈÎF	<u> </u>
Fî Fî		{ æ¢	0	FEGF	J F	EE EE Î	_	€	F	<u>GEGI</u> ∐∐ÌF	H	FEIF E€€H	F
FÎ FÏ	ÚIÌJ	{ a	V	FÈ H	G		ì	Elî	G	<u>⊞ir</u> GEGFÍ	H	FĚÌ	+
FÎ FÌ	ULIJ	{ æ¢	V	<u>F⊞</u> G	F	ËËIG	ï	ETI	ì	⊞GÎ	G	<u>r</u> Œ1	
FÎ FJ		{ a	Ó	FÈ H	Ţ	EEIG EE€	ì	ÈIÎ	+	— <u> </u>	Н	FĚ Ì	G
^		{ æ¢	U	EEG	F	ËËIG	G	ETI	ì	<u>GEGFI</u> ∰GÎ	Π	<u>r</u> Œ1	ì
	ÚI J€	{ a	V	FĚ Ĝ	G	EEEIG	ì	ÈFÍ	G	<u>⊞</u> G GEFI	<u> </u>	FÊJÌ	G
^	UI J€	{ æ¢ { a}	V	EG	Н	ËĚF	ï	EE€H	Н	<u>GEEFI</u> ⊞ÎIÏ	G	<u>FE</u> €Í	ì
FI GG FÎ GH			Ó	FĚ Ĝ	ï	<u> </u>	ì	<u>B</u> FÍ	<u> </u>	<u> </u>	ì	FÊJÌ	+
FÎ G		{ æ¢	U	EG	H	ËĚF	G	EE€H	Н	<u>GEEFI</u> ⊞ÎIÏ	+	<u>FE</u> €Í	
FÎ G	ÚI JF	{ a	V	FÊ J	G	<u> </u>	ì	FEH	G	FÈGH	F	FЀJ	+
FÎ GÎ	UI JF	{ æ¢ { a}	V	 EE€Í	Н	ËĒĴ	ï	EE⊓ EE€H	F	<u></u>	F	E€Ê	F
FÎ GÏ		{ æ¢	Ó	FÊ J	<u> </u>	⊞€F	+	FE€H	두	FÈGH	F	FЀJ	G
FÎ G		{ a	0	<u>⊞</u> €í	Н	ËĒJÎ	G	EEH	F	<u>FEGI</u>		E€€Î	F
FÎ GJ	ÚI JG	{ æ¢	V	F₿IJ		Ė	_	ÈÌÎ	J	FÊÏF	J	FÈÏJ	J
FÎ H€	0130	{ ā	V	⊞JJ	J	ËÈÏ	J	È€Í	Н	EEG Í	G	È€J	Н
FÎ HF		{ æ¢	Ó	<u>шоо</u> FÐIJ	J	Ė	J	ÈÌÎ		FÊÏF	T	FÈÏJ	
FÎ HG		{ a		⊞JJ	ī	ËÐÏ	ı	È€Í	Н	EEG Í	i i	È€J	H
FÎ HH	ÚI JH	{ æ¢	V	OŒE	i i	<u> </u>	G	FEÎ F	J	FÊÎÏ	J	ŒŒ	J
FÎH	01 011	{ a	•	ŒŒG	Н	ËEF	J	ÈE€H	Н	EEG J	G	È€Ï	Н
FÎ HÍ		{ æ¢	Ó	ŒÊ€Î	J	⊞€€I	Ï	FÈÎ F	Ť	FÊÎÏ	ī	GÉ GG	
FÎHÎ		{ a		ËE€G	Н	ËŒ	İ	È€€H	Н	EEG J	Ϊ	È€Ë	Н
FÎΗÏ	ÚI JI	{ æ¢	V	FÈÏG	Ť	ËE€Î	Н	FÈFÍ	J	FÈ€	J	GÈFÏ	J
FÎH		{ a	-	ËE€I	Н	ΗÍĠŦ	J	€	Н	III G	G	È€É	Н
FÎ HJ		{ æ¢	Ó	FÈÏG	J	ËE€Î	Н	FÈFÍ	Т	FÈ€	T	GÈFÏ	I
FÎI€		{ a		ËE€I	Н	HÍĠŦ	1	€	Н	III HGÏ	Ϊ	È€Í	Н
FÎIF	ÚI JÍ	{ æ¢	V	FÈ JG	Т	ËŒ€	ì	FÈ€JÍ	J	FĚÏF	F	GÈ€ÎF	J
FÎIG		{ a		⊞€€Í	Н	ËÈÈ€G	J	€	F	⊞JÏ	Н	È€EI	ì
FÎΙΗ		{ æ¢	Ó	FÈ JG	J	ËE€	Ì	FÈ€JÍ		FĚÏF	F	GÈÉÎF	
FÎII		{ a		⊞€í	Н	ËÈÈ€G	\perp	€	F	⊞ĭJÏ	Н	È€€I	Ì
FÎΙÍ	ÚI JÎ	{ æ¢	V	FÈÏG	1	ËŒ	Ţ	FÈFÍ	J	GÈÉÎI	Н	GÈFÏ	J
FÎIÎ		{ a		⊞€ÉÍ	Н	HÍĠŦ	J	ÈE€G	Н	⊞ì∣	G	È€Í	Ì
FÎΙÏ		{ æ¢	Ó	FÈÏG	J	Œ€	Ì	FÈFÍ		<u>QÊ</u> Î I	Н	<u>QÊ</u> FÏ	1
FÎIÌ		{ a }		ŒŒÍ	Н	HÍĠŦ	\perp	È€G	Н	<u> </u>	Ţ	Ì€€Í	Ì
FÎIJ	ÚI JÏ	{ æ¢	V	ŒFÎ	G	È€F	G	FÈÉÎF	J	<u>GEGÍJ</u>	<u> </u>	QÊF GG	J
FÎÍ€		{ a }		ËEGH	Ï	ËŒĖĠ	Ϊ	È€Í	F	ЩIН	G	Ì€€J	Ì
FÎÍF		{ æ¢	Ó	<u>Ģ</u> ĒFÎ	Ϊ	<u>E</u> F	Ϊ	FŒÎF		ÖEGI 1	<u> </u>	Q ± GG	
FÎ Í G		{ a }		ËEGH	G	ËŒĒĞ	G	È€Í	F	ЩįН	Ï	Ì€€J	ĺ
FĴÍΗ	ÚI JÌ	{ æ¢	V	<u>Ģ</u> ĒFF	G	<u></u> ÉG		FŒFÍ	Ţ_	<u>FËÌI</u>	F	Gŧ€ïì	Ï
FÎÍI		{ a	,	⊞ÉJJ	J	ËŒŢG	1	Œ€Í	1	Щ̈́ĮF	Ĺ	E F	I
FÎÍÍ		{ æ¢	Ó	GEFF		Ė	J	FŒFÍ	Ģ	<u>FËÌI</u>	Ę	GÈEÏÌ	Ğ
FÎÍÎ		{ a		∰JJ		ËŒ	G	È€Í	1	<u> </u>		<u>È</u> F	
FÎÍÏ	ÚI JJ	{ æ¢	V	HĚ FG		ÙG		FÈHFÍ	J	FĚ⊕H	J	HÈJÏ	J
FÎ Í Ì		{ a }		⊞GU	J	ËHĚÍÌ	J	È€FI	Н	⊞GÍ	G	È€GÎ	Н

90) 10				o diriggi					~ .	~	~ .		
A /	Ú æe^		Ù`¦æ&^	Ùãt{æFAŠČ∙ãã		Ùãt{æGÁŽ•ãã		Væ ÁT æ¢ÁŽ•ãa	ŚÔ	OB;* [^AŽtæåá	_ŠÔ_	X[}ÁT_ã^•ÁŽÈ	ÉŠÔ .
FÎÍJ	{	æ¢	Ó	<u>H</u> Ě FG	J	ВĠ	J	FÜHFÍ		FĚ⊕H		HÈJÏ	
FÎ΀	{	ą		⊞igi		ËHĚÍÌ		ŒFI	Н	⊞Ǵ.	Ï	È€GÎ	Н
FÎÎF	ÚÍ €€ {	æ ¢	V	ΟÈΗ̈́	1	<u>⊞</u> FF	Н	FÉGÌ F	J	FÈJÌ	J	ĢĚF	J
FÎ Î G	{	ą		€	Н	ËŒÎH	J	È€Î	Н	ËΘÎ	G	ÈĘFF	Н
FĴĴΗ	{	æ ¢	Ó	ΟÈΗΪ	J	<u>⊞</u> FF	Н	FÉGÌ F		FÈJÌ		QĚF	
FÎÎI	{	ą		€	Η	ËGÈÍH	Ţ	È€Î	Н	EĞ Î	Ï	È€FF	Н
FÎÎÍ	ÚÍ €F {	æ ¢	V	G		Œ€Î	Ì	FÈEJÌ	J	FĚFÍ	J	ŒÈ€J	J
FÎ Î Î	{	ą		ËËŒG	Н	ËGÈ€F	J	ÌŒ€Ḥ	Н	EEG Ï	G	È€Î	Ì
FÎÎΪ	{	æ ¢	Ó	G	J	ŒŒÎ	Ĺ	FÈ€JÌ		F <u>Ě</u> FÍ		ŒÈ€J	Ļ
FÎÎÌ	{	ą		ËE€G	Н	ËGÆF	Ţ	È€H	Н	EEG Ï	Ĩ	È€Î	Ĺ
FÎÎJ	ÚÍ € G {	æ ¢	V	FÈÌÏ	-	ËE€H	Ĺ	FÈ€ÏI	J	FÈĜ	Ĺ	GEH	Į
FÎÏ€	{	ą	,	ËE€Í	Н	ËÈJÎ	Ĵ	€	Н	⊞ŢJŢ	G	È€H	ĺ
FÎ Ï F	{	æ¢	Ó	FÈÌÏ	J	⊞€€H		FÈÏI		FÈ Ĝ	<u> </u>	GŒH	Ļ
FÎ Ï G	{	ą		Œ€Í	Н	ËÈĴÎ		€	Н	∰Jĺ	Ļ	È€H	1
FĴΪH	ÚÍ €H {	æ¢	V	G	Ţ	Ē	G	FÈ€JÌ	J	GÈHGÌ		ŒÈ€ĭ	Ţ
FÎÏI	{	ą		ËΞĒÏÌ		ËŒF	J	È€G	Н	<u>∰</u> 1 ĺ	G	Ì€€Î	1
FÎÏÍ	{	æ ¢	Ó	<u> </u>	J	Ē		FĖŒJÌ		<u>Çİ</u> HĞ	<u> </u>	Œ <u></u> Ě	Ļ
<u>FÎÏÎ</u>	{	ą		<u> </u>	G	ËGÆF		ÈĘ€G	Н	<u>∰</u> 1 I		È€Î	I
FΪΪΪ	ÚÍ € {	æ ¢	V	<u>ĢĒHĪ</u>		Ėįj	G	FEG F	ĺ	Œ <u>F</u> ÎI	F	Q Ě F	Í
FÎÏÌ	{	ą	,	<u> </u>		ĒĢĖÍH	J	Œ€Î		Η̈́Î		ÈFF	I
FĴŢJ	{	æ ¢	Ó	<u>G</u> È H	J	ÈÎ		<u>FÉGÌ F</u>	Ļ	GŒĴI	F	ĢĚF	
FÎÌ€	{	ą		<u>⊞</u> ïH	G	<u>EG</u> É Í H		È€Î		ĦÎÎ		ÈFF	
FÎÌF	ÚÍ € {	æ¢	V	HĚ FG	ļ	<u>FÈÌÎ</u>	G	FÈF	Ţ	GÉFI		HÈJÏ	J
FÎÌG	{	ą		<u>ËÈJÍ</u>		<u>ËHĚ ()</u>	Ĵ	È€J		⊞H_	G	ÈFÎ	
FÎÌH	{	æ¢	Ó	HĚ FG	J	<u>FÈÌÎ</u>		FÈF	ļ	GÉFI	Ļ	HÈJÏ	
FÎÌI	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ą		ËÈJÍ	G	<u>Ë</u> LĚÍÌ		È€J		⊞H ————————————————————————————————————		ÈFÎ	
FÎÌÍ	ÚÍ €Î {	æ¢	V	<u>Œ</u>	ļ	<u> </u>	Н	FÈÏÍ	Ţ	FÈÎ F	J	ŒÚ	J
FÎÌÎ	{	ą	<u> </u>	<u>È</u> FÎ	1	ËŒË	J	<u>E</u> FÌ		<u> </u>	G	ÈH .	
FÎÌÏ	{	æ¢	Ó	Ğ <u>Ç</u>	Ţ	<u> </u>	Н	FÈÏÍ		FÈÎ F	l l	ŒÚ	
FÎÌÌ	111 6	ą	.,	<u>È</u> FÎ	<u> </u>	ËŒË	ļ	<u>È</u> FÌ	<u> </u>	ΞÌΊ	<u> </u>	<u>E</u> H	1
FÎÌJ	ÚÍ €Ï {	æ¢	V	<u>FËJÏ</u>	ļ	ËŒÌ		FÈH	J	F È GÎ	J	FÈIJ	J
FÎJ€	{	ą	<u> </u>	È€H	<u> </u>	ËÈFG	J	È€Í		⊞UI	G	È€J	+
FÎ JF	{	æ¢	Ó	FË JÏ	J	ËŒÌ	1	FÈH	l ì	F È GÎ	ļ.	FÈIJ	1
FÎ JG	\(\lambda(\)	ą	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<u>Ì</u> E€H		ËÈFG	ì	È€Í	+	⊞UI	+	È€J	++-
FÎ JH	ÚÍ €Ì {	æ¢	V	<u>FÈÌÏ</u>		ËEE		ÈG	J	FÈGI	J	FĚÏ	J
FÎ JI	{	ą	<u> </u>	€ 	F	ËÈJÎ	J	È€G	-	⊞GGH	G	ÈEEI EŘII	++-
FÎ JÍ	{	æ¢	Ó	FÈÌÏ	7	ËEEI EEÈ 1Î		ÈG		FÈ GJ	ı ı	FĚÏÏ	+
FÎ JÎ	l'il Cl	ą	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	€	F	ËÈJÎ	<u> </u>	ÈE€G	-	EÈ VÍ	Ļ	È€I	+-
FÎ JÏ	ÚÍ €J {	æ¢	V	<u>FÈÍI</u> Ë∃Ï	l ï	E∃I EFÈÎG	G	<u>Ē</u> J È€€F	J F	<u>FÐJÍ</u> ∰aï		FĚ G	J
FÎ JÌ	1	ą ~	Ó	FÈÍI		EIIG E	J	ĒJ	<u> </u>		G	<u>È</u> €H FÉ G	
FÎ JJ FÏ €€	1	æ¢ a}	U	<u></u>	J	ËÈÎG		<u>E</u> J E€€F	F	<u>FÐJÍ</u> ∰	i i		
FÏ€F	ÚÍ F€ {		V	FÈÌÏ	<u> </u>	E H	G	ÈG		GEHG	+	<u>È</u> €H FĚÏÏ	+-
FÏ €G	UI F€ {	æ¢ a}	V		ï	ËÌ			J F	EÍÍ	G	EEI	J F
FÏ €H	1		Ó	FÈÌÏ	-	E) H	J	ÉE€H ÈG	-	GÈHGÌ	ì	FĚÏÏ	
FÏ€H	1	æ¢ a}	U		G	ËH		<u>#</u> G	F	EÍÍ	 	FŒTI	F
Fï €Í	ÚÍ FF {		V	FËJÏ	J	EÜÎ	G	FEH		<u>d€ii</u> GEGFÎ	F	FÈIJ	
Fï€Î	UI FF {	æ¢ a}	V	<u>F⊞</u> G	ï	ËFÈFG	J	FŒH Œ€Í	J	⊞ FÍ	H	F⊞IJ	J
FÏ €Ï	1		Ó	FËJÏ	J	EÏÎ	ï	FEHF		<u>⊞</u> ri GEGFÎ	F	FÈIJ	
FÏ €Ì	1	æ¢ a}	U	<u>r⊞</u> Ji ⊞∃ G	G	ËËF		<u>rŒr</u> Œ €Í		<u>Ge</u> FÍ		<u>r⊟ij</u>	
FÏ€J	ÚÍ FG {	<u>4</u> æ¢	V	<u></u> GE	ı	ĤJ	G	FÈÏÍ	J	G ÏH Î	F	ŒŨÍ	J
FÏ F€	or i g	ā	V	<u>⊞</u> HJ	Ï	EGECHI TIN J	J	EFH	ì	ΞΪÍ		EEGG	1
1116	ì	9		шП		ושטו	J			ш		12.00	

	l'Ilan		Ù`¦æ&^	Ùãi{æFÁX.∙ãa	ŠÔ	1)121	čΛ	Væ`ÁTæçÁŽ•ãã	čô	OT * IA 177~ 4	čô	X[}ÁTã^•ÁŽÈ	
FÏ FF	Ú æ^	(cont	Q : sax.	Ua{æ+A∆.•aa GÈGË	J	∪a{æe—x∆∙æa ÈHÎJ	<u>50</u>	væ AiæçA∆.•aa. FÈÈÏÍ	<u>so</u>	OB;* ^ÆŽæåá GÈHĤ	<u>so</u>	X[}Alan And B	<u> </u>
FÏ FG		{ æ¢ { ā}	0	— GEG	G	EGECHI ETI J	<u> </u>	FŒII E FH	ì	⊞í	<u> </u>	EEGG	+
FÏ FH	ÚÍ FH	{ eac	V	FEG	J	ÈHH	<u></u> 	ÈIÏ	J	Шı ÈJÎ	+	FE€JJ	J
FÏFI	UI FH	{ a	V	<u> </u>	J	EFÈÌÌ	J	ŒFÍ	ì	⊞HG		E€GÎ	ì
FÏFÍ			Ó	F E GÖ	-	<u>EHH</u>	+	ÈlÏ	-	шns	G	FE€JJ	
FÏFÎ		{ æ¢ { ā}	0	<u> </u>	J	EFÈÌÌ	<u></u> 	ŒFÍ	ì	⊞HG	J	EEGÎ	+
FÏFÏ	ÚÍ FI	{ æ¢	V	Шıı	J	<u>⊞</u> EEÏ	ì	<u>Ě</u> FÍ	J	<u>⊞⊓G</u> FÈÉÎÏ	ï	ÈÏÎ	J
FÏFÌ	OI FI	{ a	V	<u>E</u> SÎ	ì	ËFF	J	ŒFÎ	ì	EII ∐∐IÍ		EFF	ì
FÏFJ		{ æ¢	Ó	ÈJÎ	J	— ⊞FF	ì	ĚFÍ	+	<u>⊞ii</u> FÈ€ÎÏ	G	<u>Err</u> Biî	
FÏ Œ		{ a	0	<u>E</u> SÎ	ì	ËFF	+	ŒFÎ	ì	EIÍ	J	EFF	+
FÏ Œ	ÚÍ FÍ		V	<u>B</u> Ì	+	€	G	ĚlÎ	J	FÈHÍ I	Ï	FEII	J
FÏ Œ	OI FI	{ æ¢ { ā}	V	EE€G	ì	⊞) J	J	ŒH	ì			E€Í	ì
FÏ GH			Ó	<u>EE</u> G	J	€	<u> </u>	ĚlÎ	+	FÈHÍ I	G	FEI	
FÏG		{ æ¢ { ā}	0	EE€G	ì	⊞ì J	+	θ	ì		J	EEI	+
FÏG	ÚÍ FÎ		V	<u>EEEG</u>	+	È	G	ÈÌ	J	FÈ JÏ	ì	ΒίΪ	J
FÏĜ	OI FI	{ æ¢ { ā}	V		+	E) (I	J	ÈE€G	ì	 EE€Î	G	EE€H	ì
FÏGÏ		{ æ¢	Ó	<u> </u>	J	È	ï	ÈÌ	+	FÈ JÏ	ì	ΒίΪ	++-
FÏĠ		{ a	0		G	E)(I	+	E€€G	ì	<u>r⊞</u>	i i	EE€H	+
FÏ GJ	ÚÍ FÏ	{ æ¢	V		ı	EÏF	G	ĚIÎ	+	GEGÏ F	+	FŒII	J
FÏ H€	OI FI	{ a	V		ï	E) J	J	ŒH	J ì	<u>GG</u> FÎ		FŒI	1
FÏHF		{ æ¢	Ó	<u>B</u> j	J	<u>щі</u> ў	ï	ĚlÎ	+	GEG F	+	FŒII	++-
FÏ HG		{ a	0	— □i	G		+	Œ€H	ì	<u>EG</u> FÎ	J	EEÎ	+
FÏHH	ÚÍ FÌ	{ æ¢	V	Ε̈́JÎ	ī	ÈFG	G	ĚFÍ	J	GEG	F	ÐΪÎ	J
FÏH	OLLI	{ a	V	<u>⊞€</u> JJ	+	⊞FF	J	E€Î	ì	⊞ÏI		E€F	ì
FÏ HÍ		{ æ¢	Ó	<u>шелл</u>	J	ÈFG	ï	ĚFÍ	+	GEG	F		+ +
FÏHÎ		{ a		⊞€JJ	G	⊞FF	+	È€Î	ì	<u> </u>		È€F	
FÏ HÏ	ÚÍ FJ	{ æ¢	V	F É GÖ	J	ÈÏ	÷	ÈIÏ	J	OÈHOG	J	FEJJ	J
FÏ HÌ	0110	{ a	V	— i iiii	G	ËÈÌÌ	÷	ÈEFG	ì	⊞ÎF	Ϊ	È€GF	Ť
FÏ HJ		{ æ¢	Ó	FĚGÖ	ī	ÈÏ	G	ÈIÏ	i	GÈHGG	Ħ	FÈ€JJ	Ti-
FÏI€		{ ā		⊞ì í	Ė	萨萨ìì	J	ÈEFG	ì	⊞ÎF	G	ÈEGF	† †
FÜLF	ÚÍ Œ	{ æ¢	V	ĚlÎ	J	⊞€€Í	ì	Ė	i	FÈĤ F	J	ĚÍH	Til.
FΪΙG	<u> </u>	{ a		È€J	ì	Η̈́ΙÍ	Ť	È€Ï	ì	iii GJ	G	EFH	
FΪΙΗ		{ æ¢	Ó	ĚlÎ	Ť	ËE€Í	Ť	Ė	J	F È Ĥ F	Ť	ĚÍH	J
FÏII		{ a	_	È€J	ì	ËΙÍ	J	Ì € €Ï	ì	⊞GJ	ΪÏ	È€FH	ì
FΪΙÍ	ÚÍ Œ	{ æ¢	V	ÈGΗ	J	ËE€Í	ì	ÈĞ	J	FÉĞÏÍ	ΪÏ	ÈG	J
FΪΙÎ		{ a		È€Ï	Ì	Ë⊞HF	J	È€Î	ì	⊞EÎ	Т	È€FF	ì
FΪΙΪ		{ æ¢	Ó	ÈGΗ	Т	ËŒ€Í	ì	ÈĠÏ	П	FÈĠÏÍ	G	ÈG	
FΪΙÌ		{ a		Œ€Ï	ì	ËHF		È€Î	ì	⊞€Î	J	È€FF	ì
FΪΙJ	ÚÍ Œ	{ æ¢	V	ÈΪΗ	I	È Ì	G	ĖΞΗ	J	F È HÎ G	Ï	ÈÏF	J
FÏÍ€		{ a		⊞ÉÉÍH	Ϊ	⊞ÌF	J	È€€H	ì	⊞HGF	T	È€€Í	ì
FΪÍF		{ æ¢	Ó	ÈΪΗ	J	È€ÎÌ	Ϊ	HĐÌ	Т	F È HÎ G	G	ÈÏF	
FÏ Í G		{ a		⊞ÉÉÍH	G	⊞ÌF		È€H	ì	⊞HGF	J	È€É	ì
FΪÍΗ	ÚÍ GH	{ æ¢	V	ĚΙΪ	ı	ŒIJ	G	ÈĠÌ	J	FÈÍÎ	ì	ĚH	J
FΪÍΙ		{ a		⊞€JG	Ϊ	⊞ÍG	J	È€F	ì	€		È€G	ì
FΪÍÍ		{ æ¢	Ó	ĚΙΪ	J	È€JI	Ϊ	ÉĠÌ		FÈÍÎ	<u> </u>	ĚII	
FÏÍÎ		{ a		ËŒJG	G	⊞ÍG	\mathbf{I}	È€F	Ì	€	J	ÈE€G	ì
FΪÍΪ	ÚÍ G	{ æ¢	V	ÈΪΗ	I	ÈFH	G	HEE	J	GÉGÍ I	ì	ÈÏF	J
FΪĺÌ		{ a		⊞EÏ	Ϊ	⊞ÌF	J	È€	ì	ÈHGF		È€Î	ì
FΪÍJ		{ æ¢	Ó	ÈÏH	J	ÈFH	Ϊ	ΕĠΗ		GÉGÎ I	ì	ÈÏF	
FÏ΀		{ a		ËF€Ï	G	ËÌF	1	È€€	Ì	ÈHGF	J	È€Î	Ì
FÏÎF	ÚÍ Œ	{ æ¢	V	ÈŒΗ	J	È€F	G	ÈĠ	Į	GÈHG	F	ÈG	Į
FΪÎG		{ a }		È€Ë	Î	∰HF	J	È€€Î	İ	⊞̈́GÌ	ĺ	È€FF	ĺ

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SO 7	X[}ÁΤ <u>ã</u> ^•ÁŽÈ	ĒŠÕ .
	F		
		EG	Į į
		₽₽FF	
FÏĴÍ ÚÍ GÎ {æ¢ V LĚIĴ J LÈHG Ï LEĴ I FLĒĴF	J	<u>Ě</u> ÍH	Į
FÏĴĴ	Н	ŒFH	
FÏĴÏ {æ¢ Ó LĚIĴ I LĚEHG G LÉGÌ J FLĚÌF		ĚÍΗ	Į
FÏĴÌ {ã HẾFÌ Ï HẾIÍ J ÈE€Ï Ì HẾ FẬ	H	ÈFH	İ
FÏĴJÚÍ€€Œ {æ¢ V È€GĴ J È€€ J È€GḤ Ị GÈÈÌĴ	İ	<u>È</u> EIH	
FÏÏ€ {ã; RE€Í Ì EÊEÍ Ì ÈEÏJ	Ĵ	ÈF	İ
FÏÏF {æ¢ Ó BÈEGÎ BÈE€I BÈEGH J GHÈTÌÎ	İ	<u>È</u> EIH	J
FÏÏG {ā} BE€Í Ì EBE J BE€Í Ì ÈLÏJ		<u>E</u> F	İ
FÏÏH ÚÍ FHÓ {æ¢ V BEÍF J EËEE J BEĞ J FÜEJÍ		<u>È</u> ÉÍ H	J
FÏÏI {ã	J	ŒFH	Ï
FÏÏÍ {æ¢ Ó BÉÍF I BÉGÏ I FÉÌJÍ	J	<u>È</u> ÉÍ H	
FÏÏÎ {ã	1	ŒFH	G
FÏÏÏ ÚÍ GÍ Ó {æ¢ V ÈEHJ JËËE€G Ì ÈEG J GÈEÌI	Ï	<u>Ē</u> I	J
FÎÎÎ { â} ÊÊEF Î ÊÊHG ÊEEG Î ÊSJ	J	È€I	Ì
FÏÏJ {æ¢ Ó ÈEHJ ÊÊEG ÈEG QÈÈI	G	<u><u> È</u> I</u>	I
FÎÌ€ {ã ÉÉEF G ÉÉHG J ÉE€G Ì ÉSIJ		Œ€l	Ì
FÏÌF ÚÍHJŒ {æ¢ V ÈEH G ÈE€F G ÈEFÏ J FÈÌHH	Ï	<u>È</u> HF	J
FÏÌG {ã; È€F Ï ÊÊFJ Ï ÈE€G Ì ÈEÏJ	Н	È€Í	Ì
FÏÌH {æ¢ Ó ÈEH Ï ÈE€F Ï ÈEFÏ I FÈÌHH	G	ÈHF	1
FÏÌI {ã ÈE€F G ËË€FJ G ÈE€G Ì ÈEÏJ	H	È€Í	Ì
FÏÌÍ ÚÍÍGŒ {æ¢ V ÈEH G ÈEF G ÈEFÎ G FÈÐJF	Ï	<u>È</u> HH	G
FÏÌÎ {ã ÈE€F Ï ËE€H Ì ËE€G	H	È€Î	Ì
FÏÌÏ {æ¢ Ó ÈEH Ï ÈE€F Ï ÈEFÎ Ï FÜÐJF	G	ÈEHH	Ϊ
FÏÌÌ { ĝ ÈE€F G ÉE€H Ì ÉE€G	H	È€Î	ì
FÏÌJ ÚÍÎÍŒ {æ¢ V ÈEGJ G € Ì ÈEFÏ J GÈEJÌ	Ï	È€HF	J
FÏJ€ { ĝ ÈE€Í Ï ËE€G Î ËE€G Î	J	È€Í	ì
FÏJF {æ¢ Ó ÈEGJ Ï € Ì ÈEFÏ I GÈEJÌ	G	È€HF	I
FÏJG { ∄		È€Í	ì
FÏJH ÚÍÏÌŒ {æ¢ V ÈEHJ J ËÈEG Ì ÈEG J FÈHÍÍ		È	J
FÏJI { ĝ ÈE€H H ËËÐHG I ÈE€H Ì ËËÏFÌ	ΙÏ	È€E	ì
FÏJÍ {æ¢ Ó ÈEHJ I ËËŒG Ì ÈEG I FÈHÍÍ	J	È	I
FÏJÎ { ĝi ÈE€H H ËË€HG J ÈE€H Ì ËËÏFÌ	G	È€E	ì
FÏJÏ ÚÍJFŒ {æ¢ V BÉÍF J ÉÉE J BÉEÏ J BÉEĞ J GÂÈTHÌ	ì	ÈÉÍH	J
FÏJÌ {ã ÉÉÉH G ÉÉÉ Ì ÉÉÌJ	Ϊ	È€FI	ì
FÏJJ { æ¢ Ó BÉÍF I ÉÉE I BÉGÏ I GÀÈHÌ	ì	ÈÉÍH	1
FÌ€€ {ã ÉÉEH Ï ÉÉÉG J ÉÉEÌ Ì ÉÉÌJ	G	ŒFI	Ì
FÌ€F Ú΀ICE {æ¢ V ÈEGÎ J ÈE€Î Ï ÈEGH I FÈEGG		ÈΕΙΗ	I
FÌ€G { 引	Ϊ	È€F	ì
FÌ€H {æ¢ Ó ÈEGÎ ÈE€Î G ÈEGH J FÈEGG	J	<u>È</u> ∃ H	J
FÌ€I { ĝ ÈE€Í Ï ÈE€Î Ì ÈEÉÎ Ì ÈEÉÎ	G	È€F	ì
FÌ€Í ÚÎFÏŒ {æ¢ V ÈEIG J ËËEFG Ì ÈEGÌ I GÈEHJ	J	ÈÉÍÍ	1
F̀Π{ã ÉÉEF G ÉÉEÍ Ì ÉÉIÎ		ÈFH	ì
FÌ€Ï {æ¢ Ó ÈEIG I ËËEFG Ì ÈEGÌ J GÈEHJ		ÈÍÍ	J
FÌ€Ì {ã; ËËEEF Ï ËËEÍH J ÈEEÏ Ì ËÏIÎ	J	ÈFH	Ì
FÌ€J ÚÎFÌ {æ¢ V ÈEÍÎ J ËËEG Ì ÈEIH J GÈEĴÎ	G	ÈÏÎ	J
FÌF€ { ā ÉÉFG ÉÉFG ÉÉFG ÉFÍÍ	1	ÈEGG	Ì
FÌFF { asc Ó BÉÍ I BÉG Ì BÉIH I GEGÌ Î	Ϊ	ÈÏÎ	I
FÌFG { a	J	ÈEGG	Ì
FÌFH ÚÎFJ {æx V ÈEIG J ËËEFG Ï ÈEGÌ I GÈÈHFÌ	G	ÈÍÍ	I
FÌFI { a		ÈFI	ì

	1/11 .	_	ı`ı×ı oa		šô	ù * (OF *	ŏô	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	šô	OT * IA ÉT * ′	ŏô	\(\(\) \(\) \(\) \(\) \(\) \(\) \(\) \(** šš
Fì FÍ	Ú æ^	(Ù*¦æ&^ Ó	Ùãt{æFÁXt∙ãa ÈEIG	ŠÔ	Ùãt{æ⊖Ãi∙ãa ⊞d FG	G	Væ`ÁTæ¢ÁŽ•ãa Èccì		OB;* ^ÆŽæåá GÈHFÌ	<u> 50</u>	X[}ÁTãr^•ÁXÈ ÈEÍÍ	±80
FÌFÎ		{ æ¢	U		7	<u>⊞</u> H		EEGÌ EE€Ï	J ì	<u>GH</u> FI	-		ì
	ÚÎ Œ	{ a	1/	€ E ÉÍÎ	<u> </u>	<u>⊞</u> GF	J		-	<u>шіі</u> FÈÌG	J	<u>È</u> EFI ÈEÏÎ	
FÌ FÏ	UI Œ	{ æ¢	V		J			È H	J G	FEI G	J		J
FÌ FÌ		{ a	Á		G	⊞É G	ì	È€	G	<u>⊞</u> il FÈÌG		<u>È</u> EG ÈEÏÎ	G
FÌ FJ		{ æ¢	Ó	ÈÍÎ	<u> </u>	EEGF FFG 0		ÈEI H	<u> </u>		1		<u> </u>
FÌ Œ	ı'ıî o r	{ a	\ /	EFF C	+	⊞É G	J	ÈE€I	-		J	È€G	
FÌ Œ	ÚÎ Œ	{ æ¢	V	È G	J	€	G	ÈHF	J	FÉG	J	È Í	J
FÌ Œ		{ a	Á	È€€	+	<u>⊞a</u> -U	ı,	È€€	+	⊞Ğ	G	ÈE€Ì	-
FÌ GH		{ æ¢	Ó	È G	 	€		ÈHF	1	FÈG	ļ.	È Í	1
FÌ G	ı'ıî 🕿	{ a	\ /	È€€	<u> </u>	É U	J	È€	4	⊞ĞG		È€È	
FÌ GÍ	<u>ÚÎ Œ</u>	{ æ¢	V	ÈEGÏ	J	ÈFF	G	ÈEGH	J	GÈ€Ï	G	È	J
FÌ GÎ		{ a	<u> </u>	<u>⊞eeí</u>	<u> </u>	ŒG	l l	ÈE€G	-	È€G	l l	È€H	
FÌ GÏ		{ æ¢	Ó	ÈEGÏ		ÈFF	1	ÈEGH	1	GÈ€Ï	Ц.	È	1
FÌ GÌ	./	{ a	.,	Œ€Í	G	ŒG	J	ÈE€G		È€G	Ţ	È€H	
FÌ GJ	ÚÎ GH	{ æ¢	V	<u>È</u> H	G	È€Ï	G	È€FÎ	J	GEEGU	1	ÈHF	G
FÌ H€		{ a	<u> </u>	ËE€H	<u> </u>	<u>⊞</u> H	ı l	€	F	€	Ļ	È€€G	
FÌ HF		{ æ¢	Ó	<u>È</u> H		È€Ï		ÈFÎ		GEEGU	Ц.	ÈHF	
FÌ HG	./.^	{ a		ŒŒH	G	É H	G	€	F	€	J	È€G	
FÌ HH	ÚÎ G	{ æ¢	V	<u>È</u> HF	G	È€H	G	ÈEGH	J	<u>G</u> H	F	È	J
FÌ H		{ a }	1	<u>⊞ee</u> l		⊞EGÍ		ÈE€G	Н	<u> </u>		È€I	H
FÌHÍ		{ æ¢	Ó	<u>È</u> HF	<u> </u>	È€H		ŒGH		<u>Ģ</u> H	F	È	
FÌHÎ	/A -/	{ a		<u>⊞ee</u> l	G	ŒĠ	G	ÈE€G	Н	<u> </u>		È€	Н
FÌ HÏ	ÚÎ Œ	{ æ¢	V	<u>E</u> I G	Ţ	<u>⊞</u> EEH	G	EHF	Ĵ	GÈI G	G	<u>È</u> Í (Į
FÌHÌ		{ a	,	ËE€Ï		<u>⊞</u> U	<u> </u>	Œ€F		Η̈́ÎΪ	H	È€Ì	
FÌ HJ		{ æ¢	Ó	<u>j€</u> l G		ŒH		ÆHF		<u>Ģ</u> ĖJ G	Ш	<u>Œ</u> Í (
FÌI€		{ a		ËÈ€Ï	G	<u> </u>	ĺ	Æ€F	G	Щ̈́ÎÏ	Н	Ì€€Ì	
FÌIF	ÚÎ Ĝ	{ and	V	ÈG	Ĺ	Œ€í		EGI I	Ļ	ŒĘJH	ĺ	ÈÎG	
FÌ I G		{ a	,	È€G		∰Ġ	Ĺ	Æ€H		ĖΉ		È€Î	I
FÌIH		{ æ¢	Ó	ÈG	Ļ	Œ€í		EGI I	Ĺ	ŒĘJH	Ļ	ÈÎG	Į
FÌII	/A "	{ a		È€G		⊞̈́G	J	Œ€H		ĖΉ		È€Î	I
FİIİ	ÚÎ Ğ	{ æ¢	V	ĚÌ	J	<u>E</u> GÍ H		Ėì į́	Ļ	Q È I F	J	<u>Ě</u> FJ	Ļ
FÌIÎ		{ a	,	ŒÛĤ	G	ΨJI		Œ€Ï		ĖΗ	G	ÈFH	I
FÜÜ		{ æ¢	Ó	ĚÌ	<u> </u>	EĞİ H	G	ĖÌĹ	Ĺ	Q È I F	<u> </u>	<u>Ě</u> FJ	Į
FÌIÌ	/A	{ a		<u> </u>		ÄΊ	J	È€Ë	<u> </u>	ĖΗ		ÈĘFH	l l
FÌJ	ÚÎ GÌ	{ æ¢	V	<u>F</u> ĖÍÌ	G	ÊÛ	G	ĚÎÏ	Ļ	<u>FÈÏÎ</u>	J	FÉG	Ļ
FÌÍ€		{ a	,	⊞ǴH	Ţ	(美)	ļ	Ĵ <u>€</u> €Ĵ		⊞GG	G	ÈĘĘį̂	I
FÌÍF		{ æ¢	Ó	<u>F</u> ÉÍÌ		Ê		ĚÎÏ	Ģ	<u>FÈÏÎ</u>	<u> </u>	FÈÌ	Ğ
FÌ Í G		{ a		ŒGH	G		G	Æ€J		⊞gg		E FÎ	
FÌ Í H	<u>ÚÎ GJ</u>	{ æ¢	V	ËΪĮ		ÈÏF		ĖΘ	Ĺ	<u>FÊIÌ</u>	<u> </u>	ÈÍ	Į
FÌÍI		{ a	,	<u></u>	J	ËEEGG	J	ŒFF		<u> </u>		È€FJ	I
FÌÍÍ		{ æ¢	Ó	ijλį	J	ÈÏF	J	Ėω	Ţ	FÊIÌ	J	ÌĠ	Į į
FÌÍÎ	/ A	{ a }		∰Î I		ËEEGG		ŒFF		ŒijijĠÏ	G	È€FJ	1
FÌÍÏ	ÚÎ H€	{ æ¢	V	ĚÌ	J	ÉGIÍ	J	Ėĺ	Ļ	GÈHI		<u>Ě</u> FJ	Į į
FÌÍÌ		{ a	,	⊞gg	-	∰Jj		Œ€Ì	İ	ËÏF	J	È€FI	İ
FÌÍJ		{ æ¢	Ó	ĚÌ		<u>Ē</u> JÍ	1	<u>Ē</u> Ì į	Į	GÈII	G	<u>Ě</u> FJ	J
FÌ΀	/ A	{ a }		⊞EGG	J	∰Jļ	Į	Œ€Ì	İ	ËŬF		È€FI	İ
FÌÎF	ÚÎ HF	{ æ¢	V	ÈG	Ų	Œ€í	İ	EGI I	Ļ	FÈÏ	H	ÈÎG	Ļ
FÌ Î G		{ a	_	È€G	Ì	⊞G		È€E	Ì	⊞ÏÏ	Ï	È€Î	Ì
FÌ Î H		{ æ¢	Ó	ÈG		Œ€Í	Ì	l Đị	J	FÈÏ	Н	ÈÎG	J
FÌĴŢ		{ }		È€G	Ì	ÜG	J	È€€I	Ì	ЩÏÏ	G	È€Î	Ì
FÌÎÍ	ÚÎ HG	{ æ¢	V	FÈ€ÎÏ	-1	È∭	1	Ěĺ	J	FÈÍ F	J	FÈE	J
FÌÎÎ		{ a		lle fí	J	ËÈFÍ	J	È€GÍ	Ì	⊞FG	G	ÈΕΙΗ	Ì

	l'Ilaan		۱٬۱۲۱ مـ۵۸	Ùãi{æFÁX.∙ãa	ŠÔ	Ùãi{æĐÃŽ•ãã	čô	VaěÁTaq¢ÁŽ•ãa	čô	OT * IA Ã7~~ 4	čô	X[}ÁTãi^•ÁŽÈ	~~~
FÌÎÏ	Ú æ²^	(~~	Ù*¦æ&^ Ó	∪a{æ-A∆.∙aa FÈEÎÏ		∪a {ae—ax.•aa È€IÏ		væ AiæçA∆.•æa ĚÍ	50	_OB;* ^AŽanåá FBÈÍF	<u> 50</u>	X[}Alan•A∆⊞ FÈE	±30
FÌÎÌ		{ æ¢ { ā}	0		J	ËĖĖ	J	Œſ	+	<u>r⊞ir</u> ∰FG	i i	E H	+
FÌÎJ	ÚÎ H	{ æ¢	V	ËJJ	-	<u>⊞</u> EFG	ì	ÈÌÎ	J	<u> </u>	J	ЀÎ	J
FÌÏ€	UI ITTI	{ a	V	<u>E</u> 33	<u> </u>	⊞GG	J	Œ€J	ì	<u>rtoeu</u> ⊞ÌÏ	G	ŒFÍ	ì
FÌÏF			Ó	ËJJ	J	⊞ GG	ì	ÈÌÌ	+	<u> </u>	ı	ЀÎ	
FÌ Ï G		{ æ¢ { ā}	0	<u>E</u> 33	ì	⊞GG	1	ŒII	ì	<u>rese</u>	i i	ŒFÍ	1
FÌÏH	ÚÎ H	{ æ¢	V	È	-	<u>⊞GS</u>	ì	ÈÚ J	J	<u>шіі</u> FÈ€Î	J	ETI ETI	J
FÌÏI	υп	{ a	V	ÈE€G	ì	⊞€J	J	E⊞J	ì	<u> </u>	G	Œſ	ì
FÌÏÍ		{ æ¢	Ó	È	J	<u>⊞€</u> Í	ì	ÈÚ J	+	<u> </u>	ı	ĒΪ	
FÌÏÎ		{ a	0	ÈE€G	ì	⊞€J	1	EE€	ì	<u>r∎</u> HÍ	ï	ŒI	ì
FÌÏÏ	ÚÎ H	{ æ¢	V	ĚÍÍ	+	<u>⊞</u> €	G	ÈG	J	FÐJJ	+	Ê€J	J
FÌÏÌ	υп	{ a	V	EII	ï	⊞ÍJ	J	€	F	<u></u> HH	G	EE€G	F
FÌÏJ			Ó	ĚÍÍ	J	<u>⊞</u> IJ	ï	ÈHGÍ	<u> </u>	FÐJJ	ì	Ê€J	
FÌÌ€		{ æ¢ { ā}	0	EII	G	⊞ÍJ		€	F	<u> </u>	ï	EE€G	F
FÌÌF	ÚÎ HÎ		V	Ê	ı	<u>⊞</u> IJ	G	ÈHÍJ		GEGI Ì	+	ĒΪ	_
FÌ Ì G	OFF	{ æ¢ { ā}	V	 Œ€iJ	+	⊞€J	J	EE€	J H	<u>GG</u> H	G	EE€Ì	J
FÌ Ì H		{ æ¢	Ó	È	J	E∏ J	ï	ÈÚ J		GEGI Ì	ì	ĒΪ	
FÌÌI		{ a	0	 Œ€iJ	G	⊞€J	1	EE€	Н	<u>GG</u> I ŒHÌ	+	EE€Ì	Н
FÌÌÍ	ÚÎ H		V	<u>⊞</u> J	G	<u>⊞</u> €J	G	ÈÌÎ	J	GÊGÎÎ	+	ЀÎ	J
FÌÌÎ	υп	{ æ¢ { ā}	V		ï		ï	ŒU	ì	<u>GG</u> I	G	<u></u>	ì
FÌÌÏ		{ æ¢	Ó	ÈСН	÷	<u>ш</u> п	÷	ÈÌÌ	+	<u>πel</u>	ì	ЀÎ	+
FÌÌÌ		{ ā	0	<u> </u>	G		G	E€€J	<u> </u>	<u>GG</u> 1	+	EFÎ	1
FÌÌJ	ÚÎ H	{ æ¢	V	FEG	G	ШIJ	G	ĚÍ	J	G ÌH Í	F	FÈIÍ	+
FÌ J€	OFF	{ ā	V	⊞GG	ï	ËËËF	ï	ÈEGH	ì	⊞ÌG		<u>I</u>	1
FÌJF		{ æ¢	Ó	FEGU	÷	ÈH J	+	ĚÍ	+	G ÌH Í	F	FÈIÍ	G
FÌ JG		{ a		⊞GG	G	ËËËF	G	ÈEGH	ì	⊞ÌG		<u>I</u> EI	ì
FÌJH	ÚÎ HJ	{ æ¢	V	<u>ш</u> Б	J	ÈÏÏ	J	EGTI EGFÌ	J	<u>щго</u> ÈН	÷	ĚlÎ	J
FÌJI	OLID	{ a	V	⊞JÎ	ī	Η̈́ΪΗ	ı	<u>E</u> FÎ	ì	⊞G		ÈEGÌ	ì
FÌJÍ		{ æ¢	Ó	ÊFH	i	ÈÏÏ	i	ÈÈFÌ	i	ĚН	G	ĚIÎ	Ti-
FÌJÎ		{ a		<u>⊞</u> JÎ	J	Η̈́ΪΗ	J	ÈFÎ		⊞G	J	È€GÌ	
FÌ JÏ	ÚÎΙ€	{ æ¢	V	ÈGG	ī	iiieۓ	ì	EG Ï	J	FÈ€€	ì	ĚG	J
FÌJÌ	OI I C	{ a		<u>E</u> F	i	⊞I	J	È€J	ì	<u> </u>	G	ÈFÎ	ì
FÌ JJ		{ æ¢	Ó	ÈGG	J	<u>⊞</u> €	ì	EG Ï	i	FÈ€€	ĭ	ĚG	Ti-
FJ€€		{ a		ÈF	ì	曲	i	È€J	ì	<u>⊞</u> lí	Ϊ́	ÈFÎ	i
FJ€F	ÚÎIF	{ æ¢	V	<u> </u>	i	ÈEFÍ	G	ÈGI F	J	FEG Ì	J	ÈII	J
FJ€G	0111	{ a		€	İ	⊞UH	J	È€Í	ì	⊞€H	G	E€€J	Ť
FJ€H		{ æ¢	Ó	EÀÏ	J	È€FÍ	Ï	ÈGI F	Ť	FEG Ì	Ĭ	ÈII	Ti-
FJ€I		{ a		€	G	ÜΉ	İ	È€Í	ì	⊞€H	Ϊ	È€J	ì
FJ€Í	ÚÎIG	{ æ¢	V	ÈΠÍ	Ť	È€Í	G	È G	J	FÈÎΗ	T	ÈHÍÍ	J
FJ€Î		{ a	-	⊞€JG	Ϊ	ËΗÍ	J	ÌŒ€H	ì	€	G	È€Î	ì
FJ€Ï		{ æ¢	Ó	ĖHÍ	J	È€Í	Ï	ÈÌ G	T	FÈÎΗ	ì	ÈHÍÍ	
FJ€Ì		{ a		⊞€JG	G	ËΗÍ	Ī	ÌŒ€H	ì	€	Ϊ	È€Î	
FJ€J	ÚÎ I H	{ æ¢	V	ÈÀÏ	T	ÈEÏH	G	ÈGIF	J	GÈ€Í	ì	ÈII	J
FJF€		{ a		ËEÉÏÏ	Ï	⊞₩H	J	È€Í	ì	ÈH€Ì		È€J	ì
FJFF		{ æ¢	Ó	ĖĤΪ	J	ÈEÏH	Ϊ	ÈΘF	Т	GÈ€Í	ì	ÈII	
FJFG		{ a		ËÉ Ï	G	⊞UH		È€Í	ì	ÈH€Ì	J	È€J	ì
FJFH	ÚÎ I I	{ æ¢	V	ÈĺÌ	G	È€IÌ	G	ΕĠΪ	J	GÌH∃	Ϊ	ĚG	J
FJFI		{ a		ËŒĞÏ	Ϊ	ËΪÎ	Ϊ	È€J	Ì	È€Í	I	È€FÍ	ì
FJFÍ		{ æ¢	Ó	ÈĺÌ	Ϊ	ÈEIÌ	Ϊ	ÉĠÏ	T	GÈH€I	G	ĚG	
FJFÎ		{ ā		ËŒĠÏ	G	Η̈́ΪÎ	G	Ì € €J	ì	È€Í	J	E FÍ	ì
FJFÏ	ÚÎ I Í	{ æ¢	V	ĒFH	J	ÈÏÏ	J	E EFÌ	J	GÈHÎ	J	ĚÍÎ	J
FJFÌ		{ a		ŒIJÏ	G	ЩÏН	T	È€FÍ	Ì	⊞FJ	Ϊ	ÈEGÎ	ì

90) 10	·								~ .		w .		
	Ú æe^		Ù`¦æ&^	Ùãt{ၙæFAŠČ∙ããa	ŚÔ		ŚÔ	Væ`ÁTæçÁŽ•ãa	ŚÔ	Οξ}* <u>(</u> ^ΑΣζααåά	<u>\$Ô</u>	X[}ÁŢãr^•ÁXÈ	ÉŠÔ .
FJFJ		{ æ¢	Ó	<u>Ē</u> FH		ÈÏÏ		<u>E</u> GF <u>j</u>	Ĺ	GÌHÎ		ĚIÎ	\perp
FJŒ		{ a		ŒIJΪ	Ï	ШÏН	J	È€FÍ	Ĺ	⊞̈́FJ	G	ÈEGÎ	ĺ
FJŒ	ÚÎIÎ	{ æ¢	V	ÈÜÎ	J	ŒŒG	J	ΕÌJ	Ų	FÈHĞ	J	ÈHÏÏ	Ų
FJŒ		{ a	,	È€€H	ı	ËΉÍ	1	Œ€Í	ĺ	∰H H	G	Œ€J	ĺ
FJGH		{ æ¢	Ó	ÈijÎ		ËE€G		ÈÌJ	Ţ	FÈHG		ÈijÏ	LL.
FJG		{ a		È€€H	J	ËΪÍ	Ĵ	È€Í	ĺ	⊞Н	Ţ	Œ€J	ĺ
FJG	ÚÎTÏ	{ æ¢	V	ÈÌG	Ţ	ËE€G	ĺ	ÈĠ	Ų	FÈI G	Ĺ	ÉGÍ	Į
FJG		{ a	,	ŒFF	İ	∰î F	Ţ	È€Ï	ĺ	ËFÏ	G	ÈEFG	ĺ
FJĢ		{ æ¢	Ó	ÈÌG		ËE€G	Ĺ	ÈĞ	Ţ	FÈI G	Ĺ	ÉGÍ	LL.
FJG		{ a		ŒFF	ĺ	∰î F	J	È€Ï	ĺ	ËFÏ	Ï	ÆFG	ĺ
FJGJ	ÚÎIÌ	{ æ¢	V	ÈCC		È€FJ	G	ÈΗ̈́	Ų	GŒÍG	G	ΕΘΪ	Į
FJH€		{ a	,	ËŒH	Ï	ŒGFH	J	È€Ű	ĺ	⊞̈́Ġ		E FÍ	ĺ
FJHF		{ æ¢	Ó	ÈCC	J	È€FJ	Ĩ	ÈΗ		OEÈÍG	Ï	ĖĠÏ	
FJHG		{ a		ËŒH	G	ΕΕΘĘΗ	1	È€Ï	Ì	Щ̈́Ġ	Į	ÈEFÍ	Ì
FJHH	ÚÎIJ	{ æ¢	V	ÈÎG	G	È€Ï Ì	G	ÈEI H	J	FĚÌÎ	Ì	È	G
FJH		{ a		ˌ H	Ï	##HF	Ï	È€È	Ì	ЩÍÎ	Ţ	È€FÎ	Ì
FJHÍ		{ æ¢	Ó	ÈÎG	Ï	ÈEÏ Ì	Ĩ	ΕΗ	Ţ	FĚÌÎ	<u> </u>	È	Ĩ
FJHÎ		{ a		ˌ H	G	∰-HF	G	Œ€Ì	Ì	ЩĺÎ	G	È€FÎ	Ì
FJHÏ	ÚÎÍ€	{ æ¢	V	ÉGÌ G	G	ÈEGG	G	ÈΗ	J	GÉGI G	J	EGÏ G	G
FJHÌ		{ a		ŒŒJ	Ï	ÉGÍ	Ï	È€Ű	Ì	⊞̈́GÍ	Ï	ÆFI	Ì
FJHJ		{ æ¢	Ó	È G	Ï	ÈEGG	Ï	ÈΗ		GÉGIG		ÈGÏ G	Ï
FJI €		{ a		ŒŒJ	G	ÉGÍ	G	È€Ï	Ì	Щ̈́Ǵ	G	È€FI	Ì
FJI F	ÚÎÍF	{ æ¢	V	ÈÌ G	J	ŒŒG	Ì	ĖĠ	J	GEGI Ï	J	<u> É</u> GÍ	J
FJI G		{ a		ÈF	Ì	⊞ÎF	1	È€Î	Ì	⊞́FÍ	Ï	È€FF	Ì
FJI H		{ æ¢	Ó	ÈÌG		ËE€G	Ì	ÈĠ		GÉGI Ï	1	<u>İ</u> EGÍ	1
FJI I		{ a		ÈF	Ì	⊞ÎF	J	È€Î	Ì	⊞́FÍ	G	È€FF	Ì
FJI Í	ÚÎÍG	{ æ¢	V	ÈHÏÎ	J	È€H	Ï	ĖÌJ	J	FÈFI	J	ÈHÏ	J
FJI Î		{ a		€	G	ËΪÍ	1	È€Í	Ì	⊞ĭG	Н	ÈE€Ì	Ì
FJI Ï		{ æ¢	Ó	ÈijÎ	1	È€H	G	ΕÌJ		FÈFI		ÈijŢ	l l
FJI Ì		{ a		€	Ï	ËΪÍ	Į	È€Í	Ì	⊞ÏĢ	Н	ÈE€Ì	Ì
FJĮ J	ÚÎÍH	{ æ¢	V	<u>É</u> FÎ	G	ËE€H	Ì	ĖĠ	G	GÌH€Í	G	ĖĠĦĦ	G
FJÍ€		{ a	,	È€HÎ	Ĺ	∰î J	Ĵ	ÈEG	Ĺ	⊞ÏF		ÈΕΉ	ĺ
FJÍ F		{ æ¢	Ó	<u>É</u> FÎ	Ţ	ŒŒH	ĺ	ĖĠ	Ţ_	GÌH€Í	<u> </u>	ĖĠĦĦ	Ĩ
FJÍ G		{ a		È€HÎ	Ĺ	∰î J	G	ÈEG	Ĺ	ËijĨF	J	ÈΕΉ	ĺ
FJÍ H	ÚÎÍI	{ æ¢	V	ĖΊ	Ĩ	ŒŒG	ĺ	ÈΪG	Ţ_	FĚIÍ	H	ĘIJ	Ĩ
FJÍ I		{ a }	,	È€FÎ		∰Î G	G	ŒFI		Щ́Н	G	È€GÎ	1
FJÍ Í		{ æ¢	Ó	ĖΊ	G	⊞E€G	Ţ	ÈΕΪ G	Ğ	<u>FĚ</u> Lĺ	H	Ę'n	Ğ
FJÍ Î		{ a		ŒFÎ	J	⊞î G		ÆFI		Щ́Н		ŒĠ	1
FJÍ Ï	ÚÎÍÍ	{ æ¢	V	EĞÏ I		€	Н	ÉG€J	Ļ	FÈÌ G	Н	<u>ÈĤ Ì</u>	\perp
FJÍ Ì		{ a }	,	ŒF		⊞igí	G	Œ€J		ЩĮ́lĺ	G	ÈĘFÏ	1
FJÍ J		{ æ¢	Ó	ÉÄ	G	<u></u> .€	Н	ÉG€J	Ğ	<u>F</u> ÈÌG	H	<u>ÈĤ Ì</u>	G
FJ΀	7.5.7.5	{ a }		ŒF	J	⊞igí		Œ€J	Ţ	⊞ÎIĹ		ÈEFÏ	l l
FJÎ F	ÚÎÍÎ	{ æ¢	V	Ù₩GJ	J	€	Н	E EGJ	Ļ	FĚ€Ì	Н	È€Ì	\perp
FJÎ G		{ a }	,	È€€H		⊞H€Í	G	Œ€Í		Щ̈́ÏĢ	G	ÈĘĘ	
FJÎ H		{ æ¢	Ó	ÈGU	1	€	H	E EGJ	Ģ	FĚ€	H	È€Ì	Ğ
FJÎ I	/A / !!	{ a }		È€H	J	⊞H€Í		È€Í		ij̈́ÏĢ		<u>E</u> F	i i
FJÎ Í	ÚÎÍÏ	{ æ¢	V	<u>i</u> FG	J	È€G	J	ÈGÍ G	Ļ	<u>FĚIÌ</u>	Н	ÈÍÍ	
FJÎ Î		{ a }	,	ËE€G		ÜΨ		ÈE€G		∰FG	G	È€Í	
FJÎ Ï		{ æ¢	Ó	ÈFG		Œ€G	1	ÈGÍ G	Ğ	F <u>Ě</u> l Ì	Н	ÈÍÍ	G
FJ <u>Î</u> Ì	(4.7)	{ a		ËE€G	J	ŒΉŲÎ	J	Æ€G	Ĺ	⊞̈́FG	Ĩ	È€Í	Ĺ
FJÎ J	ÚÎÍÌ	{ æ¢	V	ĖĴĹ	J	Œ€Ĺ	J	EGÏÍ	Ļ	FĚJH	Н	Ě€I	
FJÏ €		{ a		Œ€Ì		曲门		€		曲íí	G	€	

<i>30) 1 0</i>		•		o on igg i							~ .		
-	Ú æe^		Ù`\ ` æ&^	Ùãt{,æFÁŽt∙ããa	ŚÔ	Ùãt{急ãx•ãã	ŚÔ	Væ ÁTæçÁŽ•ãa		OB;*[^AŽtæåá		X[}ÁŢã~•ÁXÈ	
FJÏ F		{ æ¢	Ó	ĖJĮ		Œ€Ì		ÉĞİ	G	FĚJH	Н	Ě€I	G
FJÏ G		{ a		Œ€ì	J	ЩÌÌ	J	€	İ	Щĺĺ	Ï	€	ĺ
FJ <u>Ï</u> H	ÚÎÍJ	{ æ¢	V	ĚÌI	J	ŒFG	J	ÈHFÍ	Ĩ	FÈÍJ	Н	ĚÌH	Ĩ
FJÏ I		{ a	,	ËŒFG	ı	∰ÌG	1	Ţ€	F	Ĥ	G	€	F
FJÏ Í		{ æ¢	Ó	ĚÌI	1	ŒFG		ÈHFÍ	G	FÈÍJ	Н	ĚÌH	G
FJÏ Î		{ a		ÏÌ G	J	∰ÌG	J	€	F	Ë	Ï	€	F
FJÏ Ï	ÚΠ΀	{ æ¢	V	ÊÏI	J	È€GH	J	ÈHÍÏ	G	FÈ FF	Н	ÈÏÏ	G
FJ <u>į</u> Ì		{ a		ËË€GH		⊞ÏJ	1	È€F	F	⊞ijiGî	G	ÈE€G	F
FJÏ J		{ æ¢	Ó	ÊÏI		È€GH		ÈHÍÏ	Ï	FÈFF	Н	ÈÏÏ	Ï
FJÌ €	(0.0	{ a		ËEGH	J	ËΪJ	J	È€F	F	⊞HGÎ	Ï	ÈE€G	F
FJÌ F	ÚÎÎF	{ æ¢	V	ÈΗ	Ï	ŒĠ	J	ÈΙ	G	GŒJG	H	₿FÌ	G
FJÌ G		{ a	,	ËEGÍ	-	⊞IF	G	È€H	F	⊞GÌ	G	È€Î	H
FJÌ H		{ æ¢	Ó	ÈΗ	G	È€GÍ		ÈJ	Ĩ	GŒJG	Н	₿FÌ	Ĩ
FJÌ J		{ a		⊞EGÍ	J	∰JF	Ï	Œ€H	F	⊞G _	Ï	È€Î	Н
FJÌ Í	ÚÎÎG	{ æ¢	V	FÈ GH	Ï	È€ÍI	J	ËIÌ	G	GEGÏÎ	Н	FÈÏ	G
FJÌ Î		{ a		⊞EÉ I		ËËIG	G	È€É	F	ŒŒÏ	G	È€J	F
FJÌ Ï		{ æ¢	Ó	FIÈ GH	G	<u>iE</u> Í I		Ëij	Ĩ	GEGÏ Î	H	FÈΪ	Ĩ
FJÌ Ì		{ a		Œ Œ ĺ	J	ËÈIG	Ţ	Œ€Í	F	ŒŒ	Ï	È€J	F
FJÌ J	ÚÎÎH	{ æ¢	V	FÈÀ H	Ï	Œ€Í	Ì	ÈÍG	G	FÈHG	Ï	FĚÏÎ	G
FJJ€		{ a		⊞E€G	Н	ËÈ€Ì	G	ÌŒ€Ï	F	<u>⊞</u> GH	Н	È€FI	F
FJJF		{ æ¢	Ó	FÈÀ H	G	Œ€Í	Ì	ÈÍG	Ï	FÈHG	G	FĚÏÎ	Ï
FJJG		{ a		ËE€G	Н	ËÈ€Ì	Ţ	È€Ï	F	ΕΈCH	Н	È€FI	F
FJJH	ÚÎÎI	{ æ¢	V	ÈHÍ	G	Œ€J	Ì	ËIJΪ	G	GÊH H	Ï	FÈHÌ F	G
FJJI		{ a		ËŒF	Н	⊞ÍF	Ţ	È€Î	Ì	⊞ั€∪	J	È€F	Ì
FJJÍ		{ æ¢	Ó	ÈHÍ	Ï	ŒŒJ	Ì	ËIJΪ	Ï	GÈH H	G	F <u>E</u> HÌ F	Ï
FJJÎ		{ a		ËŒF	Н	⊞ÍF	G	È€Î	Ì	⊞ั€∪	1	È€F	Ì
FJJÏ	ÚÎÎÍ	{ æ¢	V	FÈG	G	ŒIJÌ		ĚÌÌ	Ï	FÈH		FÈÎJ	Ï
FJJÌ		{ a		ŒŒĴÎ	J	ËË Ĝ	Ï	ÈĘĘ	Ì	⊞Ġ	Ï	È€FÌ	Ì
FJJJ		{ æ¢	Ó	FÈG	Ï	È€JÌ	J	Ěìì	G	FÈH	J	FÈÎJ	G
G€€€	,,,,,	{ a		Ĵ.	-	ËÈĴG	G	ÈF	Ì	⊞̈́Ġ	G	ÈFÌ	Ì
G€€F	ÚÎÎÎ	{ æ¢	V	Œ <u></u> ĴÏ	G	ËÏÍ	G	Ε̈́Í	Ţ	ΕĒΗ		Œ€	Ţ
G€€G		{ a	,	⊞ÏG	Ĩ	EGEG G	Ĩ	È€FÍ	İ	<u> </u>	Н	È€GJ	ĺ
G€€H		{ æ¢	Ó	Œ <u></u> ĴÏ	Ĩ	ĔÏÍ	Ĩ	Ε̈́Í	G	ΕĒΗ	J	Œ€	G
G€€I	/A A II	{ a		ËΪĞ	G	ËÇEĞÎ G	G	È€FÍ	Ĺ	<u> </u>	Н	È€GJ	ĺ
G€€Í	ÚÎÎÏ	{ æ¢	V	<u>É</u> GHF	G	Æ€F		È G	Ĩ	FŒÎÎ	J	ÈHG	Ĩ
G€€Î		{ a		ŒIG		ŒĤ		ÈEG		ЩÌÏ	G	ÈEIF	1
G€€Ï		{ æ¢	Ó	<u>É</u> GHF		<u>j€</u> €Ę	J	ÈÌ G	G	<u>F</u> ĚÎÎ	<u> </u>	ÈG	G
G€€Ì	(0.0)	{ a		ŒIG	J	iiiG+i	G	ÆG	J	<u> </u>		ÈEIF	J
G€€J	ÚÎÎÌ	{ æ¢	V	ÉG€Î		iiiee[Н	ÈJF	Ţ	FÈH G	J	ÈHG	\perp
G€F€		{ a	,	ŒF		∰-ï î		ÆFI		<u> </u>	G	ÈEGÎ	1
G€FF		{ æ¢	Ó	É€Î	G	<u>⊞</u> €€I	Н	ÈJF	Ģ	<u>FĖH G</u>	<u> </u>	ĖHĢ	G
G€FG	/ A A	{ a		ÈEF	Ĵ	⊞-ï î	G	E F∫	Ţ	<u> </u>		È€GÎ	l l
G€FH	ÚÎÎJ	{ æ¢	V	<u>E</u>		€	Н	Æ€ĺ	Ţ	<u>FÈ FÏ</u>	J	ÈĤF	\perp
G€FI		{ a		Œ€F		⊞GHÍ	G	Œ€Ì		⊞̈́€í	G	È€FÍ	1
G€FÍ		{ æ¢	Ó	ÉĞİ	G	€	H	<u>Ē</u> €ĺ	Ģ	<u>FÈF</u>	L.	ÈĤF	Ģ
ŒĨ	/A !!	{ a		Œ€F	J	<u> </u>		EEE Ì	Ţ	<u>∰</u> € <u>í</u>		ÈEFÍ	i i
ŒĘį	ÚÎÏ€	{ æ¢	V	<u> </u>	J	ÌŒ€Ï	J	<u> </u> EGĴ	Ļ	<u>FÈÎÎ</u>	J	Èŧ€G	
G€FÌ		{ a	,	Œ€Î		Ü⊞		Œ€Í		<u> </u>	G	ÈF	
G€FJ		{ æ¢	Ó	<u> </u>		Œ€Ï	1	EGĜ	Ğ	<u>FÈÎÎ</u>		ÈĘG	G
G€G€	/A !!	{ a		Œ€Ĵ	J	Œij	J	Œ€Í	Ĺ	<u> </u>	ΙΪ	ÆF	Ĺ
G€GF	ÚÎÏF	{ æ¢	V	<u>Ē</u> €Í	J	<u>Æ</u> FÍ	J	EGI I	Ļ	<u>FĚ GH</u>	Н	ÈIF	
G€GG		{ a		⊞€FI		⊞U		È€H		曲ìí	G	ÌŒ€Í	

<u> </u>	CUI D OIII AD	• •	L'IXI O						šâ	OT + 14 6 4 4 4	šâ	\(\(\alpha\) \(\begin{array}{cccccccccccccccccccccccccccccccccccc	
0001	Ú æe^	(Ù`¦æ&^_ │ ॔	Ùãt{æFÁŽ•ãa	30	Ùãt{æ6—4ÃX•ãã È⊂⊏í	90	Væ ÁTæ¢ÁŽ•ãa		OB;* ^AŽanåá		X[}ÁTã-^•ÁŽÈ	
G€GH		{ æ¢	Ó	È€Í		ÈFÍ ₩		ÈG I	G	FĚ GH	H	ÈIF	G
G€GI	ı'ıî ï O	{ a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ËŒFI È.	J	⊞H ÈCO	J	ÈE€H	T T	<u>ĦÌÍ</u>		<u>Ì€€Í</u>	+
G€GÍ	ÚÎÏG	{ æ¢	V	ĖJ	J	ŒG	J	ÈĠF	ì	FÊH	Н	ĖJI	+
G€GÎ		{ a	Ó	ËEG	-	⊞ÌG	-	È€F		⊞G	G	ÈE€G	
G€GÏ		{ æ¢	Ó	ĖΙ		ÈG		ÈĠF	G	FÊH	H	ÈJI	G
G€GÌ	.'û ï	{ a		ËEG	J	<u>⊞ÌG</u>	J	È€F	ı,	⊞G		ÈEEG	+
G€GJ	ÚÎÏH	{ æ¢	V	ĚÏI	J	ÈHÌ	J	ÈH€F		FÈ FÏ	Н	<u>Ěíî</u>	+
G€I€		{ a	<u> </u>	ËÐÌ Ťï.		ЩΪΗ		€	F	<u>⊞</u> Í J	G	€	F
G € HF		{ æ¢	Ó	ĚÏI	<u> </u>	<u>È</u> HÌ	1	ÈH€F	G	FÈFÏ	H	ĚÍÎ	G
G € I G	./	{ a			J	<u> </u>	J	€	F	∰Í J		€	F
G€H	ÚÎÏI	{ æ¢	V	ÊÎF	J	<u>È</u> Í	J	ЩН	G	GÉGFÍ	Н	ÊĺÌ	G
G€H		{ a	4	Î		⊞ÎÎÎ		È€F	F	⊞GJÎ	G	È€G	F
G€HÍ		{ æ¢	Ó	ÊÎF		<u>È</u>		ÈÍ H		GÉGFÍ	H	<u>Ē</u> ÍÌ	
G€HÎ		{ a		Ê	Ĵ		J	È€F	F	⊞GJÎ		È€G	F
G€HÏ	ÚÎÏÍ	{ æ¢	V	ËÏÌ		<u>È</u> Í	J	ÈÍÎ	G	FÈIH	J	ÈÍÏ	G
G€HÌ		{ a		<u> </u>		選 jJ	G	È€H	F	⊞ÏÎ	Н	È€Î	F
G€HU		{ æ¢	Ó	ĔÏÌ	G	<u>È</u> Í	Ţ	ÈÍÎ		FÊIH		ÈÍÏ	
G€	(0.00	{ a		i i	J	ΨÌJ		Œ€H	F	<u> </u>	Н	<u>IE€Î</u>	F
G€IF	ÚÎÏÎ	{ æ¢	V	₿FI		<u></u> ĒG	J	ĚÎÌ	Ğ	F <u>Ē</u> JI	J	<u>FÈ</u> J	Ğ
G€I G		{ a	,	ŒG		ËÜΗG	G	Œ€	Ţ	<u></u>	Н	<u>IĔ€J</u>	I.
G€IH		{ and	Ó	ÙFI	G	ÈĠ	Ţ	ĚÎÌ	Ļ	F <u>i</u> ÈJI		<u>F</u> ÈEI J	Ļ
G€I	/A !! !!	{ a		∰GJ	J	ËHG		È€E		<u> </u>	Н	<u>IE€</u> J	1
G€IÍ	ÚÎÏÏ	{ and t	V	ÈÍG		<u>Ì</u> €Ï Ï	J	ĒΗΪ	G	FÈIÌ		FÈH	G
G€IÎ		{ a	,	⊞eï J		Η̈́ΪΪ	G	È€Î	Н	ȀΠḤ	Н	È€FH	F
G€IÏ		{ æ¢	Ó	ÈÍG	G	ÈEÏÏ		ĒΗΪ	Ĩ	FÐIÌ	G	FÈH	Ĩ
G€IÌ		{ a		⊞eï J	J	ËΪΪ	Ţ	È€Î	Н	ΕÉÎΗ	Н	È€FH	F
G€IJ	ÚÎÏÌ	{ æ¢	V	ÊÎÍ	G	⊞€FH	Ì	ĚÌΗ	G	GÉGÎ Ï	Ï	FÈEFH	G
G€Í€		{ a		⊞€€Í	Н	Η̈́ΪΙ	Ţ	E€€J	F	⊞̈́FÎ	J	<u>È</u> ĘFÎ	Ì
G€ÍF		{ æ¢	Ó	ÊÎÍ	Ϊ	Ë€FH	Ì	ĚÌΗ	Ï	GEĞÎÏ	G	FÈ€FH	Ï
G€ÍG		{ a		ËE€Í	Н	Η̈́ΪΙ	G	È€J	F	⊞̈́FÎ		ÈEFÎ	Ì
G€ÍH	ÚÎÏJ	{ æ¢	V	FÈF	G	ÈEJG	1	ĚÌΗ	G	FÈJJ	1	<u>FÈI</u>	Ï
G€ÍI		{ a		⊞€	J	ËÈĜ	Ϊ	ÈEFG	Ì	⊞ÏIG	Ϊ	ÈEGF	Ì
G€ÍÍ		{ æ¢	Ó	FÈF	Ϊ	È€JG	J	ĚÌΗ	Ï	FÈJJ	J	FÈTI	G
G€ÍÎ		{ a		⊞€	1	ËÈĠ	G	ÈEFG	Ì	⊞ÏIG	G	ÈEGF	Ì
G€ÍÏ	ÚÎÌ€	{ æ¢	V	FÐÏF	O	ËÌG	G	ÊF	Ϊ	FĚÎF		FΕ̈́ÎÍ	Ï
G€ÍÌ		{ a		⊞€Í	Ϊ	ËGÈ€G	Ϊ	ÈEGG	<u> </u>	曲	ΙÏ	ÈF	Ì
G€ÍJ		{ æ¢	Ó	FÐÏF	Ϊ	ËÌG	Ï	ÊF	G	FĚÎF	J	FΕ̈́ÎÍ	G
G€Î€		{ a }		⊞Ì€Í	G	ËGÈEG	G	ÈEGG	Ì	EF)	G	È∃F	ì
G€ÎF	ÚÎÌF	{ æ¢	V	ÌLĦ	G	ËE€Í	Н	ÈÌ F	Ϊ	FÈFÎ	J	ÈFÍ	Ϊ
G€ÎG		{ a		ÈFF	1	⊞G€Í	Ϊ	ÈFF	Н	Η̈́ì	G	È€G	Н
G€ÎH		{ æ¢	Ó	ÈΊ	Ϊ	⊞€€Í	Н	ÈÌF	G	FÈFÎ	I	ÈFÍ	G
G€ÎI		{ a		È€FF	J	⊞ŒÍ	G	È€FF	Н	Η̈́Ì	Ϊ	È€G	Н
G€ÎÍ	ÚÎÌG	{ æ¢	V	ÈFÍ	Ϊ	€	Н	ÈIJÎ	Ϊ	FÈHÌ	J	ÈHF	Ϊ
G€ÎÎ		{ a		Ì € €Ï	I	EFT I	Ϊ	ÈFF	Н	Η̈́H	G	È€GF	Н
G€ÎÏ		{ æ¢	Ó	E FÍ	G	€	Н	ÈJΪ	G	FÈHÌ		ÈHF	G
G€ÎÌ		{ a		Ì € €Ï	J	EETÎ Î	G	ÈFF	Н	Η̈́H	Ϊ	È€GF	Н
G€ÎJ	ÚÎÌΗ	{ æ¢	V	EGÎ H	Ϊ	È€Ï	J	ÈG€I	Ϊ	FÈÍF	J	<u> </u>	Ï
G€Ï€	2	{ a		⊞€€I		EÈGHÎ	G	È€Î	F	Η̈́ΪÌ	G	<u>E</u> FH	
GŰF		{ 26¢	Ó	ÈGÎ H	G	È€Ï	1	ÈG€I	G	FÈ Í F	Ī	<u>H</u> i	G
G€Ï G		{ a		⊞€€I	J	⊞EGHÎ	Ï	È€Î	F	Η̈́ΪÌ	Ï	<u>E</u> FH	ì
G€ÏH	ÚÎÌI	{ 88¢	V	ÈFÏ	J	<u>``</u> EFÎ	J	ÉGFÌ	Ť	FÈJJ	J	H i	T i
G€ÏI	0.77	{ a		⊞EFG	Ī	⊞GJÌ	Ĭ	È€		⊞GF	G	È€J	
<u> </u>		١ ٦		1	1			2		4 4)	Σω	

Ular Ular	30) 10			Di jovju								w .	
Gef (a)		Ú æe^		Ù`¦æ&^	Ùãt{,æFÁŽt∙ãã	ŠÔ	Ùãt{æGÁŽt∙ããa	ŠÔ			OB;* ^AŽtæåá	ŠÔ_	
Gef Uii Case		{		0					•	G			G
Gef		{	ą			J		J		ĺ		Ĩ	ĺ
Set Set		ÚĨÍÍ {		V		J		J		Ĩ			Ţ
Gelf		{						ı		İ			İ
Gel Gel		{		Ó						G		Н	G
Set Column Colu		{	ą			J		J		Ì		Ï	Ì
Gât II (ag) 6 fill I 1 feet II feet I		ÚÎÌÎ {		V		J		J		Ï			Ï
Gel Gel		{	ą			1		1					Ì
Gel		{		Ó								Н	 G
GâI (â) (BE) B		{	ą			J				F		Ï	İ
Gai		ÚĨÍĨ {		V		J		J		Ĩ			
Sei		{	ą	,				1					F
Gel		{		Ó								Н	1
Sele		{				_							
GEUF Gast		UIII {		V		J		J					
GEJG		{								F		Н	F
GEIH ÚIÌ { ast V ÉFF J ÉFCH J ÉFCH F ÉFTÍ H ÉFGÍ F ÉFTÍ		{		0									
GEU (a) EFTG 1 EFTG 1 EEGH F EFTT H EEGE F GEU (a) EEGH T EEGH		{										_	
Geli		UIIJ {		V		J		J					
Geli Geli		{		,						F		Н	F
Geli Úi je (asc V firfi J firfi J firfi G Ffieth i firg G		{		0				1					\perp
Geli		{										H	
GEJJ		UI J€ {		V		J		J		Ğ			G
GF€€		{				<u> </u>				Ļ			1 1
GFEF ÚÎJF {ast V ÎLÎÎ J ÎLÎÎ J ÎLÎÎ G FIBÎJ Î ÎLÎH G GFEG {a} ÎLÎÎ I ÎLÎÎ I ÎLÎÎ I ÎLÎÎ Î ÎLÊF Î ÎLÊF Î ÎLÎÎ Î ÎLÊF Î ÎLÎÎ Î ÎLÎÎ Î ÎLÊF Î ÎLÊF Î ÎLÊF Î ÎLÎÎ Î ÎLÊF Î ÎLÎÎ Î ÎLÊF Î ÎLÊ		{		0		<u> </u>				ļ			1
GFEG		{										H	
GFEH		UI JF {		V		J		J					G
GFE { â } ÉÉTI J ÉÉTI J ÉÉTI J ÉÉTI Ì ÉÉTI Ï ÉÉTI Ì ÉÉTI Ï ÉÉTI Ì ÉÉTI Ì ÉÉTI Ì ÉÉTI Ì ÉÉTI Ì ÉÉTI Ì ÉÉTI Ì ÉÉTI Ì ÉÉTI Ì ÉÉTI Ì ÉÉTI Ì ÉÉTI Ì ÉTI ÈTI ÈÉTI Ì ÉÉTI ÉTI ÈTI ÉTI		{		<u> </u>		<u> </u>		1		H			
GF€ ÚÎJG {æg V ÊG G ÉEFH Ì ÊE G H ÉÌÌÌ G GEGÎ I ÊÌÌÌ G GEGÎ I ÊÎÌÌ I ÉEG H ÉÏJJ J ÈEFI Ì ÈEG H ÉÏJJ J ÈEFI Ì EEG H ÉÏJJ J ÈEFI Ì EEG H ÉÏJJ I ÈEFI Ì EEG H ÉÏJJ I ÈEFI Ì EEFI <		{		O				<u> </u>				G	1
GFEÎ {â ÉEEÍ H ÉÉFH Î ÉEÎ H ÉÉJJ I GÉGÎ GÊĞÎ GÊĞÎ GÊĞÎ GÊĞÎ H ÉÊJJ I GÊĞÎ GÊĞÎ G ÉÊFÎ Î ÉÉĞÎ H ÉÜJJ I ÉÊÇÎ Î EÊÇÎ H ÉÜJJ I EÊÇÎ Î EÊÇÎ H ÉÜJJ I EÊÇÎ H ÉÜJJ I EÊÇÎ H ÉÜJJ I EÊÇÎ H ÉÜJJ I EÊÇÎ H EÊÇÎ H ÉÜJÎ I EÊÇÎ H EÊÇÎ H EÊÇÎ H EÊÇÎ H EÊÇÎ H EÊÇÎ H EÊÇÎ H EÊÇÎ H EÊÇÎ H EÊÇÎ H EÊÇÎ H EÊÇÎ H EÊÇÎ H EÊÇÎ H EÊÇÎ I FÊÇÎ I EÊÇÎ I EÊÇÎ I EÊÇÎ I EÊÇÎ I EÊÇÎ I <td></td> <td>\(\frac{1}{10}\)</td> <td></td> <td>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \</td> <td></td> <td></td> <td></td> <td>J</td> <td></td> <td></td> <td></td> <td><u> </u></td> <td></td>		\(\frac{1}{10}\)		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				J				<u> </u>	
GF€ {asc} Ó ÉG ï ÉEFH ì ÉÉ€J ï GÉGG G ÉÉÌìì ï GÉGG G ÉÉÌìì ï GÉGG H ÉÉJJJ I ÉÉFI ì ÉÉÏI G FÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI I ÉÉFI J FÉÉJI I ÉÉFI J FÉÉJI J FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI I FÉÉJI		UI JG {		V	<u> </u>			<u> </u>				-	- G
GFE { â } BEEE H HÎHF G BEE H HÏJJ I BEFI Ì GFE JÛJH { ax } V FREI G BEEFI Ì HÎI G FEHFI I FREI J FREI J HEEFI Ì BEFI Ì HEFI I HEF		{		Á		<u> </u>		1		H		_	+
GF€J ÚÎJH { age } V FÉEI G ÉÉFFI Î ÉÉÎÎÎ G FÉFFI I FÉEJ I FÉEJ I ÉÉFFJ I ÉÉGJ I ÉÉGJ </td <td></td> <td>{</td> <td></td> <td>U</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>G</td> <td>+</td>		{		U		-						G	+
GFF€ {â} ÉÉEGI H ÉFÉGI Ï ÉÉF H ÉÉIÎÎ Ï ÉÉFJ Î GFFF {æ¢ Ó FÈEI Ï ÉÉEFÎÎÎÎ Î ÉÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎÎ		1'11 11 1		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				- U					1
GFFF { aac Ó FRE		UI JH {		V				<u> </u>				<u> </u>	ì
GFFG { \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		1		Á				ì		<u> </u>		+	+
GFFH ÚÎ JI { aac V FÈFH G ÈLJI G Éİ II J FÈÉ Î I FÈÉ Î I G É III J FÈÉ Î I FÈÉ Î I EÈG Î I EÈG Î I EÈG Î I EÈG Î I EÈG Î I EÈG Î I EÈG Î I FÈÎ Î I I EÊG Î I EÊ Î I EÊ Î I EÊ Î I EÊ Î I EÊ Î I EÊ Î I EÊ Î I EÊ Î I EÊ Î I EÊ Î		1		U		-		G				J	
GFFI { ā } ÉFFG Ï ÉFÉG Ï ÉÉFF Ì ÉÉTH Ï ÉÉG Ì CFFÍ I ÉÉTH Ï ÉÉLJI Ï ÉÉII I FÉÉG J FÉÉGÏ J FÉÉGÏ J FÉÉGÏ J ÉÉTÎ H GÉTÎ H GEĞ Ì FÉĞG Ì FÉĞG Ì FÉĞG Ì FÉĞG Ì FÉĞG Ì FÉĞG Ì FÉĞG Ì FÉĞG Ì FÉĞG Ì FÉĞG Ì FÉĞG Ì FÉĞG Ì FÉĞG Ì FÉĞG I FÉĞG I FÉĞG I FÉĞG I FÉĞG I FÉĞG I FÉĞG I H EÉĞ I H EÉĞ I H EÉĞ I H EÉĞ I H EÉĞ I H EÉĞ I H EÉĞ I H EÉĞ I H EÉĞ		1/11 11 1		\/								ı	++
GFFÍ {æ¢ Ó FÈFH Ï ÈJI Ï ÉII I FÉIÉ J FÉEÏ G G G G G EFFF Ì ÉÉÎH H G ÉÉG Ì EÉG Ì EÉG Ì EÉG Ì EÉG Ì EÉG Ì EÉG Ì EÉG Ì EÉG Ì EÉG Ì EÉG Ì EÉG I EÉG I EÉG H EÏĴĴĴ G EÉG H EÏĴĴĴ G EÉG H EÏĴĴĴ G EÉG H EÏĴĴĴ G EÉG H EÏĴĴĴ I EÉG H EÏĴĴĴ I EÉG H EÏĴĴĴ I EÉG H EÏĴĴĴ I EÉG H EÏĴĴĴ I EÉG H EÏĴĴĴ I EÉG H EÏĴĴĴ I EÉG H EÏĴĴ I EÉG H EÏĴĴ I		01.01		V		ï		ï		ì		+	+
GFFÎ { â } ÉFFG G ÉFÉG G ÉFFF Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î ÉÉG Î Î ÉÉG Î		1		Ó		÷		÷		+		<u> </u>	<u>-</u>
GFFÏ ÚÎ JÍ {æ¢ V ÈĒ G Ï ÈĒ G J ÈĒ G Ï FÊÐ J J ÈĒ G H ÈÏ JÎ G ÈĒ G H ÈÏ JÎ G ÈĒ G H ÈÏ JÎ G ÈĒ G H ÈÏ JÎ G ÈĒ G H EÊ JÎ J BÊ G H EÊ JÎ J BÊ G H EÊ JÎ J LE G H LE JÎ JÎ LE G H LE JÎ JÎ LE G H LE JÎ JÎ LE G H LE JÎ JÎ LE G H LE JÎ JÎ LE G H LE JÎ JÎ LE G H LE JÎ JÎ LE G H LE JÎ JÎ LE G H LE JÎ JÎ LE G H LE JÎ LE JÎ JÎ LE G H LE JÎ LE JÎ LE JÎ LE JÎ LE JÎ LE JÎ LE JÎ LE JÎ LE JÎ LE JÎ LE JÎ LE JÎ LE JÎ		1				G		- C					Ti-
GFFÌ { a} III EEE I I III I I I I I I I I I I I		l'IÎ IÍ J		V		ï				÷ i		_	++
GFFJ { asc Ó ÉFÏG G É€€Ï I ÉFÏG G FÉĞHU I ÉĞJJ G GEĞ H ÉĞJJÎ I EÊ€Ï H ÉĞJÎ I EÊ€Ï H ÉĞJÎ I EÊ€Ï H ÉĞJÎ I EÊ€Î H ÉĞJÎ I EÊÇÎ H EÊÇÎ		0101		V		<u> </u>		ï		Н			H
GFG€ { a} HEE€J J HEFTH G HEE€J H HEEJJ T HEEGT H GFGF ÚÎ JÎ { asc V HEEFH J HEÎ JÎ T HEGF J HEGF J HEGF T H HEÎ JÎ T HEGF J HEGF H HEÎ JÎ T HEGF J H HEÎ JÎ T HEGF J H HEÎ JÎ H <td></td> <td><i>[</i></td> <td></td> <td>Ó</td> <td></td> <td>Ġ</td> <td></td> <td>÷</td> <td></td> <td></td> <td></td> <td>ĭ</td> <td></td>		<i>[</i>		Ó		Ġ		÷				ĭ	
GFGF ÚÍ JÍ {æ¢ V ÉEFI Ï ÉEFH J ÉFÌ I Ï FÉEGF J ÉHGF Ï GFGG {ã} ÉÉEH I ÉÉFJG G ÉEFE H ÉÉGF I ÉHGF G GFGI {ã ÉÉEH J ÉÉFJG Ï ÉEE H ÉÉÉH G ÉEF H GFGI {ã ÉÉEH J ÉÉFJG Ï ÉEE H ÉÉÉH J ÉÉFJG Ï ÉEF H ÉÉTH Ï ÉEF H GFGÍ ÚÍ JÏ {æ¢ V ÉEÌ Ï ËEFÎ J ÉFJÎ Ï FÉ J ÉHIÍ Ï		{						G				Ϊ́	
GFGG { \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		ÚÎ JÎ (V		ï				Ϊ		J	T i
GFGH { as¢ Ó LÈGFI G LÈEFH I LÈTÌI G FLÈGF I LÈHGF G GFGI { a} LÈE€H J LÈHGG Ï LÈE€I H LÈÀHÍ Ï LÈEF H GFGÍ ÚÎJÏ { as¢ ∨ LÉGÌÌ Ï LÈEFÎ J LÈHÍ Ï		{		,		i				Н			Н
GFG { a} EEEEH J EEFJG Ï ÈEE H EEÏHÍ Ï ÈEF H GFGÍ ÚÍJÏ { æ¢ V ÈEÍÌ Ï ÈEFÎ J ÈHÍ Ï		{		Ó		G		ı				Ī	
GFGÍ ÚÎJÏ {æç V ÉGÍÌ Ï ÈEFÎ J ÈFJÎ Ï FÉ J ÈHÍ Ï		1						Ï				İ	
		ÚÎ JÏ {		V		Ϊ		J		Ϊ		J	Ï
		{				1				Н	Щ̈́lì		 Н

90) 10	, ar b Griffe			· · · · ·				, ~	٧.	~	٧.	, , ,	
<u>-</u>	Ú æe^		Ù"¦æ&^_	Ùãt{æFÆX•ãã	ŠÔ	Ùã!{æ©ÃX•ãã	ŠÔ.	Væ ÁTæçÁŽ•ãa		OB;* ^AŽanåá	<u></u> 80_	X[}ÁTã^•ÁXÈ	
ŒŒ		{ æ¢	Ó		G	<u>È</u> FÎ	ļ	ÈJÎ	G	FĚ	ļ ļ	ÈH Í	G
GFGÌ	(4.)	{ a		<u>⊞</u> e€î	J	ŒG-IÏ		Œ€H	H	Щ́ĵì		È€J	Η
GFGJ	ÚÎ JÌ	{ æ¢	V	<u> </u>	J	ÆGF	J	ÌĐ€Ì	<u> </u>	<u>FĚ H</u>	J	ÈÜG	
GFH€		{ a }		<u> </u>	ı	ËGIÏ		Œ€H	F	⊞́€Í	G	È€Ï	
GFHF		{ æ¢	Ó	<u> </u>		ÈEGF		ÉG€Ì	G	<u> FĚ H</u>	<u> </u>	ÈΗ̈́G	Ğ
GFHG	(0	{ a }		lit erí	J	ŒĠĬ	J	Œ€H	F	⊞ॅ́€Í		È€Ï	1
GFHH	ÚÎ JJ	{ æ¢	V	<u><u></u>ÉUÌ</u>	J	<u>i</u> €H	J	ÈGÎ		FÈIJ	Н	È€Ì	Ļ
GFHI		{ a }	,	ËEĞ		i ∰		È€G	F	⊞̈́HJ	G	È€É	1
GFHÍ		{ and	Ó	ĖUÌ		<u>i</u> €H	1	ÈGÎ	G	FÈIJ	Н	È€Ì	G
GFHÎ.	7.0	{ a		ŒŒĜ	J	ËΉÎ	J	È€G	F	Щ́Н		È€Í	1
GFHÏ	ÚÏ € €	{ æ¢	V	ÈÌ	J	<u>È</u> EI Í	J	ĚΘΪ	<u> </u>	FËJÌ	H	ÈÎ	Į
GFHÌ		{ a	,	⊞E	1	ijij	I	Œ€F	F	ı∰,	G	È€H	ĺ
GFHJ		{ æ¢	Ó	ÈÌ	1	È€IÍ	1	ĖΘΪ	G	FËJÌ	Н	ÈÎ	1
GFI€		{ a }		⊞E H	J	ШÏI	J	È€F	F	Щï	Ï	ÈE€H	Ì
GFI F	ÚÏ € F	{ æ¢	V	ĚÎI	J	È€ÎÎ	J	ĖĠΪΗ	<u> </u>	<u>G</u> ÈÎ	Н	ĚH	J
GFI G		{ a		iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	1	ЩÎН	1	€	F	⊞GJF	G	€	F
GFI H		{ æ¢	Ó	ĚÎI		È€ÎÎ	I	ĖĠΪΗ	G	ŒÈÎ	Н	ĚH	1
GFI I		{ a		⊞eîí	J	Ш́ÎН	J	€	F	ËŒJF	Ϊ	€	F
GFI Í	ÚÏ € G	{ æ¢	V	ĒΙG	J	È€JJ	J	ÈH€Ï	G	FĚÌÍ	J	È€I	1
GFIÎ │		{ a }		⊞€JJ	1	⊞ÎIÏ	1	È€F	F	⊞́ÍÍ	Н	È€G	F
GFIÏ		{ æ¢	Ó	ĒΙG	Т	ÈEJJ	П	ÈH€Ï	Ï	FĚÌÍ		È€I	J
GFIÌ		{ a		ŒIJ	J	⊞ÏIÏ	J	È€F	F	⊞́ÍÍ	Н	È€G	F
GFI J	ÚÏ € H	{ æ¢	V	ĒĠΗ	J	ÈΙÍ	J	ÈΗΗ	G	FÈÉ€Í	J	ĒΪΗ	
GFÍ€		{ a		i r⊞	ı	⊞H	I	È€G	ì	⊞€ÍÏ	Н	È€É	Ì
GFÍ F		{ æ¢	Ó	ĒGΗ	ı	ÈΙÍ	I	ÈΗΗ	Ï	FÈ€	Т	ĒΪΗ	J
GFÍ G		{ a		Î F	J	ШH	J	È€G	ì	Œ€ÍÏ	Н	Ì€€Í	Ì
GFÍ H	ÚÏ €	{ æ¢	V	ĒΊJ	J	ÈGFÎ	J	ÈĤH	G	FĖĖIÏ	Ϊ	ĖGG	
GFÍ I		{ a		ËŒJ	1	⊞΀Î	1	È€€H	ì	È€HG	ì	È€Ë	ì
GFÍ Í		{ æ¢	Ó	ĒΊJ	Т	ÈGFÎ	I	ÈĤH	Ϊ	FĖΪΙΪ	G	ĖGG	J
GFÍ Î		{ a		ËŒJ	J	⊞΀Î	J	È€€H	ì	È€HG	ì	È€Ë	ì
GFÍ Ï	ÚÏ € Í	{ æ¢	V	ĚΙ	J	ÈG€J	J	ÈÌG	G	FÐJH	Ï	ĒÎΗ	G
GFÍÌ		{ a		⊞GFI	Т	⊞ÎF	I	È€€I	F	È€JÎ	ì	È€J	ì
GFÍ J		{ æ¢	Ó	ĚΙ	Т	ÈG€J	П	ÈÌG	Ï	FÈJH	G	ĒÎΗ	Ϊ
GF΀		{ a		ËŒFI	J	⊞ÎF	J	È€E	F	È€JÎ	ì	È€€J	ì
GFÎ F	ÚÏ € Î	{ æ¢	V	ĚÍÍ	G	Ë€FF	ì	ÈŒ	G	ŒŨ	lï	ĚΙG	G
GFÎ G		{ a		ËE€Î	Н	Ш̈́ÎÍ	Ï	È€€I	Н	ŒΉ	J	È€F	ì
GFÎ H		{ æ¢	Ó	ĚÍÍ	Ï	Ë€FF	ì	ÈŒ	ï	GÈGJ	G	ĖΪΙG	ΤÏ
GFÎI		{ a	_	ËE€Î	Н	Ш̈́ÎÍ	G	È€€I	Н	ŒΉ		ÈF	ì
ŒFÎ Í	ÚÏ € Ï	{ æ¢	V	ËΉ	G	Ë€FF	ì	ÈĠÏ	G	FÈÏÏ	П	È€H	G
GFÎÎ		{ a		ËE€Î	Н	ŒΊΙÌ	Ï	È€	Н	ËĞΪ	ΪÏ	È€FF	ì
GFÎΪ		{ æ¢	Ó	ËΗ	Ϊ	ËFF	ì	ÈĠÏ	Ï	FÈÏÏ	J	È€H	T
GFÎ Ì		{ a		Œ€Î	Н	ΞÏΙÌ	G	È€€I	Н	ËĞΪ	G	ÈFF	
GFÎ J	ÚÏ € Ì	{ æ¢	V	ĖGJ	T	ÈEIF	G	ÈHH	J	FÊ FÍ	Ĭ	ÈFG	J
GFÏ€	<u> </u>	{ a		EEE Í	Ï	ШÏIH	J	È€€I	H	ШССЭН	ΙĖ	ÈF	Н
GFÏ F		{ æ¢	Ó	ĖĠ	J	<u>E</u> F	Ï	ÈHH	Ť	FÊ FÍ	J	ÈFG	
GFÏ G		{ a		E Í	G	ΠΠΗ	i	È€€I	H	ЩЭЭH	G	ÈEF	Н
GFÏ H	ÚÏ €J	{ æ¢	V	<u> </u>	ï	ÈFÌ	J	ÈÎ	G	FĚÏF	J	ÉĞÎÌ	G
GFÏ I	J. W	{ a }		<u> </u>	Ť		G	€	F	Η̈́FÌ	G	€	F
GFÏ Í		{ 26¢	Ó	ĖÏÏ	G	<u>E</u> FÌ	ı	ÈÎ	ï	FĚÏF	ī	ÈÜÌ	i
GFÏ Î		{ a		<u> </u>	J		Ï	€	F	<u>⊞</u> FÌ	İ	€	F
GFÏ Ï	ÚÏ F€	{ æ¢	V	EF	Ï	ŒFJ	J	ΕÎJ	G	FĚÏF	J	ÉGÍ	G
GFÏ Ì	0110	{ a	V	<u>i</u>	i	⊞ŒF	G	È€F	F	ЩН	G	È€Î	F
5		19				ш	J	20		ш.П	J		

30) 10	· · · ·		Di jovja						v .		٧.	, , ,	
ا تسم	Ú æg^	_	Ù"¦æ&^	Ùãt{æFÆX•ãã	ŠÔ	Ùã!{æ9ÃX•ãã	ŠÔ	Væ ÁTæçÁŽ•ãa	SΩ	O5;* <u> </u> ^AŽčanåá	<u></u> 80_	X[}ÁTã^•ÁŽÈ	ŒŞO
ŒĹ 1		{ æ¢	Ó	<u>É</u>	G	ÈFJ	<u> </u>	ÈÎJ		<u>FĚÏF</u>	l.	Ē	
GFÌ€	7.11	{ a		Œ€Î	Ĵ	⊞ŒF		Œ€F	F	Η̈́Η̈́		È€Î	F
GFÌ F	ÚÏ FF	{ and t	V	<u>É</u> L		ÆG	J	ÈÌF		G È EI Î	Н	ÈGF	I L
GFÌ G		{ a }		ŒŒÌ		<u> </u>	G	É	F	Ш̈́Î	G	È€Î	
GFĮ H		{ and	Ó	<u>Ė</u> GI į	G	<u></u> ŒG	Ţ	ÈÌF	G	G È EI Î	Н	<u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u>	Ğ
GFÌ I	/ !!	{ a		ËŒÌ	J	iiiGHÍ		Ţ€	F	∰îî	I	È€Î	1
GFÌ Í	ÚÏ FG	{ and	V	ÈHFG	J	<u>j</u> €GH	J	ĖΊÎ		FÈ G	Н	ÈÚF	Ļ
GFÌ Î		{ a	,	<u> </u>		⊞GJÌ		È€G	F	⊞JG	G	Ì€€Î	1
GFÌ Ï		{ and	Ó	ÈHFG		<u>j</u> €GH		ĖJÎ	G	FÈ G	Н	ΕΉF	G
GFÌÌ		{ a		lite rî	J	ŒĠÌ	J	È€G	F	⊞́JG	I	È€Î	1
GFÌ J	ÚÏ FH	{ æ¢	V	ĖUĮ	J	ŒHH	J	ÈEFG	Ţ	FÈ FÏ	Н	ĖÌI	Į į
ŒJ€		{ a	,	ËEGÌ		Ψìί	1	È€G	İ	⊞̈́FJ	G	EE€I	ĺ
ŒJF		{ æ¢	Ó	ÈUÎ	1	È€HH		ÈGFG	G	FÈ FÏ	Н	ĖÌI	G
ŒJG		{ a		ËEGÌ	J	∰ì Í	J	ÈE€G	Ì	⊞FJ	Ï	È€I	Ì
ŒJH	ÚÏ FI	{ æ¢	V	ÈÌ	J	È€IÏ	J	<u>É</u> GHG	Ï	FÈFG	Н	ÈÍJ	J
GFJI		{ a		iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	1	ĤΪI	1	È€F	F	⊞H I	G	ÈE€H	Ì
ŒIJĺ		{ æ¢	Ó	ÈÌ		È€IÏ		ÈGHG	G	F₿FG	Н	ÈÍJ	1
ŒIJÎ │		{ a		⊞≘í	J	ĤΪI	J	È€F	F	⊞H I	Ϊ	ÈE€H	Ì
ŒIJÏ │	ÚÏ FÍ	{ æ¢	V	ĚÎF	J	È€Ï	J	ÈGÍG	Ϊ	GÈHFF	Н	ĚGJ	J
ŒJÌ		{ a		⊞≘ÎJ	Т	⊞ÍJ	_	€	F	ËĠÏ	G	€	F
ŒIJ		{ æ¢	Ó	ĚÎF	1	ÈËÏ	1	ÈGÍG	G	GÈHFF	Н	ĚGJ	
GG€€		{ a		⊞≘ÎJ	J	⊞ÍJ	J	€	F	ËÈĠÏ	ΙÏ	€	F
GŒF	ÚÏ FÎ	{ æ¢	V	ĒΙG	J	ÈEH	J	ÈĠΊΙ	G	FĚÏF	J	ÈEG	
GŒG		{ a		⊞EH	ı	⊞ÌIÏ	ı	È€F	Ì	⊞ŒJ	Н	È€G	F
GŒH		{ æ¢	Ó	ĒΙG	I	ÈEH	I	ĚĠΊΙ	Ϊ	FĚÏF	I	È€G	J
GŒ[{ a		⊞EH	J	⊞ÏIÏ	J	È€F	Ì	⊞ŒJ	Н	È€G	F
GŒÍ	ÚÏ FÏ	{ æ¢	V	ËFÍ	J	ÈΓÍÍ	J	ΕĠΪ	G	FĚΪÌ	Ϊ	ÊÎF	
GŒÎ		{ a		ĤÍ Ì	T	⊞̈́Ǵ	T	È€G	Ì	€	F	È€EI	ì
GŒÏ		{ æ¢	Ó	ËFÍ	Т	ÈÍÍ	Т	ΕĠΪ	Ϊ	FĚΪÌ	G	ÊÎF	J
GŒÌ		{ a		ii ì⊞	J	⊞̈́Ǵ	J	È€G	Ì	€	F	È€EI	ì
GŒIJ	ÚÏ FÌ	{ æ¢	V	ËÌÌ	J	ÈGÎ	J	ÈGIG	G	FΕ̈́Ì	Ï	ĖFÏ	
Œ€		{ a		⊞GGJ	Т	⊞€	Т	È€€H	Ì	ËĤ₹Ï	ì	È€Ï	ì
GGFF		{ æ¢	Ó	ËÌÌ	Т	ÈGÎ	Т	ÈGG	Ϊ	FΕ̈́Ì	G	ĖFÏ	J
GGFG		{ a		ËŒJ	J	⊞€	J	È€H	Ì	ËĤ₹Ï	ì	È€Ë	ì
GŒ H	ÚÏ FJ	{ æ¢	V	ĚĞ	J	ÈGÏ	J	ÈJJ	G	GÈ€II	ΙÏ	Ě FJ	G
GŒFI		{ a		⊞GH	Т	ËΪΙΪ	Т	È€€H	Н	Œ	ì	È€È	ì
GŒFÍ		{ æ¢	Ó	ĚĠ	T	ÈGÏ	T	ÈJJ	ï	GÈ€II	G	Ě FJ	ΤÏ
GŒFÎ		{ a		ËΘΗ	J	ШĬIÏ	J	È€€H	Н	iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	ì	È€È	ì
GGFÏ	ÚÏ Œ	{ æ¢	V	ÈĠ	G	ËE€J	ì	ÈHFF	G	GÈHÍ H	Ϊ	ĚÍÍ	ΤÏ
GGFÌ	_	{ a		ËE€Ï	Н	ШH	Ϊ	È€G	Н	⊞EGÍ	Н	È€Ì	ì
GŒJ		{ æ¢	Ó	ÈĠ	Ï	Œ€J	Ť	ÈHFF	Ï	GÈHÍ H	G	ĚÍÍ	G
GGG€		{ a		ËEEÏ	Н	Ш́ІН	G	È€€G	Н	⊞€GÍ	Н	È€È	ì
GGGF	ÚÏ Œ	{ æ¢	V	ĚIF	G	iii€€ì	ì	ÈHÍF	J	FĚÏF	Ť	È HG	J
GGGG	J. J	{ a		⊞EEÌ	Н	ΞŰÍÎ	İ	€	F	ΞÏΗ	Н	È€Ë	Ť
GGGH		{ 26¢	Ó	ĚIF	Ϊ	<u>⊞</u>	Ť	<u> </u>	i	FĚ Ï F	J	ÊHG	
GGG		{ a		iii∈i	Н	<u> </u>	G	€	F	Η̈́ΪΗ	Н	È€Ï	ì
χ	ÚÏ Œ	{ 26¢	V	ÊÎJ	Ť	<u>⊞</u> €€Í	ì	ÈŒ	i	Œ <u>F</u> JÏ	H	ËÏI	J
GGGÎ	5. 3	{ a }	,	iii o	H	<u>⊞</u> ïì	J	€	F	⊞F	İ	È€	Ť
GGG		{ æ¢	Ó	ÊÎJ	J	<u>⊞</u> €€Í	ì	ÈŒ	J	ŒĖJÏ	H	ËÏI	Ti-
633		{ a		⊞E€Í	Н	<u>⊞</u> ïì	i	€	F	⊞F	G	È€	†
œ	ÚÏ ŒH	{ æ¢	V	ÈÏ Ï	ï	Œ€Ï	J	ÈÍF	G	GHÍ Î	F	EG H	G
GG I €	0.01	{ a	V	⊞E€J	i	⊞ G	G	È€H	ì		Н	È€Î	ì
S		19		ш.		ш	J	<u> </u>		шП	11	440	

	1'11		1`1" IOA	Ùãi{æFÁXo∙ãa	ŠÔ	Ùãi{æ€ÃX•ãã	čô	\/	ŏô	OT * IA 65-2 4	čô	VII ∕er≃ ∧ . Æv rì	~~~
CGHF	Ú æ²^	(004	Ù*¦æ&^ Ó	Ua{a⊕-A∆.•aa ÈFÏÏ	G	∪a {æe—x∡•æa ÈEEË	50	Væ`ÁTæçÁĞ•ãa ÈFÍF	<u>50</u>		<u>50</u>	X[}ÁTã:^•AŽÈ ÈGÎH	±30
CGHG		{ æ¢	0	⊞€J	J	⊞ì G	ï	ŒIF	1	<u>GENI</u>	Н	EE€Î	+
CGHH	ÚÏ G	{ æ¢	V	ÈG€Í	ï	<u></u> EFH	J	ÈÎF	G	<u>⊞ii</u> GÈHÍ	Н	È G	G
GGH	UI G	{ a	V	<u>⊞</u> EEH	1	EETH EETH	G	ŒIF	ì	— GETI ⊞ÏJ	F	EGG	ì
GGHÍ			Ó	<u>iiiee</u> ⊓ ii eei	G	<u>E</u> FH	ı	ÈÎF	+	<u>⊞ij</u>	Н	EGÌ G	+
GGHÎ		{ æ¢	0	<u>iii</u> €€H	J	EETH	ï	ŒIF	+	<u>Œ</u> ÏJ	F	EGG	
GGHÏ	ÚÏ Œ		V	EGHÌ	ï	<u>⊞</u> EFÎ	J	ÈÏ	G	<u>⊞ij</u>	Н	È	G
CCH)	UI G	{ æ¢	V	<u>⊞</u> €Î	1	ECI	G	Œſ	ì	<u>Œin</u> ∰ÎÍ	G	EE€Ï	ì
GGHJ		{ æ¢	Ó	EGHÌ	G	<u>⊞</u>	J	ÈÏ	÷	<u> </u>	Н	Ĥ	++-
©3 €		{ a	0	<u>⊞</u> €Î	J	EFI EGJ	ï	Œ€G	ì	<u>Œin</u> ∰ÎÍ	ï	EE€Ï	1
03 € 03 F	ÚÏ Ĝ		V	<u>EH</u> FH	J	<u>E</u> GF	J	ÈÌF	÷	<u>шіі</u> FÐÏI	Н	ÈG	++-
63 F	UI G	{ æ¢	V		J	<u>⊞G</u> I	J	EE€G	ì	<u>r⊟i</u> ÌG	G	Œ€Î	1
GG H			Ó	<u>EH</u> FH	+	EGF	+	ÈÌF	G	<u>шів</u> FÐÏI	Н	ÈG	G
GG I		{ æ¢	0		J	<u>⊞G</u> I	J	ÈE€G	ì	<u>r⊟il</u> ⊞ÌG	ı n	Œ€Î	ì
03 i	ÚÏ Ğ		V	<u>E</u> UÌ	J	<u>⊞</u> H	J	ÈJÌ	+	FÐFI	Н	ÈÌ I	J
GG Î	UI G	{ æ¢	V	EDI EDI	J		J	E€€G	ì	<u>гыгі</u> ∰€G	G	EE€Í	ì
ΘΪ		{ æ¢	Ó	<u>itu</u> j	+	<u>щ</u> п	1	Œ€G	G	<u>шео</u> FBFI	Н	ÈÌ I	+
GG Ì		{ a}	0	⊞EGÎ	J	i i	J	E€€G	ì	<u></u> ∰€G	i i	E€€Í	1
GG J	ÚΪĠ		V	ÈÌ	J	EIÍ	J	EEFÌ	J	<u>⊞€G</u> FÐÎI	H	ÈÎ	J
03 5 03 €	UI G	{ æ¢	V	EE H	J		J	E€€F	F	EHGF	G	ÈE€H	ì
GG F		{ æ¢	Ó	ÈÌ	+	<u> </u>	1	EGFÌ		<u>щы</u> FÐÎI	Н	ÈÎ	+
ϒ G		{ a	0	ш Ш€∃ Н	J		J	È€F	F	— FBIT	i i	EE€H	
GG H	ÚÏ GJ	{ æ¢	V	ĚÎI	J	<u>щ</u> п	J	EGI J	J	<u>шы</u> FÐÌН	F	ĚH	J
œi I	Ol GJ	{ ā	V	EE Í	ı	<u>⊞</u> ÎH	J	€	F		Н	€	F
ϒ		{ æ¢	Ó	ĚÎI	÷	<u> </u>	-	EGI J	+	FÐÌ H	F	ĚH	
œi		{ ā		EE Í	J	<u>⊞</u> ÎH	J	€	F		Н	€	F
ΘÜΪ	ÚÏ H€	{ æ¢	V	Ēl G	J	EJJ	J	EĞÏ I	+	<u>шіі</u> FĚÍÎ	J	Ê€I	
œi	OFFE	{ ā	V	⊞€JJ	ī	<u>⊞</u> 1Ï	ı	€		<u> </u>	Н	È€G	
œj J		{ æ¢	Ó	Ēl G	i	ŒIJ	i	ΕĠΪΙ	J	FĚÍÎ		Ê€	J
GG΀		{ a		⊞€JJ	J	<u>⊞</u> IÏ	J	€	ì	<u> </u>	Н	È€G	T i
GG F	ÚΪ HF	{ æ¢	V	Ĕ GH	J	<u> </u>	J	EGII	i	FÈ€G	Ϊ̈́	ĒΪΗ	
GG G	OFFI	{ a		<u> </u>	ī	ШH	ī	ÈE€G	Ì	#FG	i i	Ì€€I	
GGÎ H		{ æ¢	Ó	Ē GH	i	Ėlĺ	i	ÉGII	J	FÈ€G	G	ÈΪΗ	J
GGÎI		{ a		Î	J	Ш́Н	J	ÈE€G	ì	⊞G	ì	È€	ì
GGÍ	ÚÏ HG	{ æ¢	V	<u> </u>	J	<u> </u>	J	EGII	Ť	FÈ FI	Τ̈́	ĖGG	Ti-
GG Î		{ a	-	⊞GFJ	Ť	⊞EÎ	Ť	ÈE€H	ì	⊞-JI	ì	È€Ë	ì
ΘĜΪ		{ æ¢	Ó	Ė̈́J	T	ÈGFÎ	Т	ÈUI	J	FÈFI	G	ĖGG	J
GGÎÌ		{ a		⊞GFJ	J	⊞ŧÎ	J	È€€H	ì	⊞∃JI	ì	È€Ë	ì
GGÎ J	ÚÏ HH	{ æ¢	V	ĚΙ	J	Ľ€ŒÍ	J	ÈG	G	GÈ€JF	Ï	ÈJ	T
GGÏ€		{ a		ËŒFI	T	⊞ÎF	\mathbf{I}	È€	Н	⊞GFÏ	ì	È€€J	ì
GG F		{ æ¢	Ó	ĚΙ	Т	È€J	Т	ÈG	Ϊ	GÈ€JF	G	ÈΙ	J
GG G		{ a		⊞GFI	J	⊞ÎF	J	È€	Н	ËŒÏ	ì	È€J	ì
GGÏ H	ÚÏ H	{ æ¢	V	ÈHGÌ	G	Ë€FF	ì	ÈCHH	Ϊ	FÈ∫G		ÈG	Ϊ
GGÏI		{ a		⊞€€Í	Н	⊞HJ	Ϊ	È€	Н	ĦΠÌ	Ï	È€F	ì
GÖ Í		{ æ¢	Ó	ÈHGÌ	Ϊ	Ë€FF	ì	ÈGHH	G	FÈÍG	J	ÈG	G
GGÏÎ		{ a		⊞€€Í	Н	⊞HJ	G	È€	Н	ĦΠÌ	G	È€F	ì
GG Ï	ÚÏ H	{ æ¢	V	ĚÎÌ	1	Ë€FF	ì	ÈΗ̈́Ι	J	FÊÎÍ		ĒÌG	J
GG Ì		{ a		⊞€€I	Н	⊞ìÎ	J	È€	ì	⊞ÌIJ	Н	È€F	ì
GĞ J		{ æ¢	Ó	ĚÎÌ	J	Ë€FF	ì	ÈΗ̈́Ι	T	FÈÎÍ	J	ĒÌG	
GGÌ€		{ a		⊞€€I	Н	ËÌÎ		È€	ì	⊞ÏIJ	Н	ÈF	Ì
GG F	ÚÏ HÎ	{ æ¢	V	ĖGJ		ËŒJ	ì	ÈΗΗ	J	FĚĞ	I	ÈFG	J
GG G		{ a		ËE€F	Ì	ËΠΗ	J	È€€I	Ì	ËΪÎΪ	Н	ÈE€Ì	Ì

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`fl7cbh]bi YXL

<i>30) 1 0</i>		•									~ .		
	Ú æe^		Ù`¦æ&^	Ùãt{ੵæFAXo∙ãa		Ùãt{_æGÆX•ãã	_ŠÔ_	Væ`ÁTæ¢ÁŽ•ãa	ŠÔ	OB;*[^AŽ[æåá		X[}ÁTౖã-^•ÁŽÈ	ÊŠÔ
ΘĠ Η		{ æ¢	Ó	Ė̈́GJ	Ų	Œ€J		ÈΗΗ	Ţ	FĚĞ	J	ÈFG	Ļ
GG I		{ a		⊞€F	İ	ЩIН	ļ	È€	ĺ	ĦΪÎΪ	Н	È€Ì	ĺ
GG Í	ÚÏ HÏ	{ æ¢	V	ÈΪΗ	Ĩ	Œ€Í	I	ÈΙ	G	ŒĠÚ	Н	ĖGĮ	G
GĞ Î		{ a	,	ŒFF	ı	∰ H	G	È€F	Ĺ	⊞ÏÍĢ	G	ÈEFÌ	ĺ
ΘĠΪ		{ æ¢	Ó	ÈΪΗ	G	Œ€Í	İ	ÈΙ	Ĩ	ŒĠÚ	Н	ÉGI	Į.
œjì		{ a		È€FF	J	⊞ì H	Ï	È€F	İ	Щ̈́ÍG	Ï	ÈFÌ	ĺ
GG J	ÚΪ HÌ	{ æ¢	V	È	Ï	€	İ	ĖΙÌ	G	GÈH	Н	ÈGÎ G	G
GGJ€		{ a	,	Ì€€Ï	-	ŒIJÌ	G	Œ€J	<u> </u>	⊞̈́ÎG	G	ÈFÌ	ĺ
GGJF		{ æ¢	Ó	Đ,	G	€	İ	ĖΙÌ	Ĩ	GÈH	Н	ÈGÎG	Ĩ
GGJG		{ a		È€Ï	J	ŒFJÌ	Ï	Œ€J	İ	⊞į̇̃iG	Ï	ŒFÌ	ĺ
GGJH	ÚΪΗJ	{ æ¢	V	ĖĠHĺ	J	Ì€€Ï	J	Είι	G	FÐJJ	Н	ÈÄÍ	G
GGI		{ a	,	Œ€I	-	EEGF)	G	È€Í	Ĺ	∰ÎI	G	ÈFF	ĺ
GGJÍ		{ æ¢	Ó	ĚΉ	1	È€Ï	I	ÈίΙ	Ĩ	FÐJJ	H	ÈĞİ	Ĩ
GGJ Î	7.11	{ a		ËE€I	J	EEGF Ì	1	Œ€Í	<u> </u>	<u> </u>		ÈFF	1
GGIĹ	ÚÏI€	{ æ¢	V	ÈFÏ	J	ŒFÎ	J	ĖÎÌ	Ţ	<u>FÐII</u>	H	ÈÆĴ	Ţ
GGJÌ		{ a	,	Щ G		ii ii ii ii ii ii ii ii ii ii ii ii ii		Æ€H		⊞ÏF	G	Ì€€Ì	1
GGJJ		{ æ¢	Ó	<u>È</u> FÏ	1	ŒFÎ	1	ÈÎÌ	Ğ	<u>FÐII</u>	H	ÈÆĴ	1
G I€ €	7.0	{ a		ŒFG	J	ŒGIÌ	J	Œ€H		⊞ÏF		È€Ì	1
GH€F	ÚÏIF	{ æ¢	V	<u>i</u> È€F	J	ÆG	J	Ėì ì	Ĺ	<u>FÐ</u> €G	Н	<u></u> <u> </u>	Í
GH€G		{ a	,	⊞EGG		— Ü ÌÏ		Œ€H		<u> </u>	G	È€Î	1
GH€H		{ æ¢	Ó	È€F		ÈG	1	ÈÌÌ	Ĺ	<u>FÈ</u> €G	H	ĦĴ	1
GH€I	7 11	{ a		⊞EGG	J	<u> </u>	J	È€H		<u> </u>		È€Î	
GH€į	ÚΪΙG	{ æ¢	V	ÈÌÍ	J	<u>Ì</u> EHÏ	J	EG	J	<u>F</u> ÐH	Н	ÈÎÏ	Į
GH€Î		{ a		<u> </u>		ijΪ		ÈE€G	F	<u>∰</u> ǼH	G	È€H	
GH€Ï		{ æ¢	Ó	ÈÌÍ		<u>Ì</u> €HÏ		ÈG		<u>F</u> ÐH	H	ÈÎÏ	1
GH€Ì	.7.0	{ a		<u> </u>	J	Ħij.	J	ÈE€G	F	<u>⊞</u> HEH		È€H	
GH€J	ÚÏTH	{ æ¢	V	ĚÎÏ	J	<u>Ē</u> Í	J	ÉGÍ	J	<u>F</u> ÈG	F	ĚIG	J
GHF€		{ a	<u> </u>	<u></u>		Ħĵĵ		€	F	⊞FG	H	€	F
GFF		{ æ¢	Ó	ĚÎÏ		<u>È</u> Í	<u> </u>	ÈĠÎ		<u>FÀG</u>	F	ĚIG	
GFG	./	{ a		É	J	∰ÎÎ	J	€	F	⊞FG	Н	€	F
G-FH	ÚÏII	{ æ¢	V	Ε̈́ÍG	J	<u>È</u> G	J	ÉĠÏ	1	<u>FĚII</u>	J	ÈG	1
G+FI		{ a	<u> </u>	⊞ G		ĦÎÍÏ		€	<u> </u>	Œ÷€H	G	È€G	1
G F Í		{ æ¢	Ó	ÊÍG		È G	<u> </u>	ÉĠÏ	J	FĚII	ļ.	ÊG	J
G F Î	ı'ıï ı í	{ a		ŒĠG	J	∰ÍÏ Èα.	J	€ Trick		<u>⊞</u> EH	 	È€G	++-
G F Î	ÚÏ I Í	{ æ¢	V	ËHF	J	<u></u> ÈGH	J	ÈH€J	1	FÊFJ	1	ĒÌJ	+
G F Ì		{ a	<u> </u>	∰G		⊞ÏIG		È€G	+	⊞ÎFÎ F		ÈE€Í	+
GHFJ		{ æ¢	Ó	ËHF		ÈGH	1	ÈH€J	J	FÊFJ	G	ĒÌJ	J
GHG€	1'11 1 î	{ a		<u>⊞</u> G	J	⊞ÏIG	J	ÈE€G ÈLGÎ	-	<u>∰Î</u> F	<u> </u>	ÈE€Í	++-
GHGF	ÚÏ I Î	{ æ¢	V	<u>È</u> FÎ ∰ìF	J	ÈÏJ	J	ÈG	ì	FÈHG 		<u>L</u> ËÍJ E€€Ì	1
GHGG		{ ā	Ó	<u>E</u> FÎ	-	<u>⊞</u> HH ÈïJ		<u>E</u> €€I ÈHGÎ	+	FÈHG		EiJ	
GHGH		{ æ¢ { a}	0	<u> </u>	J	<u> ⊞</u> HH	J		J	<u>r∎rus</u> ⊞ŒÌ	G	<u>Œ</u> IJ	J
GHG HG	ÚÏ I Ï		V	<u> </u>	_	<u> </u>		EE€I ÈG€Ì	+	GÊTH	+	<u>Ě</u> FÏ	+
GHGÎ	ULTI	{æ¢ {ā}	V		J	⊞ÏJ	J	Œ€Í	Н	<u>GETIN</u> ⊞GÍF	-	<u> </u>	
GHGÏ			Ó	<u> </u>		<u>ш</u> іј	1	<u>re</u> €i		GETH	G	<u>EFF</u> ĚFÏ	1
GHGi		{ æ¢ { ā}			J	⊞ÏJ	J	Œ€Í	J H	<u>GETIN</u> ⊞GÍF	J	<u> </u>	J
GHGJ	ÚÏ I Ì	<u>{</u> 9e {æ¢	V	<u>щ</u> і	G	<u>⊞</u> IJ ⊞FI	ì	Èì H	ï	GEGFÏ	ı	<u>Err</u>	T
GH€	OFF	{ a}	V	⊞EGG	Н		Ï	ŒI⊓	Н	<u>GG</u> FI	l i	EFI	
GHF		<u>{</u> æ¢	Ó	<u>щес</u> с	Ï	<u>⊞</u>	ì	ÈÌ H	G	<u>ш</u> е ŒЭFÏ	J		G
GHG		<u>{ a</u> }		⊞E€G	- Н	iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	G	θ	Н	<u>uur</u> €	G	<u>uuu</u> E€FI	ì
GHH	ÚÏIJ	<u>{</u> æ¢	V	ĒЛÌ	1	<u>⊞</u>	ì	HI Í	J	FÈĠ	ı	ËHÎ	J
GHI	0110	{ a	V	€	Н	⊞ GF	J	È€J	ì	<u> </u>	H	ŒFJ	Ť
<u> </u>		19			- 11	щ	U	20					

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`ff7cbh]bi YXL

	1/11		1,11,1	·	šâ)) # (OFF **	šâ		šâ	~~************************************	šâ		** šš
O L Í	Ú æe^		Ù*¦æ&^_	Ùãt{an€ÁX.•ãã	ŠÔ		<u> 30</u>	VaěÁTaq¢ÁŽ•ãa	80	OB;* ^AŽanåá		X[}ÁTã ^•ÁXÈ	±80
GHÍ		{ æ¢	Ó	ĒJÌ	J	⊞€FJ	<u> </u>	ÈÏÍ	 	FÈG	J	ËHÎ	<u> </u>
GHÎ	ı'ıı (c	{ a		€ Die	H	⊞ GF	ì	È€J		Ë	H	ÈEFJ	
GHÏ	ÚÏÍ€	{ æ¢	V	ÙJF	 		<u> </u>	ĚII	J	FĚ H	1	FÈÉÍ H	J
GHÌ		{ a	<u> </u>	È€G	<u> </u>	ËÈÈFÎ	Ţ	ÈF		⊞ÏÏ	H	ÈEFJ	
GHU		{ æ¢	Ó	ÙJF	J		<u> </u>	ĚII	 	FĚH	J	FÈ H	1
GH€	.'# (-	{ a	.,	ÈE€G	Ų.	ËÈÈFÎ	ļ.	ÈF		∰Ï	Н	ÈEFJ ÈDOÍ	1
GH F	ÚÏÍF	{ æ¢	V	ÈΪJ		È€Ï		ÈĞ	G	G <u>Ť</u> IĠ	G	ÈGÍ	G
GH G		{ a	<u> </u>	ÈE G		i i	G	ÈEG	<u> </u>	ĖFI	l l	È F	1
GH H		{ æ¢	Ó	ÈΪJ	G	È€Ï	G	ÈĞ		G <u>È</u> HGÌ	1	ÈGÍ	1
GHI	./# / 🍝	{ a	.,	ÈEI G	Ĵ		1	ÈEG	J	<u>İĞ</u> FI	J	È F	J
GH Í	ÚΪÍG	{ æ¢	V	ÈJI	<u> </u>	EE€	<u> </u>	ÈĠ	G	FÈIF	Н	ÉGÍ	G
GH Î		{ a	<u> </u>	<u>È</u> F		∰ J	G	ÈFH È aî	<u> </u>	⊞ÏF	G	ÈG	1
GH Ï		{ æ¢	Ó	ÈΊ	G	<u>⊞</u>	1	ÈĠ	}	FÈIF	H	ÉGÍ	1
GH Ì		{ a	.,	ÈF	J	⊞ïJ	1	ÈFH È:	<u> </u>	⊞ÏF		ŒG	1
GH J	ÚÏÍH	{ æ¢	V	<u>ÉGIF</u>	J	€		ÈI	ļ	FÈÍÍ	H	<u>E</u>	
GHÍ€		{ a		Œ€F		⊞ŒÌ	Ĺ	È€Ï		⊞ĭIJ	G	<u>È</u> FÍ	
GHÍ F		{ æ¢	Ó	ÈG F		€		ÈI	Ģ	<u>FÈÍÍ</u>	H	ÉĞÎ	Ğ
GH, G	/ n /	{ ā		È€F	J	ŒŒÌ	J	Œ€Ï		Щ̃IJ		È€FÍ	
GH, H	ÚÏÍI	{ æ¢	V	<u>j</u> HGH	J	ÌŒ€Ï	J	Èĺ	Ĺ	FÈII	Н	ÈG	Į
GHÍÍ		{ a		ËE€Î `		Ë		È€Í		ЩÎГ	G	ÈFF	
GHÍ		{ æ¢	Ó	<u>j</u> HGH		ÈEEÏ		Ė(j	Ų	FÈII	H	ÈG	
GHÍ Î	/!! / /	{ ā		<u>⊞</u>	J	ÜĦ	J	Œ€Í		∰ÎF		ÈFF	
GHÍÏ	ÚÏÍÍ	{ æ¢	V	È€Í	J	ŒFÍ	J	ĖΊ	Į	FÈG	Н	ÈUÌ	J
GHÍÌ		{ ā	,	<u> </u>		⊞HŲ		Æ€H		ijijî	G	Ì€€Ï	I
GHÍ 1		{ æ¢	Ó	È€Í		È€FÍ	1	ÈΊ	Ţ	FÈG	Н	ÈUÌ	
GHĴ€	(11.7.6	{ a		Œ E I	J	⊞HU	J	ÈE€H		iii î		Ì€€Ï	I
GHĴF	ÚÏÍÎ	{ æ¢	V	ÈΙ	J	Ě€G	J	ÉGHH	J	<u>FÈ Í F</u>	Н	Èïì	J
GHĴ G		{ ā	,	⊞EGI		∰ÌG		È€G	Н	ŒĴH	G	Ì€€I	Н
GHJ H		{ æ¢	Ó	ÈΙ		ĚG		ÉGHH		<u>F</u> ÈÍF	Н	Èïì	
GHĴ	70.70	{ a		ËEG	J	∰ÌĢ	J	È€G	Н	⊞GJH		Ē€	Н
GHĴĹ	ÚÏÍÏ	{ æ¢	V	ĚÏĮ	J	ĚHÌ	J	ÉGÍÌ	J	<u>F</u> ËÎÍ	F	Ěíî	J
GHÎ		{ a	,	Œ <u>Ĥ</u>		Щ̈́Ϊ́Η		Ţ€	F	Щ̃€J	Н	,€	F
GĻĮ		{ æ¢	Ó	ĚÏĮ		ÈEHÌ		ÈĠÌ		<u>FËÎÍ</u>	F	ĚÍÎ	
GHĴÌ	("	{ a		<u> </u>	J	ЩÏН	J	ͺ€ __	F	⊞j́€í	Н	.€	F
GHJ 1	ÚΪ ÍÌ	{ æ¢	V	ÊÎF	J	<u>Ì€</u> Í Î	J	ÈÆÍ	Ļ	<u>FĚ I Ì</u>	J	ĒΙ	
GHÏ€		{ a	,	Î		Η̈́ĵĵ		ͺ€ __		ŒĴ	G	È€F	I
GHÏF		{ æ¢	Ó	ÊÎF		<u>È</u> (Î		ÈH€Í	Ĺ	<u>FĚ I Ì</u>	II.	ĒΙ	Į
GHÏ G	/ II /	{ a		Î	J	Ħĵĵ	J	,€		ŒŒĴÌ	II.	Œ€F	
GHÏ H	ÚÏÍJ	{ æ¢	V	ËĹΗ	J	<u>E</u> ÌÍ	J	Ė	Ļ	<u>F</u> Ê FH	Ц	ĖĠ	Ļ
GHÏÌ		{ a	,	iii (Щ̈́ĵί		È€G		<u></u>		Œ€Í	I
GHÏÍ		{ æ¢	Ó	ËίΗ		<u>È</u> Í	1	ÈH	Į	FÊ FH	G	ĖĞ	Ų
GHÏÎ	/ !! A	{ a		i i i	J	ЩÎĴĺ	J	È€G		∰HÌ	<u> </u>	È€Í	1
GHÏÏ	ÚÏ΀	{ æ¢	V	ĖН	J	ÈĠ	J	ĖĤΙ	Ļ	FÈÍH	L	È	Į į
GHÏ Ì		{ a	,	∰GU	1	ЩĺΪ	-	E€E		iiii î		È€ÈÌ	1
GH <u>İ</u> J		{ æ¢	Ó	ĖΗ	1	ÈĠ	1	ÈĤÎI	Ų	FÈÍH	G	È	J
GHÌ€	7.11.0	{ a }		∰GU	J	Ħíï	J	E€E	İ	i Î	ļ į	È€ÈÌ	İ
GHÌ F	ÚÏÎF	{ æ¢	V	<u>Ē</u> FJ	J	<u>Œ</u> Ï Ï	J	EGI H	Ļ	ŒŒĴÎ	Ĭ	Ē€J	
GHÌ G		{ a		ˌ J	1	ĦÎ I I	1	È€Î	Ì	⊞H€G	1	ÈEFG	Ì
GH) H		{ æ¢	Ó	ĒFJ	1	È€ÏÏ	1	È H	J	GÈJÎ	G	Ē€J	J
GHÌI	7.11.4	{ a		Ë J	J	⊞ II	Ų	È€Ê	Ì	⊞ H€G	J	ÈEFG	Ì
GHÌÍ	ÚÏÎG	{ æ¢	V	ÈGI	G	Œ€FÏ	Ì	ÈÎΗ		G j GHJ		ÉĠÎ	ļ Ï
GHÎ [{ a		€	Н	⊞GÍH	Ï	È€ÈÌ	İ	⊞̈FG	Ĭ	È€FÏ	

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`fl7cbh]bi YXL

90) 10		· ·		o on igg i					~ .		w .		
	Ú æz^		Ù`\ ` æ&^	Ùãt{,æFAŠX•ãã	<u>\$</u>	Ùãt{_æ€ÆX•ãã	<u>\$</u>	Væ ÁTæ¢ÁŽ•ãa		OB;* ^AŽtæåá		X[}ÁŢã,^•ÁXÈ	
GHÌÏ		{ æ¢	Ó	ÉGG		<u>⊞</u> FÏ		ΕÎΗ	Ţ	GÉGHU	J	ÉGÌÎ	G
GHÌÌ		{ a		€	Η	⊞ǴH	G	È€È	Ĺ	⊞̈́FG	G	È€FÏ	İ
GHÌ J	ÚΪÎΗ	{ æ¢	V	ÊÎJ	1	È€JG		ÉGIÌ	Ţ	FÈIH		ĒÍÍ	Ų
GHJ€		{ a	,	⊞€I	J	ËEF	J	ŒFH	ĺ	Щ̈́Ι	Ï	ÈEGÍ	İ
GHJF		{ æ¢	Ó	ÊÎJ	J	È€JG	J	ĖĐÌ	Ţ	FÈIH	J	ÈÍÍ	<u> </u>
GHJG		{ a }		⊞E		⊞́€F	1	È€FH	Ì	Щį	G	È€GÍ	Ì
GHJ H	ÚÏÎI	{ æ¢	V	FÊĤ		ĚÍÏ		ĚΪΗ	J	FĚÌF		FĚŧ	J
GHI		{ a		Щ́ÎĢ	J	ËËÐ	J	È€G	Ĺ	ЩĮJ	Н	È	İ
GHUÍ		{ æ¢	Ó	FÊĤ	J	ĚÍÏ	J	ĚΪΗ	Ţ	<u>F</u> ĚÌ F	J	FĚ€	<u> </u>
GHJ Î	/ II A /	{ a		⊞́ÎG	<u> </u>	ËËĒ€Ì	Ţ	ŒG	Ĺ	⊞įj	Н	E Í	İ
GΗJĮ	ÚÏÎÍ	{ æ¢	V	ÈÏJ	Ï	ŒŒH	Ĺ	ŒIJ	Ĩ	FËÏÌ	J	ÈÌH	Ĩ
GHJ Ì		{ a	,	ŒFÏ	G	∰FÌ	G	È€FJ	ĺ	⊞̈́FJ	G	È€HÏ	İ
GHIJ		{ æ¢	Ó	ÈÏJ	G	ËË€€H	Ĺ	ŒIJ	G	FĚΪÌ		ÈÌΗ	G
G€€	(!!	{ a		È€FÏ	<u> </u>	∰FÌ	ĺ	ÆFJ	<u> </u>	ËFJ		ŒHÏ	1
GI€F	ÚÏÎÎ	{ æ¢	V	ĚJG	1	⊞E€G		ĒFÌ	Ţ	F <u>È</u> FH	J	<u>E</u> EFÌ	I I
GI€G		{ a	,	ŒFÎ		iii î	G	E FĮ		⊞̈́€Í	G	ŒĜ	1
GI€H		{ æ¢	Ó	ĚJG	G	⊞E€G		ĖFÌ	Ğ	F <u>È</u> FH		<u>E</u> EFÌ	G
GI€	/ !! A !!	{ a		<u>Æ</u> FÎ	J	i i i i i i i i i i i i i i i i i i i	Ĺ	E FI_	Ţ	⊞̈́€ĺ		ŒĞ	I
Gl€į	ÚÏÎÏ	{ æ¢	V	ÉÍ	J	€		ĖΗ	Ļ	<u>FËÎH</u>	J	ÉĠĹ	Í
G€Î		{ a	,	ÈF		ËŒFF	Ĺ	Œ€Ĵ		⊞̈́Ğ	G	ÈEFÌ	I
GI€Ï		{ æ¢	Ó	É		€		ÈH	Ģ	<u>FËÎH</u>	<u> </u>	ÉĄĺ	I L
GEÌ	./ ^ >	{ a		ÈF	J	⊞GFF	Ĵ	È€J		⊞ĞĞ		ÈFÌ	
G€J	ÚΪÎÌ	{ æ¢	V	<u>È</u> GJ	J	€		ÈÎ	Ţ	FË€	J	ÈH	J
G F€		{ a }		È€H		⊞HEH		È€Î		<u> </u>	G	ÈFH	
G FF		{ æ¢	Ó	<u>È</u> GJ		€		ÈÎ	ļ	FË€	ļ ļ	ÈH	
G FG	./ ^ .	{ a		È€H	J	⊞H€H	J	È€Î		<u>Ĥ</u> IÌ		ÈFH	
G FH	ÚΪÎJ	{ æ¢	V	<u>È</u> FG	J	È€G	J	ÈG€Í	J	FÊÌ	H	ÈFF	J
G FI		{ a	<u> </u>	⊞EEG		Ü₩ÛÎ		È€	Н	⊞ïF	G	È€È	H
GI FÍ		{ æ¢	Ó	<u>È</u> FG		È€G	1	ÈG€Í		FÊÌ	H	ÈFF	
G FÎ	ı'ı' '' o	{ a		ËE€G	J	⊞ UÎ	J	È€	Н	⊞ÏF	<u> </u>	È€È	H
G FÏ	ÚÏÏ€	{ æ¢	V	ÈJÎ	J	È€Ì	J	È CO	J	FË∉F	H	ÈJG	J
G FÌ		{ a	<u> </u>	Œ€Ì		Ħìì		È€€G	Н	EĞIÎ	G	È€H	H
GI FJ		{ æ¢	Ó	ÈJÎ	<u> </u>	E €Ì	<u> </u>	È CO	1	FË∉F	H	ÈJG	- !
GI Œ	r'ii ii e	{ a		<u>⊞eeì</u>	J	∰ÌÌ	J	ÈE€G	Н	ËGJÎ □Ě vî	-	ÈE€H	H
G GF	ÚÏÏF	{ æ¢	V	<u>ĚÌI</u>	J	ŒFG	J	ÉGÌÎ	J	FĚ JÎ	J	ĚÏÌ	J
G GG		{ a	<u> </u>	<u>⊞</u> GFG		∰ÌG	-	€ Èàî	F	⊞GFI Fr¥ ú	G	€ Ěïì	F
G GH		{ æ¢	Ó	ĚÌI		ÈFG				FĚJÎ	l l		+
GG	LÚT T O	{ a		<u> </u>	J	⊞ÌG	J	€ ÈΩ	F	<u>ËGFI</u> FĚÍÎ	-	€ Èîì	F
G G	ÚÏÏG	{ æ¢	V	<u> </u>	J	<u>E</u> EGH ⊞ÌïJ	J	ÈHGÌ	Ì		G	€	1
GG		{ a	Ó	<u>⊞</u> EGH Èïl	-		-	€ ÈHGÌ	-	<u>⊞</u> FJ FĚÍÎ	G	EÎÎÌ	
GG		{æ¢ {ā}	U	<u></u> ≣H		<u>E</u> EGH ⊞ÌïJ	J	€	J	— F⊞TFJ	i i	€	J
GG	ÚΪΪΗ		V	<u>E</u> ÏF	J	<u>ш</u> ту E€GÍ	J	ÈijJ		<u>шггэ</u> FĚJI	+	Ε̈́ΪF	i i
G H€	OLITI	{æ¢ {ā}	V	⊞EGÍ	J	⊞ÌH	J	EE€G	ì	<u>r⊞</u> H		EE€I	+
GHF		_	Ó	<u>E</u> ïF	1	<u>ш</u> тп E €GÍ	1	HI J	J	FĚJI	G	ËÏF	++
GI HG		{æ¢ {ā}	U	<u> </u>	J	<u>Œ</u> ÎH	J	EE€G	ì	<u>r⊞</u> 3H	ì	Œ€	J
GHH	ÚÏÏI		V	— IIEG	_	<u>ш</u> пп È€Í I	J	È HH	+	FÈÍJ	 	ÈJI	++
GH	OFF	{æ¢ {ā}	V	<u> </u>	J	⊞G	J	EE€	ì	F⊞HÎ		E€EÌ	1
GHÍ		{ æ¢	Ó	<u>⊞</u> ∃F		<u>⊞</u> G ÈÉÍ I		ÈHH	J	FÈÍJ	G	ÈJI	J
GHÎ		{ a		<u> </u>	J	⊞G	J	EE€	ì	 ∰HÎ	J	E€È	ì
GH	ÚÏÏÍ	{ æ¢	V	<u>H</u> EIÌ	J	<u>⊞</u> H	ì	HÍ J		G İ İFJ	Ï	ËFF	
GH	0111	{ a	V	€	Н	##€	i	ÈEEÏ		⊞GJH		ÈFH	+
<u> </u>		1 9			- 11	ш		<u> </u>		110011			

9bj Y`cdY'D`UhY#G\ Y``Df]bW]dU`GhfYggYg`ff/cbljbi YXL

	1'11		1,1,10V	Ùãi{æFÁX.∙ãã	ŠÔ	Ùãi{æ€ÁŽ•ãã	čô	VaěÁTaq¢ÁŽ•ãa	čô	OT * I∧ Ã7-3 4	čô	X[}ÁTã^•ÁŽÈ	~~~
ОШ	Ú æe^	(~~	Ù*¦æ&^ Ó	∪a {aæ-A∆.•aa ÉËÏÌ	<u>so</u>	∪a{æ—x∆•æa EEEFH	ì	væ AiæçA∆•aa ÈHÍJ		_OB;* ^Æiæåá_ OBHFJ		X[}Alan•A∆⊞ ËFF	±30
G HJ		{ æ¢	U		<u> </u>	<u>⊞</u> €	1		J		G		ì
GI€	1/11 11 1	{ ā	1/	€	H		J	ÈE€Ï	-	⊞GH OÌ.⊓.	J	ÈEFH	++-
GIF	ÚÏÏÎ	{ æ¢	V	È H		⊞EG ∰ FO		ÉGÌÌ	 	<u>GÈIFH</u>	<u> </u>	Ě	1
GIG		{ a	Á	€	<u>H</u>	⊞H€G	J	ÈF	-		H-	ÈFJ	
GIH		{ æ¢	Ó	È H	J	⊞EG ∰ FO		ÉÉ	J	<u>GÈHFH</u>	J	Ě	J
GII		{ a		€	<u>H</u>	⊞H€G		ÈF À û ï	<u> </u>		G	E FJ	
GIÍ	ÚÏÏÏ	{ æ¢	V	ĔÏ	<u> </u>	ÈJÌ	<u> </u>	ÈĤÏ	Ĵ	FË€	l l	ËÌÍ	J
GIÎ		{ a	<u> </u>	⊞€ JÎ	J	⊞G	J	ÈFI À Î Ï	-	⊞€Í	<u> </u>	ÈEGÌ	
GIÏ		{ æ¢	Ó	ËÏ	J	ÈJÌ	J	ÈÎ Ï	1	FË€	J	ËÌÍ	1
GIÌ		{ a	.,	⊞EJÎ	+	⊞G		<u>È</u> FI		⊞€Í	G	ÈGÌ	1
GIJ	ÚÏÏÌ	{ æ¢	V	FÈ€G		È€G	1	ÊHÎ	Ţ	<u>FĚ FG</u>	l l	FÊÛ	J
GÍ€		{ a		⊞̃€G	J	ËÈÏI	J	ÈFJ		<u> </u>		<u>Ì</u> EHÏ	
GÍF		{ æ¢	Ó	FÈ€G	J	È€G	J	ÊHÎ		<u>FĚ FG</u>	J	FÊÛ	
GÍG	70.0	{ a		⊞EG	<u> </u>	<u>Ë</u> ÈÏI		ŒFJ		<u><u></u>HÍ</u>	G	<u>È</u> HÏ	
GΪ́Η	ÚÏÏJ	{ æ¢	V	ÈΊ	G	III	Ţ	È€Î	Ģ	<u>FÈ</u> FÌ	<u> </u>	ÈG€Î	Ğ
Gļļ		{ a	,	ŒFG	J	Î		E FI	<u> </u>	ЩÍI		ÆG	<u> </u>
Gİİ		{ æ¢	Ó	ĚΊJ		<u> </u>	J	È€Î	Ĺ	<u>F</u> EF	J	ÉG€Î	Į.
GÍÎ	711.	{ ā		ŒŒFG		ı İ	G	ÆFI	<u> </u>	Щ̈́Ιĺ́	G	ÈEG	1
GÍÏ	ÚΪÌ€	{ æ¢	V	ÈGI G	G	Œ€Ì		ĖΙÎ	Ĺ	<u>G</u> ÈÎÎ	H	ĖĞÏÏ	I I
GĺÌ		{ a		ÈEFG	J	ËĜ		ŒFJ		⊞ÌlF	J	Ì € HH	1
GÍJ		{ æ¢	Ó	ÈGI G	<u> </u>	È€È	J	ÈΠÎ	G	GÈÎÎ	Н	ÈĞÏÏ	G
G΀		{ ā		ÈEFG		ËĜ	G	È€FJ	1	⊞ÎIF	1	ÈEHH	İ
GÎF	ÚΪÌF	{ æ¢	V	ÈĠ	<u> </u>	<u> </u>		ÈËÏF	Ï	QEGÏÌ	Ï	ÈΗ	Ï
GÎG		{ a		⊞ G G	J	ËŒJH	G	ÈEFG	Ì	ÈUÏ	J	ÈEGF	Ì
ΘÎΗ		{ æ¢	Ó	ÈĠ	G	<u> </u>	J	ÈËÏF	G	QEĞÎ Ì	G	ÈΗ	G
GÎL		{ a		É G	1	ŒŒJH	Ϊ	ÈEFG	Ì	ÈUÏ		ÈEGF	Ì
GÎÍ	ÚΪÌG	{ æ¢	V	ÈίΗ	Ï	È€È	-	È€Ì	G	QÊFFÏ	Ï	ÈJJ	G
GÎÎ		{ a		ÈEFG	J	<u> </u>	G	ŒFÌ	Ì	ÈÌIF	J	ÈHF	Ì
GÎΪ		{ æ¢	Ó	ÈίΗ	G	È€È	J	È€Ì	Ï	<u>QÊFFÏ</u>	G	ÈJJ	Ï
GÎÌ		{ a		ÈEFG	1	EFT (Ϊ	È€FÌ	Ì	ÊIF		ÈEHF.	Ì
GÎJ	ÚΪÌΗ	{ æ¢	V	ĖĹ	<u> </u>	Œ€Î	Н	ĖG	G	Q ÌH Î		ĖGÎ	G
GΪ€		{ a		È€Í	<u>ì</u>	ii î⊞	G	È€Î	F	ÉĞÍ	ì	ÈF	F
GÏF		{ æ¢	Ó	ÈĺÌ	G	ËE€Î	Н	ÈĠJ	Ϊ	Œ Ìl €Î	J	ÈGÎ	Ï
GÏG		{ a		È€Í	<u>ì</u>	ii î⊞	Ϊ	È€Î	F	ÉĞÍ	Ì	ÈF	F
GΪΗ	ÚΪÌΙ	{ æ¢	V	Ĥ	Ï	Œ€í	J	ÈlÎ	G	GÈHI	Ï	ÉGÍ	G
GΪΙ		{ a }		ËŒÎ	1	ΕΉ̈́Η	G	È€Í	ì	⊞ĭIJ	1	ÈF	Ì
GΪÍ		{ æ¢	Ó	ÈÎ	G	ËE€Í	1	ÈlÎ	Ϊ	GÈHI	G	ÈĠÍ	Ï
GÏÎ		{ a		⊞€Î	J	ΕΉ̈́Η	Ϊ	È€Í	Ì	⊞́IJ	J	ÈF	ì
GΪΪ	ÚΪÌÍ	{ æ¢	V	ÈÍÎ	Ϊ	È€FG	J	ÈĖΪ	Ϊ	ĖΪJ	G	ÈĠÏΗ	Ï
GΪÌ		{ ā		⊞€FI	T	⊞îJ	G	€	J	ЩΪÍÎ	Ï	ÈFF	ì
GΪJ		{ æ¢	Ó	ÈĺÎ	G	È€FG		ÈίΪ	G	ĒΪJ	ΙÏ	ÈÄΗ	G
GÌ€		{ ā		⊞€FI	J	⊞îJ	Ϊ	€	Т	ĦΪÍÎ	G	ÈFF	ì
GÌF	ÚΪÌÎ	{ æ¢	V	ÈΪΗ	G	⊞€€Í	J	ÈÎΪ	Ϊ	ÈĠ	G	ÈJ	Ϊ
GÌG		{ a		⊞ E €Î	Т	ËÈÌΪ	Ϊ	È€	ì	⊞FÎ	Ϊ	È€J	ì
GÌH		{ æ¢	Ó	ÈΪΗ	Ϊ	⊞€€Í	T	ÈÎΪ	G	ÈĠ	Ϊ	ÈJ	G
GÌI		{ a		Œ€Î	J	ËÈÌΪ	G	È€	ì	⊞FÎ	G	ÈŒ€J	ì
GÌÍ	ÚΪÌΪ	{ æ¢	V	Œ	G	Œ€í	ì	ÈÎΙ	Ϊ	ÈJΪ	G	ĒĠ Ï	Ï
GÌÎ		{ a		È€Í	ì	⊞ŒJ	Ϊ	È€Í	ì	ΞÍ	Ï	È€€J	ì
GÌÏ		{ æ¢	Ó	Ð	Ϊ	ËE€Í	ì	ÈÎI	G	ÈJÏ	Ϊ	ĒĠ Ï	G
GÌÌ		{ a		È€Í	Ì	⊞G€J	G	È€Í	ì	ΞÍ	G	È€€J	ì
GÌJ	ÚÎÍHŒ	{ æ¢	V	<u>E</u> ÎG	J	<u>⊞</u>	ì	È J	J	FĚJJ	ì	ÈÌÎ	J
GJ€		{ a		È€F	H	iiii i		È€Í	ì	ĦΉ	Т	È€J	ì

9bjYcdY'D`UhY#G\Y``Df]bV]dU'GhfYggYg'fl7cbljbiYXL

U U U U	30) 1	· ·			`` ar rgg i				, ,	× 4	~	× .		
GJL	[<u></u>]	U æg^				80		, SO		80		, şo		ESO_
Gui				0				l		Ĺ				I L
GJI (as		/^/										Í		
Gui		UIIIŒ		V		Ĺ		Н		Í				
Gui Uiii Ce cas V EFH J EEEG I EEFT J EEEG I EEI F Gui Uiii Ce Cas V EEFH J EEEG I EEEFT I EEET I EEEFH I EEEFH I Gui Gu				,								Ļ		F
Gui Uiii Case V Herri J Heefer I Es J Caled I Hell J				0		Ĺ		Н		Ĺ				
GJJ		(0.//						Í		1		J		F
Geo. Geo.		UIIIŒ		V		Ĺ		1		ĺ				Ų
Gef Gef			{ a	,				Į į		1				1
GeF Uiii C ase V Ei H J EEFF I EEI J FEEG J EEFH J GeG				0						Ĺ		J		LĮ.
GeG			{ a					Ţ						1
Gen		ÚĨĬĬŎ		V		Ţ		İ		Ţ		J		Ų
Gel			{ a	,		ĺ		Ţ		ĺ		I		İ
Gel				Ó				Ì				1		1
Géd (a) ÉEGH i ÉEGG i ÉEGG i ÉEGG i ÉEGG i ÉEGG i ÉEGG i ÉEGG i ÉEGG i ÉEGG i ÉEGG i ÉÉGG			{ a			Ì		J		Ì		J		Ì
Ge Ge Ge Ge Ge Ge Ge Ge		ÚÎÍÎŒ		V		J		Ì		J		Ï		J
Géel (â) Éééch i ÉÉÉCH J ÉÉÉCH i ÉÉÉCH j ÉÉCH j ÉÉCH j ÉÉCH j ÉÉCH <td></td> <td></td> <td>{ a</td> <td></td> <td></td> <td>Ì</td> <td></td> <td>Ţ</td> <td></td> <td>Ì</td> <td></td> <td>1</td> <td></td> <td>Ì</td>			{ a			Ì		Ţ		Ì		1		Ì
GÉUJUÍTICE (ass. V ÉFF) J ÉÉEG I ÉTJJ J FÉTI I ÉTI I ÉTI J ÉTI I ETI	ŒJ	1		G										
GFE			{ a			ì		J		Ì		J		Ì
GFF {æc Ó ÊFF 1 ÉEGE i ÊFJJ 1 FÉFÍ I ÉEGE i ÉÉFF J ÉEG i ÉÉFF J ÉEG I ÉÉG J FÉFF J ÉÉG J FÉFF J ÉÉG J FÉFF J ÉÉG J FÉFF J ÉÉG J ÉÉG I ÉÉG I ÉÉG I ÉÉG I ÉÉG I ÉÉG I ÉÉG I ÉÉG I ÉÉG I ÉÉG J ÉÉG J ÉÉG J ÉÉG J ÉÉG J ÉÉG J ÉÉG J ÉÉG J ÉÉG J ÉÉG J ÉÉG J ÉÉG J ÉÉG J ÉÉG J ÉÉG J ÉÉG J	GÍ€J	ÚÎÍÏŒ	{ æ¢	V	ĖFÌ	J		ì	ÈIJ	J		Ï		J
GFC	GÍ F€		{ a			ì		1	È€	Ì		1		Ì
GFH ÚÍ Í Ó {æge V ÉEÍ G J ÉÉEGF G ÉEÍ Í J FÉFF J ÉEÍ J J ÉEÍ J J ÉEÍ G I ÉEÍ G I ÉEÍ G I ÉEÍ G I ÉEÍ G I ÉEÍ G I ÉEÍ G I ÉEÍ G I ÉEÍ G I ÉEÍ G I ÉEÍ G I ÉÉÍ G	GÍ FF		{ æ¢	Ó	ÈFÌ	-		Ì	ĖJJ	1		G		1
GFI	GÍ FG		{ a		È€Í	Ì	⊞FF	J	È€	Ì		J		ì
GFÍ { 288 } Ó BEG I BEGF I BEGI I FEGF I BEGI I FEGF I BEGI I FEGF I BEGI <td>GÍ FH</td> <td>ÚÎÍÏÓ</td> <td>{ æ¢</td> <td>V</td> <td>È</td> <td>J</td> <td>ËE€F</td> <td>G</td> <td></td> <td>J</td> <td></td> <td>J</td> <td></td> <td>J</td>	GÍ FH	ÚÎÍÏÓ	{ æ¢	V	È	J	ËE€F	G		J		J		J
GFÎ (ÎÎ (ÎÎ \$\frac{1}{16} \text{EEG}\$ G \$\frac{1}{16} \text{EEG}	GÍ FI		{ a		ÈE€G	Ϊ	EE€ÍG	1	È€Î	Ì		1		ì
GFÏ ÚĨÎÎCE {æ\$ V BÊH J BÊEG Î BÊÎÎ J FÊG Î BÊÎÎ J FÊG Î BÊÎÎ J FÊG Î BÊT I BÊG Î BÊT I BÊG Î BÊT I BÊG Î BÊT I BÊG Î BÊT J BÊG Î BÊT J BÊG Î BÊT J BÊG Î BÊT J BÊG Î BÊT J BÊG Î BÊT J BÊG Î BÊT J BÊG Î BÊT J BÊG Î BÊT J BÊG Î BÊT J BÊG Î BÊG Î BÊG Î BÊG Î BÊG Î BÊG Î BÊG Î BÊG Î BÊG Î BÊG Î BÊG J BÊG BÊG J BÊG J	GÍ FÍ		{ æ¢	Ó	ÈÉÍG	П	Ë€€F	ΙÏ	È∏Î	T	FÈF	T	Èì	1
GFÌ {â beel ì beel	GÍ FÎ		{ a		ÈE€G	G	⊞EÉ G	J	È€Î	ì	⊞€G	J	ÈEF	ì
GFJ {ast Ó ÈE H I ÉEE Í I FÈI G G ÉFHÍ I GEE Í I ÉÉE Í I ÉÉE Í I ÉÉFTJ J ÉÉE Í I ÉÉFTJ J ÉÉE Í I ÉÉFTH I ÉÉE Í I ÉÉTH I ÉÉE Í I ÉÉTH I ÉÉE Í I ÉÉTH I ÉÉE Í I ÉÉTH I ÉÉE Í I ÉÉHH I ÉÉE Í I ÉÉHH I ÉÉE Í I ÉÉHH I ÉÉE Í I ÉÉHH I ÉÉE Í I ÉÉHH I ÉÉE Í I ÉÉHH I ÉÉE Í I ÉÉE I I ÉÉE Í I ÉÉE I I ÉÉE Í I ÉÉE Í I ÉÉE Í I ÉÉE Í I ÉÉE Í I ÉÉE Í I ÉÉE Í I ÉÉE Í I ÉÉE Í I ÉÉE Í I ÉÉE Í I <t< td=""><td>GÍ FÏ</td><td>ÚÎÍÌŒ</td><td>{ æ¢</td><td>V</td><td>ÈÌΗ</td><td>J</td><td>ËE€Í</td><td>ì</td><td>ÈÏ Ì</td><td>J</td><td></td><td>Ϊ</td><td>ÈΗ</td><td>J</td></t<>	GÍ FÏ	ÚÎÍÌŒ	{ æ¢	V	ÈÌΗ	J	ËE€Í	ì	ÈÏ Ì	J		Ϊ	ÈΗ	J
GGE { a} ÈEE ì ÈEE <t< td=""><td>GÍ FÌ</td><td></td><td>{ a</td><td></td><td></td><td>Ì</td><td></td><td>1</td><td>È€Í</td><td>Ì</td><td>⊞FJ</td><td>T</td><td>È€ÈÌ</td><td>ì</td></t<>	GÍ FÌ		{ a			Ì		1	È€Í	Ì	⊞FJ	T	È€ÈÌ	ì
GGF ÚÎ Í JOE {æ¢ V ÈHJ J ÈEGÍ Ì ÈHG I ÈHG I ÈHG I ÈHG I ÈHG I ÈHG I ÈHG I ÈHG I ÈHG I ÈHG I ÈHG	GÍ FJ		{ æ¢	Ó	ÈÌΗ	П		ì	È Ì	T		G	ÈΗ	I
GÉGG { â } ÈEEÍ ì ÈEHÍ I ÈEEÍ ì ÈEHÍ I ÈEEÍ ì ÈEHÍ I ÈEEÍ ì ÈEHÍ I ÈEEÍ ì ÈEHÍ I ÈEEÍ ì ÈEHÍ J ÈEEÍ ì ÈEHÍ J ÈEEÍ ì ÈEEÍ	GÍ G€		{ a		È€	Ì	⊞€Ì	J	È€Í	ì	⊞FJ	J	Ì E €Ì	ì
G(GH) {asc} Ó ÈFHJ I BÉEGÍ Ì ÈFHG I FÉFHH G ÉEGJ I FÉFHH J ÉEGÍ Ì ÉÉGÍ Ì ÉÉGÍ Ì ÉÉGÍ Ì ÉÉGÍ Ì ÉÉGÍ Ì ÉÉGÍ Ì ÉÉGÍ Ì ÉÉGÍ I ÉÉGÍ I FÉÉGÍ I ÉÉGÍ I <td>GÍ GF</td> <td>ÚÎÍJŒ</td> <td>{ æ¢</td> <td>V</td> <td></td> <td>J</td> <td>ËE€Í</td> <td>ì</td> <td>ÈHG</td> <td>J</td> <td>FĚ FH</td> <td>Ϊ</td> <td>ÈGU</td> <td>J</td>	GÍ GF	ÚÎÍJŒ	{ æ¢	V		J	ËE€Í	ì	ÈHG	J	FĚ FH	Ϊ	ÈGU	J
GÍG {â beeí ì behí J beeí ì behí J beeí ì beeí	gi gg		{ a		È€Í	Ì	⊞HÏ	1	È€Í	ì	Œ∃U	T	Ì E €Ì	ì
GÍGÍ ÚÎÍJÓ {asp. V ÉÉHÌ I ÉÉGÍ G ÉÉGJ I FÉTÍG J ÉÉT I GÉTFG I ÉÉEGI Ì ÉÉEGI Ì ÉÉEGI Ì ÉÉEGI Ì ÉÉEGI Ì ÉÉEGI Ì ÉÉEGI Ì ÉÉEGI Ì ÉÉEGI Ì ÉÉEGI I<	GÍ CH		{ æ¢	Ó	ÈΗJ	П	ËE€Í	ì	ÈHG	T	FĚ FH	G	ÈGU	I
GÍGÎ {a} HEECS Î HEECS	G G		{ a		È€Í	Ì	⊞HÏ	J	È€Í	ì	Œ∃U	J	Ì E €Ì	ì
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		ÚÎÍJÓ	{ æ¢	V	ÈΗ	-	ÈEGÍ	G	ÈEGJ	1	FÈÏG	J	ÈÉÍF	I
GÍGÌ {ã} ÉEG G ÉÉHÍ I € Ï ÉEFG J ÉE€I Ì GÉGÌ I ÉEFG J ÉE€I Ì GÉGÌ I ÈEGÌ I FÈÉGÌ I FÈÉGÌ I FÈÉGÌ I FÈGÌ	GÍ GÎ		{ a		ËEG	Ϊ	ËE∃HÏ	J	€	G		1		Ì
GGJ ÚÎ΀CE {æ¢ V ÈEJI I ÈEGÎ G ÈEÎÎ I FÈÎF Î ÈEGÎ I FÊÎF Î ÈEGÎ I EÊGÎ I ÈEGÎ I EÊGÎ I ÈEGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I EÊGÎ I I EÊGÎ I EÊGÎ I I EÊGÎ I I EÊGÎ I I EÊGÎ I I EÊGÎ I I EÊGÎ I I I EÊGÎ I I I I	GÍ GÏ		{ æ¢	Ó	ÈΉ	J	È€GÍ	Ï	È€GJ	J	FÈÏG		ÈÉÍF	J
GÍH€ {a} ÉÉHF Ï ÉÉUI J ÉÉGH Ì ÉFGI I ÉÉGÍ Ì ÉÉGÍ I ÉÉGÍ J FÉÉGI I FÉÉGI J FÉÉGI I FÉÉGI J FÉÉGI I FÉÉGI I FÉÉGI I FÉÉGI I FÉÉGI I FÉÉGI I FÉÉGI I FÉÉGI I FÉÉGI I FÉÉGI I FÉÉGI I FÉÉGI I FÉÉGI I FÉÉGI I FÉÉGI	GÍ GÌ		{ a		ËEG	G	ËE€HÏ	1	€	Ï		J	È€EI	Ì
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	GÍ GJ	ÚÎ΀Œ	{ æ¢	V	ÈΠ	-	È€GÎ	G	ÈÍÌ	1	FÈÍF	ΙÏ	È€Î	I
GÍHG {ã} ÉÉHF G ÉÉUI I ÉÉEH Ì ÉFG J ÉÉEÍ Ì GÍHH ÚÎÎFOE {æ¢ V ÉÉÍÍ I ÉÉÍI J ÉÉEH Ì ÉÉGJ I ÉÉÍÌ J ÉÉÉIÍ J ÉÉÉIÍ J ÉÉÉIÍ J ÉÉÉIÍ I ÉÉÍÍÍ J ÉÉÉIÍ I ÉÉÍÍÍ I ÉÉÉIÍÍ I ÉÉÉIÍÍ I ÉÉÉIÍÍ I ÉÉÉIÍÍ I ÉÉÉIÍÍ I ÉÉEIÍÍÍ I ÉÉEIÍÍÍÍ I ÉÉEIÍÍÍ I ÉÉEIÍÍÍÍ I ÉÉEIÍÍÍÍ I ÉÉEIÍÍÍÍÍ I ÉÉEIÍÍÍÍ I ÉÉEIÍÍÍÍI I ÉÉEIÍÍÍÍI I ÉÉEIÍÍÍI I ÉÉEIÍÍI I ÉÉEIÍÍI I ÉÉEIÍÍI I ÉÉEIÍÍI I ÉÉEIÍI I ÉÉEIÍI I ÉÉEIÍI I ÉÉIÍI I ÉÉIÍI I ÉÉIÍI I ÉÉIÍI I ÉÉIÍI I ÉÉIÍI I ÉÉIÍI I ÉÉIÍI I ÉÉIÍI I ÉÉIÍI <	GÍ H€		{ a		Ë⊕F	Ϊ	ŒŒJI	J	ÈE€H	Ì		1	È€Í	Ì
GÍHH ÚÎÎFŒ {æ¢ V ÈÏÍ I ÈÉ G ÈÏÏ J FĒÎÎ Ï ÈÏÎ J ÈÉEH Ì ÈÉEGJ I ÈÉEÎ Ì ÈÉEÎ Ì ÈÉEÎ I ÈÉEÎ I FĒÎÎ J ÈÉEÎ I EÊEÎ I FĒÎÎ J EÊEÎ I FÊÊÎÎ <t< td=""><td>GÍ HF</td><td></td><td>{ æ¢</td><td>Ó</td><td>ŒIJ</td><td>J</td><td>ÈEGÎ</td><td>Ϊ</td><td>ÈÉÍÌ</td><td>J</td><td>FÈÍF</td><td>G</td><td>ÈEÎ</td><td>J</td></t<>	GÍ HF		{ æ¢	Ó	ŒIJ	J	ÈEGÎ	Ϊ	ÈÉÍÌ	J	FÈÍF	G	ÈEÎ	J
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	GÍ HG		{ a		⊞⊞F	G	Œ∭	1	ÈE€H	ì	ÈĠ	J	È€Í	ì
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	GÍ HH	ÚÎÎFŒ	{ æ¢	V		П	ÈÉÍ	G	ÈÏÏ	J	FÊÎÍ	Ï	Èîì	J
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	GÍ HI					Ϊ	⊞ï J		È€H	ì		I		ì
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	GÍHÍ		{ æ¢	Ó	ÈΪÍ	J		Ϊ	ÈÏÏ	I	FÊÎÍ	G	Èîì	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					⊞€Í F		⊞ïJ	I		ì				Ì
GÍHÌ {a} IIIECH IIIEIÍ J € H IIECGÌ Ì € H GÍHJ {a¢ Ó ÌEIÏ J ÌEGI I ÌEH J CÀEGÎ I ÌEÍI J GÍI€ {a} IIECGH G IIEÎI I € H IIECGÌ Ì € H GÍIF ÚÎÎCCE {a¢ V ÌEÎH I ÌEÍ G ÌEGJ I FILÎF G ÌEÏI J		ÚÎ Î FÓ		V	ÈEIÏ	-		G		T		G		I
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					ËEGH	Ϊ				Н		ì		Н
GÍI€ {ã} ÉÉGH G ÉÉBÍ I € H ÉÉGJ I FÉÏF G ÉÉÏI J				Ó		J		Ï				Ï		
GÍIF ÚÎÎGOE {æ¢ V ÈEÌH I ÈEÍ G ÈEGJ I FÉLÏF G ÈEÏI J								I		_		ì		
		ÚÎ Î Œ		V		I		G		I		G		
<u>GIG {ā 1000 100</u>	GÍIG		{ a		⊞€Í	Ϊ	⊞EH	J	€	F	⊞UJ	ì	€	F

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`fl7cbh]bi YXL

Újær Ú'; æðr Úð (æðr. að. 50) Úð	FF 90
GÍII {â} ÉÉÉ G ÉÉÀ H I € F ÉHUJ Ì € GÉÉJI J FÉÐÍG Ì ÉÉÐFH GÉÐFH GÉÐFH GÉÐFH J FÐÍG Ì ÉÐFH GÉÐFH GÉÐFH J EÐÍG J ÉÐFH J EÐFH GÉÐFH GÉÐFH GÉÐFH GÉÐFH GÉÐFH GÉÐFH GÉÐFHH <th></th>	
GÍIÍ ÚÍÎHŒ {æç V ÈHG I ÈEJI G ÈEJ J FÈÌG I ÈEFH GÍIÎ € I € I ÈEFH GÍIÎ € I EEFFH GÍIÎ J € I EEFFH GÍIÎ EEFFH GIIÎBÎHÎ J € I EEFFHH GÎIÊFHH GÎIÊFHH GÎIÊFHH GÎIÊFHH GÎIÊFHH GÎIÊFHH GÊIÊFHH	1
GÍIÎ {â BEUI Î BEUI Î BEUI Î € Î € I BEEF G Î BEUI Î BEUI Î BEUI Î BEUI Î BEUI Î BEUI Î BEEF Î BEUI Î BEEF Î BEUI Î BEEF Î BEUI Î BEEF Î BEEGUI Î DEEF Î BEEGUI Î BEEF Î BEEGUI Î BEEF Î BEEGUI Î BEEF Î BEEGUI Î BEEF Î BEEGUI Î BEEF Î BEEGUI Î BEEF Î BEEGUI Î BEEF Î BEEGUI Î BEEF Î BEEGUI Î BEEF Î BEEGUI Î BEEF Î BEEGUI Î BEEF Î BEEGUI Î BEEF Î BEEGUI Î BEEF Î BEEF	F
GÍIÏ {agc Ó ÈCHG J ÈEJI Ï ÈEJ I FÈÌIG Ì ÈEFH GÍIÌ I EÉJI I FÈÌIG Ì EÉFH G ÈEGJ I GÈFHU G ÈEFF G ÈEGJ I GÈFHU G ÈEFF G ÈEGJ I GÈFHU G ÈEFF G ÈEGJ I GÈFHU G ÈEFF G ÈEGJ I GÈFHU G ÈEFF G ÈEGJ I GÈFHU G ÈEFF G ÈEGJ I GÈFHU G ÈEFF G ÈEGJ J GÈFHU G EÈFF G ÈEGJ J GÈFHU G EÈFF G EÈFHU H EÈFG G EÈFHU H EÈFG G EÈFHU H EÈFG G EÈFHU H EÈFG G EÈFHU H EÈFG G EÈFHU H EÈFG G EÈFHU H EÈFG G EÈFG G EÈFG G EÈFG G	Í
GÍIÌ {a} ⊞EUI G ⊞EH I € Ì € J ÈEFF G EEGJ I GÈHU GÈHU GE	
GÍIJ ÚÎÎHÓ {æ¢ V ÈEHU G ÈEF G ÈEGJ I GÈFHU G ÈEF G ÈEGJ I GÈFHU G ÈEF I ÈEGH H H HÉIG H ÈEG G H H HÉIG H HÉEG G H HÉEG	Į
GÍ € { a}	I
GÍF {æ¢ Ó ÈEHJ Ï ÈEF Ï ÈEGJ J GÈFHJ Ï ÈEÍF G ÉÉHJ I ÈEGH H ÉÉIG H ÈÉÉIG H ÉÉIG H ÉÉIG H ÉÉIG H ÉÉIG H ÉÉIG H ÉÉIG H <	1
GÍG {a} ÉÉFI G ÉÉHÍ I ÉÉEH H ÉÉIG H ÉÉEI I ÉÉEI I CÉHI F ÉÉIG I ÉÉEI I CÉHI F ÉÉIG I ÉÉEI I CÉEI I ÉÉEI	Н
GÍÍH ÚÎÎI Œ {æ¢ V ÈEJI I ÈEGI G ÈEÎÎ I GÊHI F ÈEÎ GÍÍI {æ¢ Ó ÈEJI J ÈEGI Ï ÈEÎÎ J GÊHI F ÈEÎ GÊHI F ÈEÎ GÊHI F ÈEÎ GÊHI F ÈEÎ GÊHI F ÈEÎ GÊHI F ÈEÎ GÊHI F ÈEÎ GÊHI F ÈEÎ GÊHI F ÈEÎ GÊHI GÊHI F ÈEÎ GÊHI GÊH	J
GÍI {ã} III HG III III J III III J III III J III III J III III J III III J III III J III III J III III J III III J III III J III III J III III J III III J III III III J III J III	Н
GÍÍÍ {æ¢ Ó ÉEJI J ÉEGI Ï ÉÉÍÌ J GÉHI F ÉÉÉÍ GÉHI F ÉÉÉÍ GÉHI	1
GÍÍÎ {ã} ÉÉHG G ÉÉUI I ÉÉ€H F ÉÏGJ Ì ÉÉÉÎ GÍÎÎ ÚÎÎÍ CE {æ¢ V ÉÎÎÍ I ÉÊÎJ G ÉÊÎÏ J GÊHGG Ì ÉÊÎÎ GÍÎJ {æ¢ Ó ÉÎÎÍ J ÉÊÎJ Ï ÉÊÎÏ I GÊHGG Ì ÉÉÎÎ I GÊHGG Ì ÉÉÎÎ I GÊHGG Ì ÉÉÉGÎ I ÉÉÉÎ G ÉÉÉÎÎ J GÊHF I ÉÉÉÎÎ J GÊHF J ÉÉÉÎÎ J EÊÊÎÎ J ÉÊÎÎÎ J CÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÊÎÎ J EÊÎÎÎ J EÊÎÎÎ J EÊÎÎÎ J EÊÎÎÎ J	F
GÍÍÏ ÚÎÎÍ Œ {æ¢ V ÈÏÍ I ÈÈÌ J G ÈĒÏÏ J CÉHCG Ì ÈĒÎÌ J CÉEGH Ì CÉTGT Ï EÉGÎ CÉTÎ J CÉEGH Ì CÉTCG Ì EÉGÎ LÉEGÎ CÉTCG Ì EÉGÎ LÉEGÎ I CÉTCG Ì EÉGÎ LÉEGÎ I CÉTCG Ì EÉGÎ LÉEGÎ LÊECÎ LÊECÎ LÊECÎ LÊECÎ LÊECÎ	J
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	F
GÍ J {æ¢ Ó ÉTÍ J ÉÉJ J Ï ÉÉÏ Ï I GÉHCG Ì ÉTÎ Ì GÍ € {ā} ÉÉG G EÉG J ÉÉE Î Ì ÉÉE Î J CÉHF Ì ÉÉ Î GÍ Î G {ā} ÉÉE G Î ÉÉE Î Ì ÉÉ Î Ì ÉÉ FF GÍ Î H {æ¢ Ó ÉÉ G I ÉÉE Î Ì ÉÉ HF Ì ÉÉ FF GÍ Î I {ā} ÉÉE G G ÉÉ G J ÉÉ Ê Ì ÉÉ HF Ì ÉÉ FF	J
GÍ΀ {â/g IÎEGG G IÎFÎJ I IEE€H Ì IÊGFÏ G IEE€Î GÍÎF ÚÎÎÓ {asc V ÎEÂGG J ÎEÊÊÎ Ì ÎEÂÎ J CÎÊHF Ì ÎEÂÎH G ÎEÊFF GÎÎH {asc Ó ÎEÂGG I ÎEÊÊÎ Ì ÎEÂHF Ì ÎEÂHF Ì ÎEÂHF Ì ÎEÂFF GÎÎI {â} ÎÊÊEGG G ÎEÂGG J ÎEÂGÎ Ì ÎEÂHF Î ÎEÊFF	Ì
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1
GÍÎG {ã ÉÉEEG Ï ÉÉEG I ÉÉEÍ Ì ÉÉIÍ GÉFF GÍÎH {æ¢ Ó ÈEÍG I ÉÉEÍ Ì ÈEIÎ I GÈHF Ì ÈE GÍÎI {ã ÉÉEG G ÉÉIG J ÈEÍ Ì ÉÉIHÍ Ï ÈEFF	Ì
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	J
GÍÌI (a) EEEG G EEÁG J BEEÂ Ì EÊHÍ Ï BEFF	Ì
	1
GÍÍÍ ÚÍÍÍŒ {æd ∨ ÈEÌH J ËË€€Î Ì ÈĒÏÌ J GÊHGÍ Ì ÈFHÍ	ì
	J
GÍÎÎ {ā} ÈE€Í H ËÈÈ I ÈE€Í Ì ËËGJG G ÈE€J	ì
GÍÎÏ {æ¢ Ó ÈEÌH I ËËŒÎ Ì ÈEÏÌ I GÈHGÍ Ì ÈEHÍ	1
GÍÌÌ {ā ÈE€Í H ËÈEÌ J ÈE€Í Ì ËÈGJG Ï ÈE€J	ì
GÍÍJ ÚÍÍÏŒ {æ¢ ∨ ÈFHJ J ËÈŒÍ Ì ÈFHG J GÈHHÌ F ÈGGJ	J
GÍÏ€ {ã ÌȀΠH ËËTHÏ ÌÈ€Í Ì ËËÏ Ì ÈÈ€J	ì
GÍÏF {æ¢ Ó ÌĒHJ I ËËŒÍ Ì ÌĒHG I GÈĒHÌ F ÈÈGJ	1
GÍÏG {ã ÌȀΠH ËËTHÏ J ÈE€Í Ì ËËÏ Ì ÈE€J	ì
GÁÏH ÚÎÎÏÓ {æ¢ V ÈEÌH J ËËEF Ì ÈEÎI J GÀEÏÏ Ì ÈËFH	J
GÍÏI {ã ÈE€G G ÉÉÉÏ I ÈÉ€Ï Ì ÉÉFEF G ÈÉFH	ì
GÍÏÍ { aac Ó BÉÌH I EÉEF Ì BÉÎI I GAÉIÏ Ì BÈFH	1
GÍÏÎ {ã ÈE€G Ï ËÈEÏ J ÈE€Ï Ì ËÈFF Ï ÈEFH	ì
Gáïï ÚîîìŒ {æ¢ ∨ ÈH J ËËŒ Ì ÈE J GÊGÎ Ì ÈFÎG	J
GÍÏÌ {ã; È€F G ËÏFG I ÈE€Í Ì ÈE G ÈE€Ì	Ì
GÁÏJ {æ¢ Ó ÈEH I ËËE€Í Ì ÈEJ I GÀEGÎ Ì ÈEÎG	I
GÍÌ€ {ã ÈE€F Ï ËËTG J ÈE€Í Ì ÈE Ï ÈE€Ì	Ì
GÁÌF ÚÎÎJOE {æ¢ ∨ ÈHFÌ J ËËE€ Ì ÈFJJ J FÈÐJÏ J ÈHÎÍ	J
GÍÌG {ã ÈE€Í H ËËFF I ÈE€Í Ì ËËGF H ÈE€Ì	Ì
GÍÌH {æ¢ Ó ÈHFÌ I ËËŒ Ì ÈFJJ I FÈÐJÏ I ÈHÎÍ	1
GÍÌI {ã È€Í H ËHFF J È€Í Ì ËÏGF H È€€Ì	ì
GÍÌÍ ÚÎÎJÓ {æ¢ ∨ BÉÎG J ÉÉEE Ì BÉIJ J GÀÉEÍ J ÉÉÌÎ	J
GÍÌÎ {ā ÌÈ€F Ì ËËÊÎ I ÈE€ Ì ËHÍ I ÈE€Ì	ì
GÍÌÏ {and Ó BÉÎG I ÉÉEEÏ Ì BÉIJ I GÀÉGEÍ I ÉÉÌÎ	1
GÍÌÌ {āj ÈE€F Ì ËEÉÎÏ J ÈE€I Ì ËËHÍ J ÈE€Ì	Ì
GÍÌJ ÚÎÏ€Œ {æ¢ V ÈEÍG J ËÈŒH Ì ÈE€Ì J GÈĞIF Ï ÈEJG	J
GÍJ€ {ā] € H ËËFÍF I ÈE€G Ì ËËEF I ÈE€H	Ì
GÍJF {æ¢ Ó ÈFÍG I ËÈE€H Ì ÈF€Ì I GÈEÏF G ÈFJG	1
GÍJG {ã € H ËÉFÍF J ÈE€G Ì ÈÉEF J ÈE€H	ì
GÍJH ÚÎÏFÓ {æ¢ V ÈHFH J € Ì ÈG J ÈJ€J G ÈHÎI	
GÍJI { ð} ÈE€G H ËËHÉÌ I ÈE€G H ËËIJ J ÈE€H	J

9bjYcdY'D`UhY#G\Y``Df]bV]dU'GhfYggYg'fl7cbljbiYXL

30) 1	car D Onn	· ·		o di iggi									
	Ú æz^		Ù.¦`æ&v	Ùãi{,æFÁXi∙ãã	ŠÔ		ŠÔ.	Væ`ÁTæ¢ÁŽ•ãa	ŠÔ	OB;*, ^AŽtæåá	ŠÔ	X[}ÁŢã;^•ÁXÈ	ÊŠÔ
GJÍ		{ æ¢	Ó	<u> </u>		€		Ė		<u>È</u> €J		ÈĤÎI	
GJÎ		{ a		È€G	Η	⊞ l €Ì	J	È€G	Н	ЩIJ		È€€H	Н
ďJΪ	ÚÎÏŒ	{ æ¢	V	ŒĖJÏ	G	FĚH	G	ÈÌF	G	FĖJÌ	J	QÊÈÌ G	G
G J i		{ a	,	ËĖĮį	Ĩ	ËŒÌJ	Ĩ	Œ€Í	Н	Щ̈́ΙJ	G	Œ€J	F
G 11		{ æ¢	Ó	ŒĖJÏ	Ĩ	FĚH	Ĩ	ÈÌF	Ï	FÈJÌ		QÊÈÌ G	Ĭ
Ğ€€		{ a }		ËĚĮÎ	G	ËŒĴĴ	G	È€Í	Н	⊞į́IJ	Ï	È€J	F
Ğ€F	ÚÎÏHŒ	{ æ¢	V	FË Ì G		ÈJÌ	G	ÈÍÍ	J	QÊH H	G	FËÎG	J
GĴ€G		{ a		Ħ	Ï	ËÈF	J	È€	Ì	Êîî	J	È€Ï	Ì
Ğ€H		{ æ¢	Ó	FË Ì G	J	ÈJÌ	Ï	ÈÍÍ		QÊH H	Ï	FËÎG	1
Ğ€	/A !! /	{ a		Ħ	G	ËÈF	Ţ	È€	Ĺ	Êĵî	Ĺ	È€Ï	ĺ
Ğ€	ÚÎÏHÓ	{ æ¢	V	ĒFÍ	G	Œ€Í	Ĺ	Ě€H	Ĩ	FÈH	Ĺ	ÈÌ	Ĩ
Ğ€Î		{ a	,	È€G	Ĺ	Η̈́Ξ	Ĵ	È€€H	İ	Щ̈́Ι	Ĺ	È€Î	İ
G΀Ï		{ æ¢	Ó	ĒFÍ	Ĩ	ËE€Í	Ĺ	Ě€H	G	FÈH	<u> </u>	ÈÌ	G
Ǵ€Ì		{ a		È€G	Ì	⊞H	G	È€€H	Ì	Щ̈́Ι	J	È€Î	Ì
Ğ€J	ÚÎÏIŒ	{ æ¢	V	ÈG€G	J	€	Ì	È G		GE€JH	<u> </u>	ÈHFÎ	1
GÎF€		{ a		€	Ì	ŒŒÎ	Ţ	€	Ì	ÈG	J	€	Ì
GÎ FF		{ æ¢	Ó	ÈG€G		€	Ì	È G	J	GE€JH	<u> </u>	ÈHFÎ	J
GÎ FG		{ a		€	Ì	ŒŒÎ	Į	,€	Ì	Ė	1	€	Ì
GÎ FH	ÚÎÏÍŒ	{ æ¢	V	ÈIJ	J	€	Ì	ÈH€J	G	ÐIJ	G	ĚÍI	G
GÎ FI		{ a		€	Ì	ШÍН	Ţ	€	Ì	⊞ÎÎJ	J	€	Ì
GÎ FÍ		{ æ¢	Ó	ÈIJ		€	Ì	ÈH€J	Ï	ÈIJ	Ï	ĚÍI	Ï
GÎ FÎ		{ a		€	Ì	Щ́́́́Н	J	€	Ì	ΞĨĴ	1	€	Ì
GÎ FÏ	ÚÎÏÎŒ	{ æ¢	V	FÈJI	Ï	ÊĺÎ	Ï	ÈJ		<u>QEGIÍ</u>	J	FÈHFÍ	G
GÎ FÌ		{ a	,	⊞ÎIF	G	ËËFH	G	È€€G	İ	Êlî	G	È€€I	ĺ
GÎ FJ		{ æ¢	Ó	FÈJI	G	ÊÍÎ	G	ÈΙ	Ų	<u> GEGI (</u>		FÈHFÍ	Ĩ
GÎG€		{ a		⊞ÌIF	Ï	ËFĚFH	Ï	È€€G	ĺ	Êţî	Ï	È€EI	İ
GÎ GF	ÚÎÌŒ	{ æ¢	V	ÈÎÎ	ļ	€	F	ĚÍ	J	GÈH	F	FÈ€€	J
g œ		{ a	,	€		⊞îì	J	€	F	⊞̈́Fl	J	È€F	F
а́ан		{ æ¢	Ó	ÈÎÎ	Ĺ	€	F	ĚÍ		ЭÈН	F	FÈ€€	
ďď	(4)	{ a }		€		Щĵj		€	F	⊞̈́FI	Ļ	È€F	F
ďď	ÚÎÌHŒ	{ æ¢	V	F <u>i</u> EGÌ H	J	ÈH	J	ĚΪΙ	J	ŒÈ€Ï		FÈGF	J
G G		{ a }	,	⊞É⊬N		ËE EG) Í		ÈEG	Н	ЩÌЦ	Ţ	È€EI	Н
ďά		{ æ¢	Ó	F <u>E</u> H		<u>.È</u> HÍ		ĚΪΙ		ĞŒŢ€Ï	Ш	FÈGF	
ď d	(4)	{ a		ŒĤŃ	J	ËE ÉGÌÍ	J	È€G	Н	ЩÌЦ		È€	Н
g G	ÚÎ Ì HÓ	{ æ¢	V	<u>FĚÎÌ</u>	Ļ	€	Н	ÈΗ	J	<u>FĖÌÏ</u>	Ш	FÉ FÎ	J
GÎH€		{ a }		È€G		ŒĚÎÌ	J	È€F	Н	Щ́ÍF	Н	È€G	F
GÎHF		{ æ¢	Ó	FĚÎÌ	Ų	€	Н	ÈΗ		<u>F</u> ÈÌÏ	J	FÊ FÎ	
GÎ HG	/^\	{ a		Œ€G		ËĚÎÌ		Œ€F	Н	<u> </u>	Н	È€G	F
ĞΗΗ	ÚÎÌIŒ	{ æ¢	V	FĒ Ğ	Ļ	<u>⊞€</u> El	Н	ΒÌJ	J	<u>F</u> ÈÌ J		FÈHG	J
GÎΗ		{ a }		È€J		ËĖH	J	È€Ï	Н	<u>∰</u> ĴH	Н	ÈEFG	Н
GÎH		{ æ¢	Ó	FÊ Ğ	Ţ	<u>⊞</u> €EI	Н	ÐÌJ		<u>F</u> ÈÌ J	J	FÈHG	
GÎHÎ	./	{ a		È€J		ËËHÏ 		È€Ï	Н	⊞JH	Н	ÈFG	H
GÎΗΪ	ÚÎÌΙÓ	{ æ¢	V	HEJJ		ÊlÏ		FÉG	J	<u>FÈ</u> IG	Ļ	QÈ Í G	J
GÎH		{ a		ЩН	J	ÜÜFFÏ	J	È€	Н	⊞G Ì		ÈF	Н
GÎ HJ		{ æ¢	Ó	HÈEJJ	J	Êlï	J	FÈG		<u>FÈIG</u>	Ų	GÈÍG	
GÎI€	./^ > /	{ a		ЩН		ËEFÏ		È€	H	iii i		ÈF cò	H
GÎIF	ÚÎÌÍŒ	{ æ¢	V	GÈ Ğ		ÈEG		FÈEÏÎ		<u>G</u> ÈIG	Н	ŒĠ	
GÎIG		{ a }		⊞EGG	J	ËŒ	J	€	Н	<u> </u>	F	€	H
GÎIH		{ æ¢	Ó	<u>Ģ</u> ĒĞ	J	ÈEGÍ	J	FÈEÏÎ	G	<u>GÈ</u> IQ	H	ŒĖGJ	G
ĠIJ	./	{ a		⊞EGG		ËŒĞ		€	Н	<u> </u>	F	€	H
GÎ I Î	ÚÎÌÎŒ	{ æ¢	V	<u>GĚ</u> JÍ	<u> </u>	ÈH J	1	FÈG	J	<u>FÈÍF</u>	F	ŒIJ	J
GÎIÎ		{ a		⊞HJ	J	ˌΠ€Í	J	ÈE€G		⊞ÍH		È€H	

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`fl7cbh]bi YXL

30) 1	· ·	· <i>-</i>		o on igg i					~ .		~ .		
_ <u> </u>	Ú æ²^		Ù`\ ` æ&^	Ùãt{æFÁŽ•ãã		Ùãt{æGÁŽ•ãã		Væ ÁT æ¢ÁŽ•ãa	ŠÔ	OB;* ^AŽtæåá		X[}ÁT_ã^•ÁŽÈ	ÈŠÔ
ĠΊΪ		{ aa¢	Ó	<u>Ģ</u> ŧJÍ	J	<u></u> Èl J	J	FÈGÌ	Ĺ	FÈÍF	F	ŒÈIJ	Ļ
GÎ I Ì		{ a		⊞HJ		ËÇHÊ €Í		Æ€G	Ì	Щ́ÍН	Ì	È€H	İ
ŒIJ	ÚÎÌÏŒ {	{ æ¢	V	CEE€Î	I	È€ÏG		ÐΪF	J	FËJÌ	F	FÐÏJ	J
ĞÍ€		{ a	,	EEEEE H	J	ËGÆFI	J	ÈE€G	İ	⊞́Įĺ	İ	È€H	İ
GÍF		{ æ¢	Ó	GÈ€Î	J	È€ÏG	J	₿ÏF	Ĺ	FËIÌ	F	FÐΪJ	Į
GÍG		{ a		⊞EGÏH		ËĢÆFI	1	È€G	ĺ	ЩÍJ	ĺ	ÈE€H	Í
ĠÍΗ	ÚÎÌÌŒ {	{ æ¢	V	F <u>Ě</u> FF	G	È€II		ËÌÍ	Ï	FÈĠ	F	FĚII	Ï
GÍI		{ a	,	<u> </u>	J	ËĘĚFÏ	Ï	È€G	F	Щ́€Ï	<u>i</u>	È€€H	F
Ġĺĺ		{ æ¢	Ó	F <u>Ě</u> FF	Ï	<u>È</u> E] I	J	ËÌÍ	G	FÈĠ	F	FĚII	G
GÍÍ	(0.)	{ a		<u> </u>	-	ËĚFÏ	G	Æ€G	F	⊞ॅ́€Ï	<u>l</u>	È€H	F
ĠίΪ	ÚÎÌJŒ {	{ æ¢	V	FÈ€HÏ	G	ŒŒG	Ĺ	ĚHÌ	Ĩ	FÈI	F	FÈ€ÍJ	Ĩ
GÎ []		{ a	,	€	Ţ	ËEF		Œ€F	F	⊞Ĵl		Œ€H	F
ĠίJ		{ æ¢	Ó	FÈ€HÏ	Ï	ËE€G	İ	ĚHÌ	G	FÈI	F	FÈ€ÍJ	G
GÎ΀	(0)	{ a		€		ËEF	G	Æ€F	F	<u>⊞</u> JI		È€H	F
GÎF	ÚÎ J€Œ {	{ aa¢	V	<u>Ě</u> FH	G	€	Н	ÈGÌ G	G	G j Gj j	Н	ĚΙ	I
GÎG		{ a	,	ËŒI	Ţ	⊞̃FI		É	F	<u>Ë</u> ÍÏ	G	€	F
ĠĴΗ	{	{ æ ¢	Ó	<u>Ě</u> FH	Ţ	€	Н	ÉGÌ G		<u>GEGÏ Ï</u>	H	ĚΙ	G
GÎI	(0)	{ a		<u> </u>		∰FI	G	ູ€	F	<u> </u>		,€	F
GÎÍ	ÚÎ J€Ó {	{ a	V	<u> G</u> EGT (G	ËĦ	G	ËHF	Ļ	<u>F</u> Ê∯H	Ţ	FÐJI	Ğ
GÎÎ		{ a	,	<u> </u>	Ţ	EGÉGI H	<u> </u>	È€É		<u> </u>		È€Ì	l l
ĠĴŢ	{	a	Ó	<u> G</u> ÉGÏ (ÈH		ËHF	Ĺ	FÊ⊕H	Ļ	FÐJI	Į
GÎÌ		{ a		<u> </u>	G	EGEGÏ H	G	È€Í		Ш́Н		È€È	
GÎJ	ÚÎ JFŒ {	a	V	<u>ĢÈ Ģ</u>	G	ÈUJ	G	FÈFH	Ğ	ĞĦĠH	H	Q E G G	G
ĞÏ€		{ a		⊞FÏ		ËŒĠ		È€H		<u>⊞</u> lì	G	È€Í	
ĠΪF		{ æ¢	Ó	<u>ĢÈ Ģ</u>		ÈUJ		FÈFH	ļ	ĞĦĠH	H	Q E G G	
GÏG		{ a		<u> </u>	G	ËŒĠ	G	È€H		<u></u>		È€Í	
GΪH	ÚÎ JŒE {	{ æ¢	V	F <u>È</u> JJ	G		ļ	ÈÌÍ	G	GEGI	H	FÈH	G
GÎÏI		{ a	<u> </u>	⊞GGG	J	苗	4	È€H	ı l	ΗЩΉ	G	È€Í	
ĠÏÍ		(<u>æ</u> ¢	Ó	FÈ JJ		<u>EG</u> ì	J	ÈÌÍ		GEG I	H	FÈH	
GÎ Î Î	r'ıî ır ıor	{ a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<u>⊞G</u> G		苗	G	ÈE€H	<u> </u>	∰H	-	È€Í	
GÎÏ	ÚÎ JHŒ {	(æ¢	V	<u>FÈÌ</u>	G	È G	ı T	ËJÎ	G	GÊGÎ J	Н	FĚH	G
<u>GÎÏÌ</u>		{ a	<u> </u>	EÈ I	J	ËÈÏJ	-	ÈE€H	F	⊞Ï i H	G	È€Î	F
GÎ Î J	1	(<u>æ</u> ¢	Ó	<u>FÈÌ</u>		È G	J	ËJÎ		GÉGÎ J	H	FĚ HJ	<u> </u>
GÎÌ€	rúî u or	{ a	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			ËÈÏJ	G	ÈE€H È.cí	F	⊞ÏH		<u>È</u> €Î FÈ JÍ	F
GÎF	ÚÎ JIŒ {	(æ¢	V	<u>FÊĴH</u>	G -	⊞EEG	ı T	ÈG	G	GÉGÎ H	G		G
GÎÌG		{ a	Ó	€ FEGÎH	<u> </u>	ËË Ë	î	ÈE€F ÈGÍ	F	<u>⊞</u> fi GEGÎH	 	<u>È</u> €G FÈ JÍ	I F
GÎH		(æ¢	Ó		ì	⊞EG	-				-		
GÌÌ	ÚÎ JI Ó	{ a	1//	€ OÈDÍG		ËË Ë	G	<u>E</u> €F Èìï	F	GHI	J	<u>È</u> €€G GÉĽÏF	F
GÌÌ	UIJIU	{ æ¢ { ā}	V	<u> </u>	G	FÈE€J ËGÈGÎÌ	G	Œ€Î	J	— G⊞iH	F	<u>GE</u> F	1
GÌÏ			Ó	<u> </u>	ï	FÈ€J	ï	<u>E</u> ÌÏ		GHI	F	<u>Œ</u> F G Ě ÏF	G
Gii		{ æ¢ { ā}	0	ËFË G	G	EGE)ÎÌ	G	θ		<u>GE</u> ÌH	Î	<u>Œ</u> F	1
GÌJ	ÚÎ JÍ Œ	<u>(91</u> {æ¢	V	<u>ŒĒĠ</u>	G	ÊÏ	G	ÐÏJ	G	<u>⊞</u> ∏⊓ ŒÈΪΪ	Î	GÊHÎ Ì	+
GÎJ€	OI JI CE	<u>₩</u> { ā	V	⊞JG	ī	ËËĤ	ï	EE€Í	ì	⊞IJ	+	Œ€Ì	
G JF		<u>\ 9</u> { æ¢	Ó	<u>⊞</u> 3G	÷	ÊÏ	÷	BÏJ	÷	OŒFΪΪ	î	GÊHÎ Ì	G
G J G	1	<u>a</u> {a}	U	⊞JG	G	ËËĤ	G	E€€Í		⊞IJ		EE€Ì	
G JH	ÚÎ JÎ Œ	<u>(91</u> {æ¢	V	<u>шэв</u> FÐFF	G	EGÎ F	_	ÈÎÏ	G	GEGÌÌ		FÈ GJ	G
G JI	OI OI OL	(a)	V	<u> </u>	7	ËĐÂ	Ï	Œ€H		⊞ĭ€G	G	EE€Î	
GÎ JÎ		<u>9</u>	Ó	FBFF	ï	EGÎ F	J	ÈÎÏ	Ÿ	OEEE) Ì	ì	FÈ GJ	T T
GÎ JÎ		$\{a\}$		<u> ⊞G</u> G	i	ËĐÂ	G	È€H	ì	⊞ĕG	İ	È€Î	† <u>† </u>
G J I	ÚÎ JÏ Œ	(æ¢	V	FÊ FÍ	G	<u>E</u> H	I	<u>B</u> FÌ	G	Ω <u>±</u> H	H	FË H	G
G Ji	3. 0. dL	$\{a\}$		EEEHU	J	ËĒĪ	Ï	ÈE€G	Ĭ	<u> </u>	G	È€	
J. 51		. 7			_		•		•				

9bjYcdY'D`UhY#G\Y``Df]bV]dU'GhfYggYg'fl7cbljbiYXŁ

<u> </u>	CUI D OIII RO	•		· · · · ·					٧.		٧.	, , ,	
oî	Ú æ^		Ù"¦æ&^_	Ùãt{æFÁX.∙ãã	<u>\$0</u>	Ùãt{æ€4Ã.•ãã		Væ ÁTæçÁŽ•ãa	<u>\$0</u>	OB;* ^AŽanåá		X[}ÁTãa^•ÁXÈ	±\$O
GÎ JJ		{ æ¢	Ó	FÊ FÍ	<u> </u>	ÈH THÈ HÌ	J	ÐFÌ Èrco	1	<u>GÊHÎ</u>	Н	FË HÎ	1
GÜ€€	ı'ıî ıì œ	{ a		ËÈ U	<u> </u>	ËĒĀ	G	È€G	<u> </u>		ı	È€I	
ĞEF	ÚÎ JÌŒ	{ æ¢	V	FÈĤÌ	G	ŒŒG	l ÿ	ΒÎ	G	<u>GEGÌ Ï</u>	G	FËFH	G
GÏ€G		{ a	<u> </u>	€ cèûì	+	ËÈÎ	1 î	È€F	F		ļ.	È€G	F
ĞEH		{ æ¢	Ó	FÈÌ Ì	<u> </u>	ËE€G	ı	ΒÎ		GEGÌ Ï	1.	FË FH	+-
Ğ€	.'A .) A	{ a		€	<u> </u>	ËĤÏ	G	È€F	F		Ĵ	È€G	F
Ğ€Í	ÚÎ JÌ Ó	{ æ¢	V	lĤÌ	G	GÈ JJ	G	FÈÌÌ	J	<u>GÊJF</u>	1	HÈÍF	1
Ğ€Î		{ a	<u> </u>	ËŒFI	.	ËÈH	l l	È€Ű	-	<u> </u>	Ì	<u>È</u> FH	
Ğ€Ï		{ æ¢	Ó	lĤÌ	<u> </u>	GÈ JJ	ı	FÈÌÌ	<u> </u>	<u>GÊJF</u>	1	HÈÍF	G
GÏ€Ì	ı'ıî ı ı œ	{ a		ËŒFI	G	ËÈH	G	ÈEEÏ	÷	<u> </u>	1	<u>È</u> FH	
ĞEJ	ÚÎ JJŒ	{ æ¢	V	GÈ G	G	È€	G	ÈFÏ	<u> </u>	<u>FÐG</u>	 	<u>QÊÍÏ</u>	1
GÏF€		{ a	<u> </u>	⊞FG	┈	ËŒ	ļ.	È€Î	<u> </u>	⊞FG	1	<u>È</u> FF	
G FF		{ æ¢	Ó	GÈ G	<u> </u>	È€l	ı	ÈFÏ	G	FÈG!	1	<u>QÊÍÏ</u>	G
G FG	1'ii cor-	{ a		⊞FG	G	ËŒÌÍ	G	È€Î	Ų.	⊞FG	Ì	<u>È</u> FF	<u> </u>
G FH	ÚÏ €€Œ	{ æ¢	V	G È ÎG	G	Ė	l v	ÈΪ		FÀÎÌ	 	GÈEF	1
GÏ FI		{ a	<u> </u>	⊞G€F	<u>J</u>	Ë3ÈEÏ H		È€Î	F	<u> </u>	Ì	ÈEFG	F
GÏ FÍ		{ æ¢	Ó	GÈÉÎ G	<u> </u>	Ė	J	ÈΪ	G	FÈÎÌ	 	GÈEF	G
GÏ FÎ	.'.i'	{ }		⊞G€F	<u> </u>	ËGÈEÏ H	G	È€Î	F	<u> </u>	ļ	ÈFG	F
GÏ FÏ	ÚÏ∉FŒ	{ æ¢	V	FÈÏÍ	G	<u>Ì</u> EHÍ	ļ	FÈ€Ĝ	G	<u>FÐÏÏ</u>	1	FÈ JF	G
GÏ FÌ		{ }	<u> </u>	Ë€HÍ =Řïí	<u>J</u>	ËË)		È€H	Ų.	⊞ÎÍG	ļ	È€Î	F
GÏ FJ		{ æ¢	Ó	FÈÏÍ	<u> </u>	<u>È</u> H	J	FÈ€Ĝ	Ì	<u>FÐÏÏ</u>	1	FÈJF	1
GÜG€	ı'ıï .co	{ }		Ë€HÍ =֕=	<u> </u>	ËË!Ì	G	È€H		⊞ÍG		È€Î	F
G GF	ÚÏ €GŒ	{ æ¢	V	FÈÏF	G	ËE€G	l v	FÈ€JH	G	<u>GÌH</u>	G	FÀH	G
G GG		{ a	<u> </u>	€	.	ËÈÏF	Ì	È€F	F	<u>⊞î</u> F	l l	È€G	F
G GH		{ æ¢	Ó	FÈÏF	<u> </u>	ËE€G	<u> </u>	FÈ€JH		<u>GÌH</u>	<u> </u>	FÀH	1
GG	.' aaá	{ a		€	<u> </u>	ËÈÏF	G	È€F	F	<u></u>	J	È€G	F
Ġ Ġ	ÚÏ € SÓ	{ æ¢	V	lÈÎI	G	FÈGJJ	G	FÈF	ļ	<u>FÈ HG</u>	J	<u>IÈEH</u>	1
ĠĠ		{ a	4	ËÈÚ	<u> </u>	ËĚG	<u> </u>	È€Í		⊞HÏ		<u>È</u> F	
ĠĞ		{ æ¢	Ó	lÈÎI	<u> </u>	FÈJJ	<u> </u>	FÈR	G	FÈHG	1	IÈ€H	G
G G	1'ii a 10e	{ a		ËÈÚ	G	ËĚG	G	È€Í	Ų.	⊞HÏ	<u> </u>	<u>È</u> F	<u> </u>
G GJ	ÚÏ €HŒ	{ æ¢	V	GÈ HÎ	G	ÈÌI	G	FÈJH	ļ	FË HJ	J	GÊÎF	1
GÏH€		{ a	<u> </u>	⊞ÌI		ËŒÏ	ı l	È€È		⊞ǵ		<u>È</u> FÏ	
GÜHF		{ æ¢	Ó	GÈ HÎ	<u> </u>	ÈÌI	ı	FÈJH	G	FËH		<u>ĢĒÎF</u>	G
GÜHG	ı'ıï a os	{ a			G	ËŒÎ	G	È€È	÷	<u>⊞</u> G	1	<u>È</u> FÏ	
GÏ HH	ÚÏ €I Œ	{ æ¢	V	QÊÊÎ Í	G		l Ÿ	FÈGÉ	_	FËÎÌ	1	<u>GÌHH</u>	+
GH		{ a	<u> </u>		J	ËŒ	4	È€Í	F	⊞́€Ì	G	<u>È</u> FF	F
GÏHÍ		{ æ¢	Ó	GÊÎÍ	<u> </u>		J	FÈGÉ	G	FËÎÌ	ļ ļ	<u>GÌHH</u>	G
GÏHÎ	úï á œ	{ a		E Í			G	È€Í	F	<u>⊞</u> €Ì	ļ	<u>È</u> FF	F
GH	ÚÏ €Í Œ	{ æ¢	V	FË H	G	ŒĠ	ı,	FÈG	î	<u>FÈIÎ</u>	1	<u>GE</u> H	l
GHÌ		{ a	<u> </u>	ËEG	J	ËËIG	-	ÈE€G		<u> </u>	G	<u>Ì</u> €€Í	
G HJ		{ æ¢	Ó	FË H	<u> </u>	ÈG	J	FÈG	G	FÈIÎ	ı l	<u>GÈEIH</u>	G
Œ۱€	ı'ii dî or	{ a		ËEGI	<u> </u>	ËËIG	G	È€G	+	<u> </u>	ļ	<u>È</u> €Í	+
GIF	ÚÏ €Î Œ	{ æ¢	V	FÈJI	G	EEEF	ı.	FEGHU	Î	FЀJ	1	<u>QÊÎG</u>	Î
GIG		{ a	<u> </u>	€ Fit II	ï	ËÈJÍ	î	€			G	<u>ÈE</u> €G OÈFÎG	
GIH		{ æ¢	Ó	FÈ JI	í	ËEEF Ö⊏È Ú		FEGHU	G	FЀJ	I I		G
GII	ıπάΛ	{ ā	1//	€ Où Lï		ËÈJÍ Èí	G	€	÷			ÈEEG	
GII	ÚÏ €Î Ó	{ æ¢	V	GÈFÏ		Ėĺ		FŒ€	ĺ	GÊFÍ H	1,	GÊHÎ	J
GÜLÜ		{ a	ć	∰Í OÙ EÏ	J	ËEE G	J	È€G			H	<u>È</u> €H	
GII		{ æ¢	Ó	GÈ FÏ	<u>J</u>	Ėĺ	J	FÈ€Ű	G	<u>GÊFÍ H</u>		<u>G</u> ÉGH	1
GII	úï ä o	{ a	1/		+	ËŒĞ		È€G		<u> </u>	H	<u>È</u> €H	+
GIJ	ÚÏ €Ï Œ	{ æ¢	V	FÐÍÍ	1	EG Ï		Βĺ	G	<u>G</u> ÈI J	F	FÐG	
ĞÍ€		{ a		⊞G	J	ËĖBÌG	J	ÈE€G	F	⊞Í		È€Í	F

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`fl7cbh]bi YXL

30) 1	,			` ~				, ~	× ^	~	× ^	, , ,	
-: (- l	Ú æe^		Ù"¦æ&^_	Ùât{æFÁX.∙ãã		Ùã!{a€9ÃX•ãã		Væ ÁTæçÁŽ•ãa	SΩ	OB;* ^AŽanåá		X[}ÁTã^•ÁXÈ	
ĠĹĘ		{ æ¢	Ó	FÐÍÍ	J	<u>ÉG</u> Ï	J	Ìί		<u> G</u> ĖĮ J	F	FÐĞ	G
GÜÍG	/" \	{ a		<u></u>		Ë ĐÎ G		ÈE€G	F	ΞÍ	ļ	È€Í	F
ĠΪĮΗ	ÚÏ €ÌŒ	{ æ¢	V	FÊ€Î	G	È€I	l l	ËΊΙ	G	<u>Ğ</u> İHÊ	1	F <u>Ě</u> JÏ	G
GÜÜ		{ a	,	ŒŢ€Ï	J	ËįĖ€U		ÈE€H	F	Щ̈́€ĵ	H	È€Í	F
GÍÍ		{ æ¢	Ó	FÊ€	-	È€I	J	ËΊΙ		GÌH€Î		FĚJÏ	
GÍÍ	,	{ a		ŒŒ		ËĒ	G	Ē€H	F	⊞̈́€Î	H	È€Í	F
ĠΪΪ	ÚÏ€JŒ	{ æ¢	V	FÈÏ G	G	È€FÍ		ĚΊ	G	GEG J		FŒÌ G	G
GÍÌ		{ a	,	lig fi	J	ËÈÏH	1	Œ€G	F	<u> </u>	H	È€I	F
ĠΪĺ		{ æ¢	Ó	FÈÏ G	1	ŒFÍ	J	ĚJÍ		GEG J		FÈÌ G	1
GÏ΀	,	{ a		lle fi		ËÈÏH	G	È€G	F	Щ̈́ίί	Н	Œ€I	F
GÎF	ÚÏ F€Œ	{ æ¢	V	ÈFÏ	G	Œ€F	F	ÈÎ	G	G i Či	G	ÈΪΗ	G
GÎG		{ a	,	€	Ĺ	ËFÏ	Ï	€	F	⊞ĭıF	Ĩ	È€F	F
ĠΪH		{ æ¢	Ó	ÈFÏ	Ï	Ë€F	F	ÈÎ	Ï	GEGÏ	Ï	ÈΪΗ	Ï
GÎŢ		{ a		€	Ì	ËFÏ	G	€	F	ЩĮF	Î	È€F	F
GÎÍ	ÚÏ F€Ó	{ æ¢	V	ŒĠ		ÈUG	1	ÎΪĠ	G	GEGÎ J	Î	ΟŒΈGΗ	J
GÎÎ		{ ā		⊞į́UJ	J	ËŒ	J	È€G	Ì	ΕĞ	ĺ	È€I	Ì
ĠΪΪ		{ æ¢	Ó	Œ	J	ÈUG	J	ÌΪĤ	Ϊ	GÉGÌ J	Î	GÈEGH	1
ĠÎÌ		{ a		⊞UJ	ı	ËŒ	I	ÈE€G	Ì	⊞ÏĠ	ĺ	È€I	Ì
ĠΪĴ	ÚÏ FFŒ	{ æ¢	V	ŒÈ€Ï	G	ÈH	1	ĤHĠ	G	OÈHGG	F	FÐJÏ	G
GΪ€		{ a		ΉH	7	ˌȀJ	Ϊ	ÈE€H	Ì	ËΗÌ	Н	È€Î	ì
ĠΪF		{ æ¢	Ó	ŒÈ€Ï	Ϊ	ÈH	J	HHÉ	Ϊ	GÈHCG	F	FÈJÏ	Ϊ
GΪG		{ ā		⊞HÏ	1	ˌȀJ	G	È€H	Ţ	Η̈́Η	Н	È€Î	Ì
GΪH	ÚÏ FŒE	{ æ¢	V	FĚÌÌ	G	Èîì	I	ÈÎ	G	GÉGHU	Î	FΕ̈́ĺĺ	G
GΪΙ		{ a		ΕΉ̈́Η	J	ËËÌJ	Ϊ	È€	F	⊞GH	Н	È€Ì	F
ĠΪÍ		{ æ¢	Ó	FËÌÌ	Ϊ	ÈÎÌ	J	ÈÎ	Ϊ	GÉGHJ	Î	FĖÍÍ	Ϊ
GÏÎ		{ a		ΕΉ̈́H	-	ËËÌJ	G	È€	F	⊞GH	Н	È€ÈÌ	F
ĠΪΪ	ÚÏ FHŒ	{ æ¢	V	FÈH	G	È€HÌ	I	ĒIJΪ	G	GÈHF	Î	FÈHÎÌ	G
ĠΪÌ		{ a		⊞€	J	ËÈHU	Ϊ	È€H	F	ËÎΙΉ	G	È€Í	F
ĠΪJ		{ æ¢	Ó	FÈH	Ϊ	È€HÌ	J	ĒIJΪ	Ϊ	GÈHF	Î	FÈHÎÌ	Ï
GΪÌ€		{ a		⊞€		ËÈHU	G	È€H	F	ËÎΙΉ	Ϊ	È€Í	F
ĠÌΕ	ÚÏ FI Œ	{ æ¢	V	FÈEÏÏ	G	ËE€G	F	ÊÎG	G	GÉGI G	G	FÈFJ	G
GÏÌG		{ a		€	ì	Ë ÈEÏ Î	Ϊ	È€F	F	ËËGÏ	Т	È€G	F
ĠÌΗ		{ æ¢	Ó	FÈEÏÏ	Ϊ	ËE€G	F	ÊÎG	Ϊ	GÈGI G	Ï	FÈFJ	Ϊ
ĠΊΙ		{ a		€	ì	Ë ÈEÏ Î	G	È€F	F	ËŒĞ	J	È€G	F
ĠÌÍ	ÚÏ FI Ó	{ æ¢	V	ÈΙJ	Ï	ËE€H	Н	ÉĠÏÎ	G	FÊ€Ï		ĚFG	G
GÌÌ		{ a		È€G	F	曲íì	G	È€€H	F	ЩΪÍ	G	È€Î	F
ĠΪΪ		{ æ¢	Ó	ÈΙJ	G	ËE€H	Н	ÎÜ	ï	FÈ€Ï	J	ĚFG	ΪÏ
Giì		{ a	_	È€G	F	曲íì	Ï	È€€H	F	ΞÍ	Ϊ	È€Î	F
ďÌJ	ÚÏ FÍŒ	{ æ¢	V	ĚÌH	G	È€FG	I	È€Ï	Ï	GÈÎÍ	G	Ė̈́GJ	ΪÏ
GÏJ€		{ a		ÏÌ 	J	Ш̈́ÌJ	Ï	È€€H	F	ШÏIН	Н	È€Í	F
GÜJF		{ æ¢	Ó	ĚÌH	Ï	È€FG	J	È€Ï	G	GEÊÎ Í	Ï	ĖĠ	G
GÜJG		{ ā		ÏÌ 	ı	Ш̈́ÌJ	G	È€€H	F	ШÏIН	Н	È€Í	F
GΪJΗ	ÚÏ FÎŒ	{ æ¢	V	ĒJÍ	G	ËE€H	G	ÈHÍÍ	Ï	GÊÊÎ I	ì	Ë€Ï	Τ̈́
GÜJI	<u> </u>	{ a		È€G	F	⊞́€l	Ï	È€€H	F	ŒH	J	È€Î	F
G JÍ		{ æ¢	Ó	ÊJÍ	Ï	III€€H	Ï	Ηί	G	GÊÎI	ì	Ë€Ï	G
GÜJÎ		{ a		È€G	F	⊞€	G	È€H	F	ÈH	i	È€Î	F
ĠIJÏ	ÚÏ ŒŒ	{ æ¢	V	ËÍΗ	Ï	<u>⊞</u> €€Î	Н	ÈΗ	G	FÐÏ H	G	ÈIG	G
G 1j	2. 222	{ a		⊞EEF	Н	H	G	È€G	Н	Œ€JÍ	J	È€Í	Н
G 11		{ æ¢	Ó	ËÍΗ	G	<u>⊞</u>	Н	ÈΗJ	ï	FÈÏH	ï	ÈIG	ï
Gi€€		{ a		⊞EEF	Н		Ï	È€G	Н	Œ€JÍ	i i	È€Í	H
GI€F	ÚÏ ŒŒ	{ æ¢	V	FÊ FÌ	Ϊ	<u> </u>	J	ÈÌÍ	G	FËÍJ	G	FË G	G
GÌ€G	<u> </u>	{ a	,	€	Н	ËÈÌI	G	È€Î	Н	<u> </u>	J	EFF	Н
<u> </u>		1 9)	- 11	4411				1	J		

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`ff/cbh]bi YXL

Újar Újar Újar ÁR a. SÓ Úlar (arak a. SÓ) Úlar (arak a. SÓ) Que francha a SÓ Que francha a S
G e G e G e G e G e H e e e H e e e e H e e e e e e
G ef Û Û Û Û Û Ê Û Û Ê Û Û
G e
G e
Giel (a) Étéel J Étéel J Étéel H Étéel I Étéel H Étéel I Étéel J FÉTH H GÉTH H GÉTH G Étéel F Étéel F Étéel F Étéel F Étéel F Étéel F Étéel F Étéel F Étéel F Étéel F Étéel F Étéel G Étéel F Étéel G Étéel
G € J ÚÏ G Œ {æg V GÊ HF Ï ÉEEÉ J FIÈUG G FIÈ IH H GÊ Ï G GE ÑE I ÉEÉÎ I I EEÊÎ I I ÉEÊÎ I I FIÈUG Î FIÈIH H GÊ ÎÎ I GE ÎÎ I HEEÎ I I HEEÎ I I HEEÎ I I HEEÎ I I HEEÎ II I HEEÎ II I HEEÎ II I HEEÎ II I HEEÎ II I HEEÎ II I HEEÎ II I HEEÎ II I HEEÎ II I HEEÎ II I HEEÎ II I HEEÎ II GÊ ÎÎ HEEÎ II GÊ ÎÎ GÊ ÎÎ GÊ ÎÎ GÊ ÎÎ GÊ ÎÎ GÊ ÎÎ GÊ ÎÎ GÊ ÎÎ HEEÎ II I HEEÎ II I HEEÎ II J HEEÎ II J HEEÎ II J HEEÎ II J HEEÎ II J HEEÎ II J HEEÎ II J HEÊÎ II J HEÊÎ II J
G F€ (a) ÉEEGÍ I ÉEGÍ F ÉEGÍ F ÉÉGÍ I ÉÉGÍ I FÉÍI H H GÉFF H G ÉÉGÍ I FÉÍI H H GÉÍI I I GEFH H
GFF {æ\$ Ó GÊHF G ÉEEÍ I FÊUG Ï FÊÍH H GÉI Ï GFG {æ\$ V GÉEGI I ÉGÉGI I ÉGÉGI FÉGÉGI G ÉÉEGI FÉÉGGI G ÉÉEGI G ÉÉEGI G ÉÉEGI G ÉÉEGI I FÉÉGI G ÉÉEGI I FÉÉGI G ÉÉEGI I FÉÉGI G ÉÉEGI I FÉÉGI G ÉÉEGI I ÉÉÉGI I FÉÉGI I ÉÉEGI I ÉÉÉGI I FÉÉGI I ÉÉEGI I ÉÉEGI I ÉÉEGI I ÉÉEGI I ÉÉEGI I ÉÉEGI I ÉÉEGI I ÉÉEGI I ÉÉEGI I ÉÉEGI I ÉÉEGI I ÉÉÉGI I
GFG { a teed J teed F teed F teed G teed I ceed G teed I teed
GFH ÚÏ G Œ {æg V Cœ ŒGJ Ï ÉEEGC J FÈEH G FÊCGS I Cœ ☐ G GÉEGJ I ÉEEG I ÉÉII I ÉÉEG<
GFI {â} € F ÉBÉGI G ÉEE ì ÉÉFEI ì ÉÉEG i ÉÉEG i ÉÉEG j ÉÉEGG j ÉÉEGG j ÉÉEGG
G F I {asc} Ó CÉEGJ G ÉÉEGG I FÉEH I I FÉEGG J CÉÉI I GÉÉI I I FÉEG I ÉÉII I I ÉÉEG I ÉÉII I I ÉÉEG I ÉÉII I I ÉÉEG I
GİFÎ {a} € F BOBELÎ Î BEEL
GİFİ ÚÏĞCE {æ\$ V FÈGHG Ï ÉÉEGI J ÊHU G FĒÍJ I FĒG G GÉEGH H ÉÉTÎ Î ÉÉEGÎ H ÉÉEGH H ÉÉTÎ Î ÉÉEGÎ H ÊHU Î FÊÎJ J FÊĞÎ H H ÊÉTÎ J FÊĞÎ H H ÊÊTÎ J FÊĞÎ H H H ÊÊTÎ J FÊĞÎ H
GİFİ {a} € F ĒFĒCH G ĒĒCH H ĒĒTĪ Ï ĒĒCÉ H ĒĒTĪ Ï ĒĒCÉ H ĒĒTĪ I ĒĒTĪ J FĒĞI I ĒĒTĪ I ĒĒTĪ J FĒĞI I ĒĒTĪ J FĒĞI I ĒĒTĪ J FĒĞI I ĒĞI G GĒĞI H ĒĒTĪ H ĒĒTĪ G ĒĞGI H ĒĒTĪ G ĒĞGI H ĒĒTĪ G ĒĞGI H ĒĒTĪ G ĒĞGI H ĒĒTĪ G ĒĞGI H ĒĒTĪ G ĒĞGI H ĒĒTĪ G TĒĞGI H ĒĒTĪ G TĒĞGI H ĒĞGI H ĒĞGI H ĒĞGI H ĒĞGI H ĒĞGI H ĒĞGI H ĒĞGI H ĒĞGI H ĒĞGI H ĒĞGI H ĒĞGI H ĒĞGI H ĒĞGI
GÌFJ {æ¢ Ó FÉBHG G ÉÉEG I ÉHJ Ï FÉÍJ J FÉBÍ Ï GÌGE {â} € F ÉFÉBH I ÉÉGH H ÉÉTI G ÉÉEG H GÌGE (I) GÌGE {æ¢ V ÉLJG Ï ÉÉEGG H ÉH G FÉFF I ÉÍÍ G GÉEGG H ÉH I FÉFF I ÉÍÍ G GÉEGG H ÉH I FÉFF I ÉÍÍ I GÉEGG H ÉH I FÉFF J ÉÉEGG H ÉH I FÉFF J ÉÉEGG H ÉH I FÉFF J ÉÉEGG H ÉH I FÉFF J ÉÉEGG H ÉH I FÉFF J ÉÉGG H ÉH I FÉFF J ÉÉGG H ÉH I J ÉÉGG H ÉH I J ÉÉGG H ÉH I J ÉÉGG H
Ġ Œ { â } € F Ê Ê Ê H H Ê Ê Ê ☐ H Ê Ê Ê ☐ H Ê Ê Ê ☐ H Ê Ê Ê ☐ H Ê Ê Ê ☐ H Ê Ê Ê ☐ H Ê Ê Ê ☐ H Ê Ê ☐ H
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
GÌ CH {æ¢ Ó È JG G ÉÈEG H ÈH Ï FÈF J ÈÍÍ Ï G G G H ÈH Ï FÈF J ÈÉEG H BH Ï FÈF J ÈÉEG H BH Ï FÈF J BEEG H BH I FÈF J BEEG H BH I FÈFI J BEEG H BH I BH G BH BH I BH G BH BH I BH BH
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
GÌ GÍ ÚÏ GÍ Ó {ææ V É JG Ï ÉÉGF Ì É Î Î Î Î G F Î Î Î Î Î G G Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î
GÌ GÌ {ã} HÌEEH F HÌI J G HEFH Ì € J HEGI Ì GÌ GÌ {ã¢ Ó HÌ JG G HI HI J I HÌ HÌ I I HÌ HÌ I I HÌ HÌ I I HÌ HÌ I I HÌ HÌ I I HÌ HÌ I I HÌ HÌ I I HÌ HÌ I I HÌ HÌ I I HỊ HÌ I I HỊ HÌ I I HỊ HÌ I I HỊ HÌ I HỊ HÌ I HỊ HÌ I HỊ HÌ I HỊ HÌ I HỊ HÌ I HỊ HÌ I HỊ HÌ I HỊ HỊ HÌ I HỊ HỊ HÌ I HỊ HỊ HÌ I HỊ HỊ HÌ I HỊ HỊ HÌ I HỊ HỊ HÌ I HỊ HỊ HÌ I HỊ HỊ HÌ I HỊ HỊ HÌ I HỊ HỊ HÌ I HỊ HỊ HỊ HÌ I HỊ HỊ HỊ HÌ I HỊ HỊ HỊ HỊ HỊ I HỊ HỊ HỊ HỊ HỊ HỊ HỊ HỊ HỊ HỊ HỊ HỊ HỊ H
GÌ GÏ {æ¢ Ó É JG G ÉÉGF Ì É Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î
GÌ GÌ {ã} ÉÉECH F ÉÉIJ Ï ÉÉFH Ì € I ÉÉGI Ì GÌ GJ ÚÏ GÌ CE {æ¢ V FÉËIJ Ï ÉÉEGI Ì ÈHÎ G FÉÉGI Ç FÉÉGI Ç J ÉÉEGI Ç J É
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
CÀHÍ {æ¢ Ó CÉÈÌH G ÉEFG I FÉÈFH Ï FÉÉEÍ Ï CÉÏÍÍ Ï CÀHÍ (Ä) ÉÉFG J ÉGÁÍGG Ï ÉE€I Ì € I ÉE€I Ì CÀHÍ ÚÏHFCE {æ¢ V CÉÀHÌ Ï ÉEF J FÉÌÌ G FÉÌÌ H CÀЀF G
GÌHÎ {ã} ÉÉEFG J ÉGÉ GG Ï ÉE€I Ì € I ÉE€I Ì GÌHÏ ÚÏHFŒ {æ¢ V GÈHÌ Ï ÉEF J FÈÎÌ G FĚÌI H GÈEF G
GÌHÏ ÚÏHFŒ {æ¢ V GÀÈHÌ Ï ÈEF J FÈEÎÌ G FÉEÌI H GÀDEF G
GÌHÌ {ā} EÈEF I ECHÈÎH G ÈE€Í Ì EÈF Ï ÈEFF Ì
GÌHJ {æ¢ Ó GÈHÌ G ÈEF I FÈÌÌ Ï FÈÌI H GÈ€F Ï
GÌI€ {ā ÉEFF J ÉGÈÌH Ï ÉE€Í Ì ÉEFF Ì
GÌIF UÏHOOE {æ¢ V GÀEIG Ï ÈE€G J FÈEÍÌ G FÈLÏF F GÀEÌJ G
GÌIG {ā BÉE€G I BÉBÉÎ G BÉE H BÉFÎF Ï BÉE€J H
GÌIH {æ¢ Ó GÀEIG G ÌE€G I FÈEÍÌ Ï FÉLÏF F GÀEÌJ Ï
GÌII {ã, ÉE€G J ÉGÉÉ Ï ÈE€I H ÉÉFÎF G ÉE€J H
GÌIÍ ÚÏHHŒ {æ¢ V FÉBÌG Ï € J ÉÈÌJ G FÉLÏF F FÈHÏ G
GÌIÎ {ã, € H ËFÈGJG G ÈE€H H ËËGÌÌ Ï ÈE€Í H
GÌIÏ {æ¢ Ó FÉGÌG G € I ÉÈÌJ Ï FÉËÏF F FÈÈHÏ Ï
GÌIÌ {ā € H ËFÈGJG Ï ÈE€H H ËËGÌ G È€€Í H
GÌIJ ÚÏHŒ {æ¢ V ĒÌÍ Ï Ē€H J ĒĤH G FĒÏF F ĒJI G
GÌÍ€ { a
GÌÍF {æ¢ Ó LĚÌÍ G LĚ€H I LÈHÌH Ï FLĚÏF F LÊJI Ï
GÌÍG {ā HEEH J HÌÌÌ Ï € Ì HÌFÍ G REEG Ì
GÌÍH ÚÏHÓ {æ¢ V ÉÌ Ï ÉÉEG Ì ÉHG G FÈÌJ G ÈGÍ G
GÌÍI { aj € F ËËÎ € G ÈEFF Ì ËËGHÍ Ì ÈEGG Ì

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`fl7cbh]bi YXL

	· ·			`` ar rgg i				, ,	× .	~	× ^	, , ,	
	Ú æ^	1.	Ù"¦æ&^	Ùãt{ <u>æ</u> FÁX∙ãã			ŚÔ	Væ ÁTæ¢ÁŽ•ãa	ŠÔ	Οξ)* <u>(</u> ^ÁΣtæåá	ŠÔ	X[}ÁŢã^•ÁXÌÈ	±\$Ô
ĠÍÍ		{ æ¢	Ó	ĚÌ	G	ËËŒG	<u> </u>	ĚΗG	Ĺ	<u>Ē</u> ĐÌ J	Ĺ	₿Ġ	
ĠĺÎ	(" ({ a		€	F	⊞€Ì	ĺ	ÈEFF		<u> </u>		ŒGG	I
ĠίΪ	ÚÏ HÍŒ	{ æ¢	V	FËΉ	-	Œ€F	1	ÈΪ	Ģ	<u>FÈÏÍ</u>	Ģ	FÈÎÍ	G
GÍÌ		{ a	,	È€F	F	ËË)	Ğ	E F	<u> </u>	ÈÎI	ļ ļ	ÆG	l l
GÍJ		{ æ¢	Ó	FĚΉ	G	ËŒF		ÌΪ	Ţ	FÈÏÍ	Ļ	FÈÎÍ	Į
Ġ΀	, A	{ a		È€F	F	ËËÌ	Ĩ	È€F	İ	ÈÎI	ĺ	È€G	İ
ĠÎΓ	ÚÏ HÎ Œ	{ æ¢	V	GÈ FÍ	Ĩ	È€Î	J	FĚ€G	G	FËÎJ	G	ŒĴHF	G
GÌ Î G		{ a		ŒŒÎ		ËĢĖÍI	G	ÈF	F	<u>⊞</u> EE H	İ	ÈEG	F
ĠΪH		{ æ¢	Ó	GÈ FÍ	G	È€Î	I	FĚ€G	Ĩ	FΕ̈́ÎJ	Ĩ	ŒÐHF	Ĩ
GÎI	,	{ a		ËE€Î	J	ËŒLÍI	Ĩ	È€F	F	<u>⊞</u> H	Ĺ	ÆĞ	F
ĠĨÍ	ÚÏ HÌŒ	{ æ¢	V	ŒÌ€Î	Ï	Ì€€Í	J	FĚ FI	Ğ	FÊÌI	Ĺ	Œ) Ì	G
ĠĴĴ		{ a	,	Œ€Í	-	HÉÐÐ	G	È€Î	Ĺ	⊞ <u></u> G	Ĩ	ŒFH	F
ĠÎΪ		{ æ¢	Ó	ŒÌ€Î	G	È€Í		FĚFI	Ï	FÊÌI	ĺ	(Œ)	Ĩ
<u>G</u> ÌÌ		{ a		ËE€Í	J	EGÈ) H	Ϊ	È€Î	Ì	⊞jí G	G	È€FH	F
ĠΪJ	ÚÏHJŒ	{ æ¢	V	GÈÈÌG	Ï	ËE€G	J	FÈ€JF	G	<u>FĚJÌ</u>	Н	Q Ì EI G	G
ĠΪ€		{ a		€	F	ËŒJJ	G	È€I	Ì	ŒH	Ï	Ì€€J	Ì
ĠΪF		{ æ¢	Ó	GÈÈÌG	G	ËË€G	1	FÈ€JF	Ï	FĚJÌ	Н	QÈIG	Ï
ĠΪG		{ a		€	F	ËĢÆJJ	Ϊ	È€	Ì	ËŒH	G	Ì€€J	Ì
ĠΪH	ÚÏI€Œ	{ æ¢	V	FÈH	Ϊ	Œ€	J	ËlÎ	G	FĚÏF	F	FÈG	G
ĠΪΙ		{ a		€	F	曲曲	G	È€H	Н	<u> </u>	Ï	È€Í	Н
ĠΪÍ		{ æ¢	Ó	FÈHÌ	G	Œ€	I	ËlÎ	Ϊ	FĚÏF	F	FÈG	Ï
ĠÏÎ		{ a		€	F	生生	Ϊ	ÈE€H	Н	⊞FÍ	G	È€Í	Н
ĠΪΪ	ÚÏIFŒ	{ æ¢	V	ÈΪG	:	ËE€G	Н	ÈÏÏ	G	FĚÏF	F	ÈÍ	G
ĠΪÌ		{ a		€	—	ĦΪÏÍ	G	€	Н	ШĬÎ	Ï	È€€G	Н
ĠΪJ		{ æ¢	Ó	ÈΪG	G	ËE€G	Н	ÈÏÏ	Ϊ	FĚÏF	F	ÈÍ	Ϊ
GÌÌ€		{ a		€	Ì	ΪÏÍ	Ϊ	€	Н	∰îî	G	È€G	Н
GÌF	ÚÏ I FÓ	{ æ¢	V	Ěìì	G	È€Î	Т	ÈHGG	Ϊ	GÈ€H	G	ÊHF	Ϊ
GÌ G		{ a		ÈE€G	Ì	⊞rï	Ϊ	ÈE€H	Ì	ÈH€Ï	J	È€	ì
GÌΉ		{ æ¢	Ó	ĚÌÌ	Ϊ	È€Î	J	ÈHGG	G	GÈ€H	Ï	ÊHF	G
GÌÌ		{ a		ÈE€G	—	ËFÏ	G	ÈE€H	Ì	ÈH€Ï		È€	ì
GÌÌ	ÚΪΙŒ	{ æ¢	V	ÈÎÎ	G	ËÈ€H	ì	ÈÍÍ	G	GÈEÏÎ	G	Ĕìì	G
GÌÌÎ		{ a		€	—	⊞JI	Ϊ	È€F	Ì	ÈGHH	J	ÈE€H	ì
ĠÌÏ		{ æ¢	Ó	ÈÎÎ	Ϊ	ËÈ€H	ì	ÈÍÍ	Ϊ	GÈEÏÎ	ΙÏ	Ĕìì	Ϊ
GÌÌ		{ a		€	Ì	⊞JI	G	È€F	Ì	ÈHH	T	È€EH	ì
GÌJ	ÚÏ I HŒ	{ æ¢	V	FÈJJ	Ϊ	€	ì	ËÍG	G	FÐJF	G	FÈUF	G
GÌJ€		{ a		È€F	F	ËÈGF	G	ÈE€H	Ì	⊞i ï	ì	È€Î	ì
GÌ JF		{ æ¢	Ó	FÈJJ	G	€	Ì	ËÍG	Ϊ	FÈJF	Ï	FÈUF	Ϊ
ĠJG		{ a		È€F	F	ËÈGF	Ϊ	ÈE€H	Ì	⊞i ï	ì	È€Î	ì
ĠJΗ	ÚΪΙΙŒ	{ æ¢	V	FÈÏI	Ϊ	È€Î	J	FÈFG	G	FÈÍG	G	ŒÊĞ	G
G JI		{ a		Œ€ï	1	ËGÈ€FF	G	È€Ï	Ì	<u>iiig</u>	ì	ÈEFI	Ì
GÌJÍ		{ æ¢	Ó	FÈÏI	G	È€Î	I	FÈFG	Ϊ	FÈÍG	Ï	ŒÈĞ	Ϊ
GÌJÎ │		{ a		Œ€Ï	J	ËGÈ€FF	Ϊ	È€Ï	Ì	<u>iiig</u>	ì	ÈEFI	Ì
GÌ JÏ	ÚÏIÎŒ	{ æ¢	V	FÈÎJ	Ϊ	È€J	J	FÈEÏ	G	FËIF	ì	GÈ€Ï	G
GÌ JÌ		{ a		ËŒ€J	_	ËÈJH	G	È€Î	Н	ËŒJ	Ï	ÈEFG	Н
G JJ		{ æ¢	Ó	FÈÌJ	G	È€J	I	FÈEÏ	Ϊ	FËIF	ì	ĢÈEÏ	Ï
GJ€€		{ a }		ËŒJ	J	ËĐJΗ	Ϊ	È€Î	Н	⊞ E GJ	G	ÈEFG	Н
GJ€F	ÚÏIÏŒ	{ æ¢	V	FÈHÏJ	Ϊ	ËŒ	J	ĖΪG	G	FĚÏF	F	FÈÏÍ	G
GJ€G		{ a }		€	F	ËÈUÍ	G	È€Í	ì	⊞FÏ	Ï	È€J	
GJ€H		{ æ¢	Ó	FÈHÏJ	G	ËE€	I	ĖΪG	Ϊ	FĚÏF	F	FÈÏÍ	Ϊ
GJ€I		{ a		€	F	ËÈUÍ	Ϊ	È€Í	Ì	⊞FÏ	G	È€J	Ì
GJ€Í	ÚΪΙÌŒ	{ æ¢	V	ÈΙΪ	Ϊ	ËE€Í	ì	ĚJG	G	FĚÏF	F	FÈÈÌÌ	G
GJ€Î		{ a }		€	F	ΕÚÎ	G	È€€H	ì	⊞ÍF	ΙÏ	Ì E €Í	

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`ff7cbh]bi YXL

	۱٬۱۱۰۰۰۸		۱٬۱۲۱ مـ۵۸	Ùãi{æFÁXo∙ãa	ŠÔ	Ùãi{æG-ÃŽ•ãã	čô	VaěÁTaq¢ÁŽ•ãa	čô	OT * IA Ã7~~ 4	čô	X[}ÁTãi^•ÁŽÈ	~~~
CIEÏ	Ú æz^	(~~	Ù*¦æ&^ Ó			∪a {æe+x.•æa EEEEÍ	ŠÔ.		<u>50</u>	OB;* ^Æžæåá FÉLÏF	<u>so</u>	X[}Alan And H	±30
GJ€Ï		{ æ¢	U	ÐΙΪ	G		<u> </u>	ĚJG	1	<u>FEIF</u> 曲ÍF	_		1
GJ€Ì	ı'ıı ı ıœ	{ ā	1/	€ ĚÌJ	F		<u> </u>	ÈE€H			G	È€Í È ↔	
GJ€J	ÚÏIJŒ	{ æ¢	V		1	ËE€G		ÈÏ	G	<u>FĚÏF</u>	F	ÈGG	G
GJF€		{ a	Á	€	Н	⊞JF	G	€	+	<u> </u>	Ļ	È€G	+
GJFF		{ æ¢	Ó	ĚÌJ	G	ËE€G	ı T	ÈÏ	ì	FĚÏF	F	ÈGG	1
GJFG	viii (cor	{ a	.,,	€	H	⊞JF	<u> </u>	€	ı	<u> </u>	G	È€G	
GJFH	ÚÏ Í €Œ	{ æ¢	V	ÈHJ	<u> </u>	ŒŒG		ÈGHH	G	<u>FÐÎÎ</u>	J	ÈGF	G
GJFI		{ a	<u> </u>	€	Н	⊞ÍG	G	€	<u> </u>	⊞ĕí	G	È€G	1
GJFÍ		{ æ¢	Ó	ÈHJ	G	ËËŒG	l i	ÈGHH		<u>FÐÎÎ</u>	ļ.	ÈGF	1
GJFÎ	./.:: /	{ a	.,	€	Н	⊞ÍG	<u> </u>	€		Œ€	Ц.	È€G	
GJFÏ	ÚÏ Í FŒ	{ æ¢	V	ËÎÎ		EEEÉ		ÈFH	G	<u>FËH</u>	J	È€G	G
GJFÌ		{ a		€	F	<u> </u>	G	È€H	ļ.	<u>⊞g</u> G	G	È€Í	1
GJFJ		{ æ¢	Ó	ËÎÎ	G	ŒŒÍ	<u> </u>	ÈFH	Ĺ	<u>FËH</u>	LL.	È€G	Ļ
GJG€	7.0.7	{ a		€	F	ΞÏÎ		È€€H		<u>ÉG</u> G		È€Í	
GJŒF	ÚÏÍŒ	{ æ¢	V	FÈÌJ		<u>⊞</u> €€I	J	É GF	G	<u>F</u> ÊÎI	J	FĚGÍ	G
GJGG		{ a	,	€	F	Ë È	G	È€Í	H	∰Ĥ	G	Œ€J	H
GJGH		{ æ¢	Ó	FÈÌJ	G	ËE€I	Ţ	ĔĠF	1	FÈÎI		FĚGÍ	I
GIG	7.11.7	{ ā		€	F	ËÈË		È€Í	Н	∰H <u></u>		Ì€€J	Н
GIĞ	ÚÏÍHŒ	{ æ¢	V	FĚ€Í	Ĩ	Ë€J	J	ËÌF	G	FÊĞ	Ų	FĚIÎ	G
GIGÎ		{ a	,	ËEJ		ËĚHF	G	È€Î	Н	EE Í	Ĺ	È€FF	Н
GJGÏ		{ æ¢	Ó	FĚ€Í	G	È€J	-	ËÌF	Ϊ	FĒĞ		FĚIÎ	Ï
GIG		{ ā		ËE€J	J	ËĚF	Ϊ	È€Î	Н	EE Í	Ì	ŒFF	Н
GJGJ	ÚÏÍÍŒ	{ æ¢	V	FÈÌ H	Ï	È€Î	J	ĒΗ	G	FĒÌH	Ï	FÈIÎ	G
GJH€		{ a		ËE€Ï	1	ËÈH	G	È€Í	Н	⊞eï I	I	È€F	H
GJHF		{ æ¢	Ó	FÈÌ H	G	ÈE€Î		ĚΗ	Ϊ	FĒÌH	G	FÈIÎ	Ϊ
GJHG		{ a }		ËŒË	J	ËÈGH	Ϊ	È€Í	Н	ËË I	J	ÈF	H
GJHH	ÚΪÍÎŒ	{ æ¢	V	ÌίΪ	Ï	Ë€FF	J	ĚHÏ	G	FÈ€J	ΙÏ	FÈ€l	G
GJH		{ ā		€	Н	ËÈ€H	O	È€Ï	Н	⊞ĒGÎ	T	ÈFI	Н
GJHÍ		{ æ¢	Ó	ÌίΪ	G	Ë€FF		ĚHÏ	Ϊ	FÈ€J	G	FÈ€I	Ϊ
GJHÎ		{ a }		€	Н	ËÈ€H	Ϊ	È€Ï	Н	ËŒĠ	J	È€FI	Н
GJHÏ	ÚÏÍÏŒ	{ æ¢	V	ÈÏF	Ϊ	⊞EGÍ	Н	ÈGJF	G	GÈEHG	ΙÏ	ĚÎF	G
GJHÌ		{ ā		€	Н	Η̈́Η̈́	G	ÈFH	Н	⊞ G	T	ÈEGÍ	Н
GJHJ		{ æ¢	Ó	ÈÏF	G	⊞EGÍ	Н	ÈGIF	Ϊ	GÈEHG	G	ĚÎF	Ϊ
GJI €		{ a		€	Н	⊞́HÎ	Ϊ	ÈFH	Н	⊞í G	J	ÈEGÍ	Н
GJI F	ÚΪÍÌŒ	{ æ¢	V	ÉGIÌ	Ϊ	È€Î		ÈΪΙ	G	F É Ĝ I	J	ÈFÌ	G
GJI G		{ a		È€€H	J	⊞G ï	G	È€J	Н	⊞GF	Ϊ	ÈEFÎ	Н
GJI H		{ æ¢	Ó	ÉÐÌ	G	È€Î	J	ÈÏI	Ϊ	FÈGÎ∣	П	ÈFÌ	Ϊ
GII		{ a		È€€H	I	⊞GÏÏ	Ϊ	È€J	Н	⊞GF	G	È€FÎ	Н
GJI Í	ÚΪÎÌŒ	{ æ¢	V	ÈÎF	Ϊ	ËŒJ	Т	ÈHI	Ϊ	FÌЀÍ	Т	ĒĒ€Ï	Ϊ
GJI Î		{ a		ËŒH	J	ĤΉ	G	È€FG	Н	⊞ìî	G	È€GF	Н
GJI Ï		{ æ¢	Ó	ÈÎF	G	ËE€J	J	ĖΗΙ	G	FÌЀÍ	J	ĒĒ€Ï	G
GJI Ì		{ a		ËËŒH	Т	ĤΉ	Ϊ	È€FG	Н	Η̈́ÌÎ	Ï	ÈEGF	Н
GJI J	ÚÏÎJŒ	{ æ¢	V	ÈÌÌ	Ï	€	J	ÈΪJ	G	GÌH∃	G	ÈGJ	G
GJÍ €		{ a		ÈF	ì	ĤΪJ	G	È€Î	ì	€	J	ÈFF	ì
GJÍ F		{ æ¢	Ó	ÈÌÌ	G	€	T	ÈΪJ	Ϊ	GÌH€	Ï	ÈGJ	Ï
GJÍ G		{ a		È€F	ì	ĦΪJ	Ϊ	È€Î	ì	€		ÈFF	ì
GJÍ H	ÚÏÏ€Œ	{ æ¢	V	ÈG	G	ËE€I	ì	Ě€I	G	GEF J	G	ÈĠ	G
GJÍ I		{ a		ËË€H	J	⊞€F	Ϊ	È€€I	ì	⊞JÎ	Н	È€Î	ì
GJÍÍ		{ æ¢	Ó	ÈG	Ï	—————————————————————————————————————	ì	Ě€I	ï	<u>— 5:</u> GEFJ	Ï	₿Ġ	ï
GJÍ Î		{ a		ŒŒH	i	⊞€F	G	È€	ì	⊞Ĵĵ	H	È€Î	ì
GJÍ Ï	ÚÏÏ€Ó	{ æ¢	V	ĚJF	İ	EEH	Н	HII	İ	GÊGF	G	ÊJÏ	Τ
GIÍÌ		{ a		E€€F	ì	⊞F	G	ŒFJ	Н	<u>⊞€</u> JÌ	J	ŒHÎ	Н

9bj Y`cdY'D`UhY#G\ Y``Df]bW]dU'GhfYggYg'fl7cbljbi YXL

<i>90) Y C</i>	9 b j Y ca Y D UnY#ε\ Y Dτjb Vija U Grt Ygg Yg τίν cb η b i ΥΧΣ.												
	Ú æg^		Ù~¦-æ&^	Ùãi{æFÁŽi∙ãã	ŠÔ	Ùãt{æGÁŽ•ãã	ŠÔ	Væ`ÁTæçÁŽ∙ãã	ŠÔ	OB;* ^AŽtæåá	ŠÔ	X[}ÁTã~•ÁŽÈ	ÈŠÔ
GJÍ J		{ æ¢		ĚJF	G	⊞ © H	Н	ÈÌ I	G	ŒŒ	ΙΪ	ĒJÏ	G
GJÎ €		{ a		È€F	ì	⊞F	Ï	È€FJ	Н	ŒĴÌ	i	ÈEHÎ	Н
GJÎ F	ÚÏÏFŒ	{ æ¢	V	Ê HJ	ï	iii€€ï	i	ĚFG	G	GÈTIÍ	G	ÈJJ	G
GJÎ G	OTTT GE	{ a	•	⊞EEI	Н	ΞΪÍÎ	G	È€G	ì	€	J	È€Î	ì
GIÎ H		{ æ¢	Ó	ÊΉ	G	ŒŒ	ì	ĚFG	Ť	ŒÌÍ	ï	ÈJJ	T i
GIÎ I		{ a		⊞EEI	Н	ΞΪÍÎ	i	È€G	i	€	i	È€Î	ì
GIÎÎ	ÚÏ Ï Œ	{ æ¢	V	ĚÌG	G	<u> </u>	i	ĚÏÍ	G	GÉGHF	l 🕆	Β̈́JÎ	G
GIÎ	OTTAL	{ a	V	È€G	F	HII)	i	È€Î	ì	<u>G</u> EJÌ	J	ÈFG	ì
GIÏ		{ æ¢	Ó	ĚÌG	i	<u> </u>	÷	ĚÏÍ	÷ i	GEGHF	ì	₿JÎ	T T
GIÌ		{ a		È€G	F	H i i	G	È€Î		EJÌ	H	ÈFG	ì
GlÎJ	ÚΪΪΘΌ	{ æ¢	V	FE€FJ	÷	<u>⊞</u> FF	J	Ê€H	G	FÈÍH	G	FÈI	G
GIÏ €	01160	{ a	V	FŒF5	Н	— ŒÎ	G	E€J	Н		J	EEG	Н
GIÏ F			Ó	FEFJ	G	<u> </u>	-	<u>re</u> €	ï	FÈÍH	ï	FÈI	-
		{ æ¢	U	FŒF	Н	— ŒFEÎ	ï	E€J	Н			EEG	
GIÏ G	ÚÏ Ï HŒ	{ a	\/		Π		ì	ÊÌJ		FЀ		FEG I	H
GIÏ H	ULLHUE	{ æ¢	V	FÈ€	1				G		G		G
GIÏ I		{ a	<u> </u>	<u>⊞</u> €Î	Н	ËÈIH Ëzri	G	È€Ë	T T	€	J	ÈFI □ÒÏÏ	
GÜÍ		{ æ¢	Ó	FÈ€	G	<u>⊞</u> €FÍ	<u> </u>	ΕÌJ	1	FЀ	1	FÈGÏÏ	1
GÜÎ	ı'ıï ï ı o c	{ a		<u>⊞</u> €Î	H	ËÈIH	ì	È€Ï	<u> </u>	€ O ò òî ï	ļ ļ	EFI FÈ Î O	
GÜÜ	ÚÏÏIŒ	{ æ¢	V	FÈÎÍ	Ì	ËŒH	<u> </u>	ĚΉ	G	GÈÉÎÏ	Ц.	FÈĤ G	G
GJÏ Ì		{ a		€		ËÈ	G	ÈE€G	<u> </u>	ÈÎ	Ţ	È€H	1
GIÏ J		{ æ¢	Ó	FÈÎÍ	Ģ	ËŒH	ļ	ËΉ	ļ	GÈÉÎÏ		FÈĤ G	
Gĺ €	700.7	{ a		.€	l.	<u>ĒĒ</u>		Œ€G		ÈÎÎ		È€H	
GŲ F	ÚÏÏIÓ	{ æ¢	V	<u>FÈ Ï F</u>		j€gí	J	ĖFį	G	FË€	G	FĚÏÏ	G
GŲ G		{ a	,	ŒŒĜ		ËĚFF	G	Œ€	Н	<u>⊞</u>	J	ÈĘFÏ	H
GŲ H		{ æ¢	Ó	FÈÏF	G	j <u>E</u> GÍ	<u> </u>	ÈFÌ		FË€Î		FĚÏÏ	
GŲ	7.11.17	{ a		⊞EGÎ	J	ËÉFF		Œ€Ì	Н	Ë€HÏ		È€FÏ	Н
GŲ į	ÚÏÏÍŒ	{ æ¢	V	FÊŒ	ı	ÆHG	J	ÐĘΪ	G	FËHU	G	FËÍI	G
GJĮ į̇̃		{ a		Œ€HG	ı	ËĒÍJ	G	Œ€Ì	Ĺ	€	J	È€FÍ	İ
GŲ Ï		{ æ¢	Ó	FÈŒ	G	È€HG		ÐFΪ	Ĩ	FË₩	Ï	FËÍJ	Ĩ
GJÌ Ì		{ a		Ë€HG	J	ËĒIJ	Ï	È€È	Ì	€		È€FÍ	Ì
GJÌ J	ÚÏÏÎŒ	{ æ¢	V	FÈ FJ	Ϊ	È€GÍ	J	FÈ€G	G	FÐFI	Ì	FÐÎ	G
GJJ€		{ a		ËEGÎ		ËÈÌÌ	G	ÈE€H	Ì	È€HÏ	J	È€É	Ì
GJJF		{ æ¢	Ó	FÈ FJ	G	È€GÍ	1	FÈ€G	Ϊ	FÐFI	ì	FÐÎ	Ϊ
GJJG		{ a		ËEGÎ	J	ËÈÌÌ	Ϊ	ÈE€H	Ì	È€HÏ	1	Ì E €Í	Ì
GJJH	ÚΪΪÌÓ	{ æ¢	V	FĚΪÌ	Ϊ	È€GJ	J	ĖlÌ	G	FË⊕H	Н	FÊÍG	G
GJJI		{ a		ËEGJ	-	ËFÊ€H	G	È€Î	—	Œ€ÌI	Ï	ÈFH	ì
GJJÍ		{ æ¢	Ó	FĚΪÌ	G	È€GJ		ÈlÌ	Ϊ	FË⊕H	Н	FÊÍG	Ϊ
GJJÎ		{ a		ËEGJ	J	ËFÈ€H	Ï	È€Î	Ì	Œ€ÌI	G	ÈEFH	ì
GJJÏ	ÚÏÏJŒ	{ æ¢	V	FË∄	Ϊ	È€HÏ	J	ÐНG	G	FÊHÌ	Н	FÈ€G	G
GJJÌ		{ a		ËÈ€HÏ	-	ËËH	G	È€€I	Ì	⊞G	Ϊ	È€F	ì
GJJJ		{ æ¢	Ó	FË€Ì	G	È€HÏ	Т	₿HG	Ϊ	FÊHÌ	Н	FÈ€G	Ϊ
H€€€		{ a		ËÈ€HÏ	J	ËËH	Ϊ	È€€I	Ì	⊞G	G	È€F	ì
H€€F	ÚÏÌ€Œ	{ æ¢	V	FÈÏÎ	Ϊ	È€GJ	J	FÈEFÌ	G	FËÌG	ì	FÈÏG	G
H€€G		{ ā		ËŒGJ		ËЀ	G	È€€I	ì	ËFÏF	Ï	ÈFF	ì
H€€H		{ æ¢	Ó	FÈÏÎ	G	È€GJ	Ī	FŒFÌ	Ï	FËÌG	lì	FÈÏG	Til
H€€I		{ a		⊞€GJ	J	ËЀ	Ϊ	È€€I	Ì	⊞ï F	G	ÈFF	
H€€Í	ÚÏÌ € Ó	{ æ¢	V	FEGHG	Ï	EE€J	J	ÊÎI	G	FÊG	ĭ	FEGIF	G
H€€Î	0	{ a	•	⊞EEJ	i	ËË	G	È€	Ĭ		Ï	È€J	
H€€Ï		{ æ¢	Ó	FÈGHG	G	È€J	ī	ÊÎI	Ï	FÊG	J	FEGIF	T T
H€€Ì		{ ā		⊞€J	J	EEG	Ϋ́	È€	ì		G	È€J	
H€€J	ÚÏ Ì FŒ	{ æ¢	V	FEG	ï	ŒFH	J	ËFF	G	FĚÏF	F	FÈĤ Ì	G
H€F€	OI II GL	{ a	V	<u>⊞</u>		ËÈ	G	E€€		EEGH	l i	È€J	
		1 9		11 11		440	<u> </u>	<u> </u>		ш п			

9bj Y`cdY'D`UhY#G\ Y``Df]bW]dU`GhfYggYg`ff/cbljbi YXL

	Ú æ^		Ù"¦æ&^	Ùãi{æFÁX.∙ãa	ŠÔ	Ùãi{æ€ÁŽ•ãã	ŠÔ	VaĕÁTaq¢ÁŽ•ãa	čΛ	OE}* ^AŽ(æåá	čΛ	X[}ÁTã:^•ÁŽÈ	÷šô
HEFF	Ulae,	{ æ¢	Q Service	Ua { aer μα • aa FÈGJ	G	Ua { a€ Ja ∆ • aa	3U	Væ Aι æ;A∆•aa ËFF	ï	FĚÏF	F	∧[}Alan an Ala	Ϊ
HEFG		{ a}	0	— FLESU ⊞EEFH	J	ËË Ë	+	È€	ì	EEGH	G	EE€J	1
HEFH	ÚÏ Ì Œ	{ æ¢	V	FEH	ï	EE€J	J	ĔII	G	FÊ FI	ì	FÈG	G
HEFI	UTTGLE	{ a	V	EE€J	-	ËH F	G	E€€	ì	EEG Ï	+	EE€J	ì
HEFÍ		{ æ¢	Ó	FÈH	G	EE€J	ı	ĔII	÷	FÊ FI	+	FÈG	+
HEFÎ		{ a	0	EE€J	J	ËĤF	+	EE€	ì	EEG Ï	G	EE€J	ì
HEFÏ	ÚÏ Ì ŒÓ	{ æ¢	V	È€F	ï	<u>⊞</u>	J	ÈÍF	G	FÊÍÎ	1	ÈÎ	G
HEFÌ	ULIGO	{ a	V	€	F	⊞ FF	G	ŒTF	Н	<u>r⊞</u> (í	i i	Œ€	Н
HEFJ			Ó	<u> </u>	G	⊞F	J	ÈÍF	ï	FÊÍÎ	J	ÈÎ	
H€G€		{ æ¢ }	0	€	F	⊞ FF	ï	ŒIF	Н	<u>r⊞</u> (í	G	E€€Í	Н
HEGF	ÚÏ Ì HŒ		V	ÈlÍ	F T	<u> </u>	<u> </u>	ÈJI	G	FĚÏF	F	₿Ġ	G
H€GG	ULLINGE	{ æ¢ }	V	<u>⊞</u>	1	ĦÍI	G	E€€H	Н	<u>ΓΕΙΓ</u>	F	E€€Í	Н
H€GH			Ó	ÈlÍ	G	θ	J	ÈJI	ï	FĚÏF	F	₽Ġ	
		{ æ¢	0	<u>⊞</u>	J	HI I	ï	E€€H	Н	<u>Γ⊞</u> Ĥ Η	G	Eۃ	Н
H€GÍ	ÚÏÌIŒ	{ ā	V	ЀF	ï	⊞II	<u> </u>	ĚĺÎ	G	FĚÏF	F	FEFH	G
H€GÎ	UITICE	{ æ¢	V	€	F	⊞F	G	<u> </u>	Н	<u>ΓΕΙΓ</u> ⊞F	F	EEF⊓ EE€Í	Н
		_	Ó	<u> € </u> ఏ€F	G	— ⊞F	J	ĚlÎ	ï	FĚÏF	F	FEFH	-
H€GÏ		{ æ¢	0	€	F	⊞F	ï	ŒII	H	<u>ΓΕΙΓ</u>	G	<u>re</u> ern E €€Í	H
H€GÌ H€GJ	ÚÏÌIÓ	{ ā	V	<u> € </u>	Ţ	⊞EG	H	EGÎÎ	G	FÈ FÌ	G	ĚFF	G
	UITIO	{ æ¢	V	€	- 1	⊞€i	G	€	Н	<u>ruri</u> Hili	+	EE€G	Н
H€H€ H€HF			Ó	<u> € </u>	H	⊞€G	H	— € ĒGÌÎ	Ţ	FÈ FÌ	-	ĚFF	
		{ æ¢	0		Н	⊞€i	Ţ	€	1	<u> </u>	J		1
HEHG	ÚÏÌÍŒ	{ a	1/	<u>€</u> Èîì	<u> </u>	€	+	— € ÈHÍF	Н	<u>шіі</u> FĚÏF	F	<u>È</u> €G ÈG	H
HEH	UITIŒ	{ æ¢	V		1	€ ⊞Ï	J G	€	G H	F⊞TF	F		G
HEH		{ a	Ó	<u>€</u> Èîì	Н		G	— € ÈHÍF	H	<u>⊞€⊓</u> FĚÏF	F	<u>È</u> €G È G	H
HEHÍ		{ æ¢	0		G	€ ⊞ï	<u> </u>		1	FEIF	_	ÈE€G	1
HEHÎ	ÚÏÌÎÓ	{ a	V	€ ĚHÍ	H	⊞EG	-	€ ÈFÍ	Н	<u>⊞€⊓</u> FĚÏF	G	ĔH	H
H OH Î	UITIO	{ æ¢	V		H	⊞HÏ	H		G H	<u>r⊞ir</u> ∰HÌ	F	E€€G	Н
		{ ā	Ó	€ ĚHÍ	G	⊞G	H	EFÍ	ï	FĚÏF	F	ĒΗ	-
HEHU		{ æ¢	0			⊞HÏ	Ţ		1	<u>F⊞IF</u>			1
H€E	ÚÏÏÌŒ	{ a	1/		H	EEGÍ	+	€ FĚH	Н	四月 Fài	G	<u>LEE</u> €G HEEIÌ	H
H€ F H€ G	UITIŒ	{ æ¢	V	<u>G</u> ÈJH ∰EGÍ		EHE€G	J G	rtin E€€Í	G H	F⊟I EEGF	H	EEU	G H
Hel H			Ó	<u>⊞</u> G∃JH	G	ŒĠ	<u> </u>	FĚH	ï	FÐÌ	H	HEIÌ	T T
He I		{ æ¢ }	0	— GESI⊓ EEGÍ		EHE€G	ï	r¤⊓ È€€Í	Н	 ∰€GF	-	EE€J	H
Helí	ÚÏÏJÓ		V	H ÈH Í	J	EH	J	FË H	G	FËIÍ	H	HÈ€	G
Helî	01130	{ æ¢ }	V		+		G	r¤m È€€Ï	ì	- ΓΕΙΙ €	J	<u>⊓</u> Œ€	ì
Helï			Ó	H ÈH Í	G	EH	J	FË HH	÷	€ FËIÍ	H	HEEF⊓	+
		{ æ¢	0		-		ï	EEE	ì		-		
H€Ì	ÚÏ Ì €Ô	{ ā	V	HÐÍÏ	J	EEGÍ	-		G	€ FÊÍH	G	<u>E</u> FH I EFÌ	
H€ J H€ €	ULLEO	{ æ¢ }	V	⊟⊒II ⊞EGÍ		ËHĐJF	J G	GÈEGG ÈE€J	F	F⊞H€G	ì	I ŒFI ŒFÏ	G F
Hei €			Ó	HĐÍÏ		EEG(J	GEEGG	Ţ	FÊÍH	+	IÈFÌ	
H€ÍG		{ æ¢ }	0	⊓⊒∏ ⊞GÍ	G	ËHÐJF	ï	EE€J	F	<u>F⊞</u> 1EG		I ŒFI ŒFÏ	F
Hei H	ÚÏ Ì FÓ		V	HEIF	J	EGH	-	FĚÍÌ	G	FÈ I Í	H	HE	G
	ULIFO	{ æ¢	V			EHEEÏ G	J		_		Π		
H€ÍI H€ÍÍ		{ a	Ó	<u>⊞</u> EGH HE€IF	_	EEGH	G	<u>E</u> €Î FĚÍÌ	H	<u>Ë</u> E€J FÈIÍ	H	<u>E</u> EFG HE€JI	H
Heiî		{ æ¢ }		HEELF HEEGH	G J	EHEEÏ G	ï	FŒII	Н	EEEJ	G	<u>HE</u> FG	H
H€Ï	ÚÏ Ì GÔ		V	HEH	ï		-	FË HÎ	G	FËH	Н	HÈFÌ	G
Heiì	ULIGO	{ æ¢ }	V			ËHH	J G	FŒĦ	ì	FŒFI	H ₋	EFF	
H€IJ			Ó		-	EHH	J	FËH	i	FË H		HÈFÌ	T T
H€Î€		{ æ¢ }	U		G	EHH F	ï	FEH E€€Í	ì	<u>F⊞</u> GÎ	Н	HE FI ÈFF	+
Hei€ HeiF	ÚÏ Ì HÓ		V	HÐFI	J	EEGH	-	EE€I FÐJH		GEGF	G	HBÎÍ	
	ULLU	{ æ¢	V		1		J G	EE€Ì	G F	G E GF	1	 HEFÎ	G F
H€ÎG		{ a		ËEGH		ÌIÉHË	G	ŒEI	Г	<u> </u>		ŒFI	Г

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`fl7cbh]bi YXL

30) 1	· ·							, ~	× ^	~	٧.	, ~ ,	
🚓	Ú æe^	Ι.	Ù"¦æ&^	Ùãt{æFÁŽ•ãã	ŠÔ	Ùã!{æ€ÃX•ãã	ŠÔ_	Væ ÁTæçÁŽ•ãa	SΩ	OB;* ^AŽanåá	, SO	X[}ÁTã~•ÁŽÈ	Æ\$O
H€ĴH		{ æ¢	Ó	HÐFI	G	ÌŒGH	<u> </u>	F₽Ì		GŒGF	<u> </u>	HÈÌÍ	
H€ÎI	/ !! \ A	{ a }		ŒĞH	Ĵ	ÜÜİ	I	Œ€Ì	F	<u><u> </u></u>	G	ÈEFÎ	F
H€ÎÍ	ÚÏÌIÔ	{ æ¢	V	FĚJ		ŒHÌ	J	<u>È</u> HG	G	<u>FËÍJ</u>	Н	FÊII	G
H€ÎÎ		{ a		<u> </u>		ËĒG	G	È€Í	H	<u> ⊞</u>	J	ÈF	H
H€ĴÏ		{ æ¢	Ó	<u>F</u> Ě J	G	ÉHÌ	Ţ	ÈΗĢ		F <u>ι</u> ξίJ	Н	FᡛÌⅡ	
H€ÎÌ	(11.) (({ a }		Œ Œ HÌ	J	Ε̈́Ε̈́G		È€Í	Н	<u> </u>		ÈF	Н
H€ÎJ	ÚΪÌÍÓ	{ æ¢	V	FÊJH	1	<u>Ì</u> €ĵĺ	J	₿Œ	G	<u>F</u> ËÎJ	Н	FĒJ	G
Heï€		{ a }	,	⊞ e îí		ËËĞ	G	È€È	Н	<u> </u>	J	ÈĘFÏ	H
H€ÏF		{ æ¢	Ó	FĒJH	G	<u>Ì</u> EÎ Í		₿Œ		FΕ̈́ÎJ	Н	FĒΊ	1
H€ÏG	/ III > A	{ a		EEE Í	J	ËËĞ		È€ÈÌ	Н	<u>∰</u> FI_		ÈFÏ	Н
H€ÏH	ÚΪÌÎŒ	{ æ¢	V	FÈÌJ		ÈEÏH	J	FŒIJ	G	FË Ĝ	Н	ÇÈ€FÎ	G
H€ÏI		{ a	,	ΕΕΕ	-	Ε̈́ĖĠ	G	È€Ë	Ĺ	€	J	ÈFI	İ
H€ÏÍ		{ æ¢	Ó	FÈÌJ	G	È€ÏH		FÈ€IJ	Ï	FĒĞ	Н	QÈEFÎ	Ï
HeÏÎ		{ a		ΕΕΘΉ	J	ËÐG	Ï	È€Ï	Ì	€	1	È€FI	Ì
H€ÏÏ	ÚΪÌΪŒ	{ æ¢	V	OEÈGÏG	Ï	È€ÎÍ	J	F É GIÍ	G	FĒΙΉ	G	QÈ€	G
H€ÏÌ		{ a		ÉÉÍ	-	<u>EÇIÈHÊ</u>	G	È€Í	Ì	È€FI	J	È€J	Ì
H€ÏJ		{ æ¢	Ó	OÈGÏG	G	È€ÎÍ	1	F È GIÍ	Ϊ	FÈÌ́H	Ï	GÈE	Ï
H€Ì€		{ a		⊞€Í	7	ËŒHÊ	Ϊ	È€Í	Ì	È€FI		ÈŒ€J	ì
H€ÌF	ÚΪÌÌ	{ æ¢	V	ŒĤ	:	È€HÌ	J	FĚ FJ	G	FÊÌG	G	HÈ€€	G
H€ÌG		{ a		ËŒHÌ	-	ËGÈÌJ	G	ÈŒ€J	F	⊞HG	ì	ÈEFÏ	F
H€ÌH		{ æ¢	Ó	ŒĤ	G	È€HÌ	Т	FĚ FJ	Ϊ	FÊÌG	ΙÏ	HÈ€€	Ï
H€ÌI		{ a		⊞⊞	J	ËGÈÌJ	Ï	Ľ ≘€ J	F	⊞HG	ì	È€FÏ	F
HeÌÍ	ÚΪÌJ	{ æ¢	V	FÈĠ	Ϊ	È€HÏ	J	ÈH	G	FË FÌ	Н	FÈÎJ	G
H€ÌÎ		{ a		Œ∃Ï	ı	ËĒÍF	G	È€Í	Н	ËE€G	Ϊ	È€FF	Н
H€ÌÏ		{ æ¢	Ó	FÊG	G	È€HÏ	Т	ÈII	Ϊ	FË FÌ	Н	FÊÎJ	Ï
H€ÌÌ		{ a		Œ€HÏ	J	ËĒÍF	Ϊ	È€Í	Н	ËE€G	G	È€FF	Н
H€ÌJ	ÚÏ J€	{ æ¢	V	FË FJ	Ϊ	È€ÎÍ	J	ÀHF	G	FĖΪÌ	Н	FÈ€	G
H€J€		{ a		ËEÎÍ		ËËÍ	G	È€È	F	Œ€ï	Ϊ	È€FÎ	F
H€JF		{ æ¢	Ó	FË FJ	G	È€ÎÍ	Т	ÀHF	Ï	FĖΪÌ	Н	FÈ€	Ï
H€JG		{ a		ËEÎÍ	J	ËËÍ	Ϊ	È€È	F	Œ€ï	G	È€FÎ	F
H€JH	ÚÏ JF	{ æ¢	V	FÈFG	Ϊ	È€ÏF	J	FÈ€ÍH	G	FËĠ	Н	GÈEGJ	G
H€JI		{ a		ËEF	Т	ËÈΙΗ	G	È€Î	ì	lle Fì	Ï	È€FG	ì
H€JÍ		{ æ¢	Ó	FÈFG	G	È€ÏF	Т	FÈ€ÍH	Ï	FËĞ	Н	GÈEGJ	Ϊ
H€JÎ		{ a		ËEF	J	ËÈIH	Ϊ	È€Î	Ì	lig Fì	G	È€FG	ì
H€JÏ	ÚÏ JG	{ æ¢	V	GEGÎ J	Ï	È€ÎÍ	J	FÈH	G	FÊ€Ï	Н	G ÌÌ Ì Í	G
H€JÌ		{ a		ËEÎÍ		ËŒH	G	È€G	ì	Ë F	Ï	È€Î	ì
H€JJ		{ æ¢	Ó	GÉGÎ J	G	ÈÉÎÍ	Ī	FÈGH	ï	FÈ€Ï	Н	G ÌÌ ÌÍ	ΪÏ
HF€€		{ a	-	EE Í	J	ËŒH	Ï	È€G	ì	Ë€ F	G	È€Î	ì
HF€F	ÚÏ JH	{ æ¢	V	OÈÎÏ	Ï	È€HÏ	J	FÈÏÍ	G	FÈÌÍ	ì	ŒÌG	G
HF€G		{ a		ÏÌ		ËŒĴŪ	G	È€È	F	EE ì	Ï	È€FÍ	F
HF€H		{ æ¢	Ó	OÈÎÏ	G	È€HÏ	Ť	FÈÏÍ	Ï	FÐÌÍ	T	GÈ G	Ť
HF€I		{ a		III I	J	ËŒĴ	Ϊ	È€È	F	EEE Ì	G	È€FÍ	F
HF€Í	ÚÏ JI	{ æ¢	V	FÈÎÌ	J	ÈÏF	J	ÈÎ	Ť	FÈ€H	Ï	FÈF	T
HF€Î	<u> </u>	{ a		iii i	Ī	ËÈÌÌ	Ī	È€€H	ì	ĦÎÍ	ì	È€É	ì
HF€Ï		{ æ¢	Ó	FÈ Î Ì	i	ÈÏF	i	ÈÎ	J	FÈ€H	G	FÈF	J
HF€Ì		{ a			J	ËÈÌÌ	J	ÈE€H	ì	<u> </u>	ì	È€Í	T
HF€J	ÚÏ JÍ	{ æ¢	V	HÊÎG	G	EÏ Ï	G	FĚÎ	İ	GÊTÎ	Н	HEII	ΤĦ
HFF€	5, 0,	{ a			ï	<u> </u>	Ï	€	Ì	ÈFH	Η̈́	È€G	† †
HFFF		{ æ¢	Ó	HÈÎG	ï	<u>E</u> ÏÏ	ï	FĚÎ	G	<u>G</u> Èïì	Н	HÈÍI	G
HFFG		{ ā			G		G	€	ì	ÈFH	J	È€G	ì
HFFH	ÚÏ JÎ	{ æ¢	V	ÎÈÎÍ	G	FÈÌH	G	ŒĤ	J	FÈÍI	Н	ÍÈH	T i
HFFI	0.01	{ ā	V	ËÈÌF	ï	ÉÈGJ	Ï	ÈE€G	ì	<u> </u>	1	È€€I	1
		119		441		T T C		100					

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`ff7cbh]bi YXL

			1 ³ 18 1	·`····· = 65 m	¥ A	·``	×A		×A	a= ~	×A	<u> </u>	~ × × ×
urrí	Ú æe^		Ù*¦æ&^_	Ùãt{æFÁX.•ãa	ŠÔ		SO	Væ ÁTæçÁŽ•ãa	80	OB;* ^AŽanåá		X[}ÁTã^•ÁXÈ	
HFFÍ		{ æ¢	Ó	ÎÈÎÍ	<u> </u>	FÈÌH	I .	QÈHÌ	1	FÈÍI	H	ÍÈH	G
HFFÎ	.4.0 .0	{ a	.,	ËÈÌF	G	ÉÈG	G	ÈE€G	ļ.	<u>ÈÉÍ Ï</u>	J	È€E	l l
HFFÏ	ÚÏ JÏ	{ æ¢	V	<u>ĢĚ</u>	G	È H	G	FÈGÏ Ì	<u> </u>	<u>FÈÏJ</u>	Ц.	ŒĬÏ	1
HFFÌ		{ a	<u> </u>	⊞GG	Ų.	ËŒ JÌ	ļ.	ÈE€G		ÈÏÍ	Ţ	È€H	
HFFJ		{ æ¢	Ó	<u>G</u> Ě ì	<u> </u>	<u>È</u> H		FÈĠÌ	G	FÈÏJ	Ц.	ŒĬÏ	G
HFG€	.7.0 .5	{ a		⊞ G	G	ËŒĴŮ	G	È€G		ÈÏÍ	l l	È€H	1
HFGF	ÚÏ JÌ	{ æ¢	V	<u>H</u> È G	G	Β̈́JÏ	G	FÈHÏ	Ĺ	<u>FÈII</u>	Ш	HÈÈÌÍ	Ļ
HFGG		{ a }		⊞ĴI	<u> </u>	ËĖĮ	<u> </u>	È€F		<u>Œ</u> Ì I		È€G	
HFGH		{ æ¢	Ó	<u>H</u> È G	<u> </u>	Β̈́ĴΪ		FÈHÏ	Ţ	<u>FÈII</u>	G	HŒÌÍ	Ğ
HFG	7	{ a }		∰ìĭ	G	ЩĖÍJ	G	È€F	<u> </u>	<u>È</u>	J	È€€G	<u> </u>
HFGÍ	ÚÏ JJ	{ æ¢	V	<u>Ģ</u> ĚÍÌ	G	Ė	G	FŒÎ J	Ĺ	<u>ĘĔ į</u>	ш	ŒĖĴĴ	
HFGÎ		{ a	,	⊞ÔĤ		ËĢĚÏÏ		È€		<u> </u>		È€È	I
HFĞ		{ æ¢	Ó	QĚÍÌ		<u></u> È		FÈÈÎJ	Ğ	FĚΪ	G	ŒĚÎÎ	G
HFGÌ		{ a		ŒG . U	G	ËĢĚÏÏ	G	E€€I	<u> </u>	<u> </u>	J	È€ÈÌ	I
HFGJ	ÚÌ € €	{ æ¢	V	Q Ì I I H	G	ÈÜJ	G	FÈ€J	Ţ	FÀH		QÎGHF	Į į
HFH€		{ a	,	ŒΉÌ	Ĩ	ËÇELUÍ	Î	Ì€€H	İ	Ε̈́ÏΗ	1	È€Î	İ
HFHF		{ æ¢	Ó	OÈHÏ H	Ï	ÈijJ	Ï	FÈ€J	G	FÀH	G	QÈCHF	G
HFHG		{ a		ËΪÌ	G	ËŒŪ	G	È€H	Ì	ÈEÏH	J	È€Î	Ì
HFHH	ÚÌ €F	{ æ¢	V	ŒĠ	G	€	Ì	F È GIÌ	Ϊ	FÙJI	Ï	ŒHU	Ï
HFHI		{ a		€	F	ËGËTH	Ϊ	È€	F	ÈÈÌÏ	ì	ÌŒ€Ì	F
HFHÍ		{ æ¢	Ó	ŒÈGJ	Ï	€	Ì	F È GIÌ	G	FÙJI	G	ŒHU	G
HFHÎ		{ a		€	F	ËŒÈIH	O	È€	F	ÈÌÏ	ì	È€Ì	F
HFHÏ	ÚÌ € G	{ æ¢	V	FÈHJ	G	È€E	_	FÈÌF	Ϊ	ŒÈŒH	Ϊ	GÈÉÍ G	Ϊ
HFHÌ		{ a		⊞€€I	J	ËÈIÏ	Ϊ	È€H	F	ÈΪÌ	ì	È€Î	F
HFHJ		{ æ¢	Ó	FÈHJ	Ï	È€€I	J	FÈÈÌF	G	ŒÈСН	G	OÈÉÍ G	G
HFI €		{ a		⊞€€I	T	ËÈIÏ	G	È€H	F	ÈΪÌ	ì	È€Î	F
HFI F	ÚÌ €H	{ æ¢	V	FĚ FÏ	G	ËE€G	F	FÈGÍ F	Ϊ	GÉGÌÍ	Ϊ	GÈÌ H	Ï
HFI G		{ a		€	F	ËFĚFJ	Ϊ	È€F	F	ÈGIG	ì	È€€G	F
HFI H		{ æ¢	Ó	FĚ FÏ	Ï	ËE€G	F	F È GÍ F	G	GÉGÌÍ	G	ŒÈÌ H	G
HFII		{ a		€	F	ËFĚFJ	G	È€F	F	ÈGIG	ì	È€€G	F
HFIÍ	ÚÌ €	{ æ¢	V	FÈJÍ	G	ËE€G	F	FÈG	Ϊ	GÈHÎ	Ϊ	FÈÏÍ	Τ̈́
HFIÎ		{ ā		€	F	ËÈJÏ	Ϊ	È€F	F	ÈHG	ì	È€€G	F
HFI Ï		{ æ¢	Ó	FÈJÍ	ï	ËË€G	F	FÈG	G	GÈHÎ	G	FÈÏÍ	G
HFI Ì		{ ā		€	F	ËÈJÏ	G	È€F	F	ÈHG	ì	È€€G	F
HFI J	ÚÌ €	{ æ¢	V	FΕ̈́ÍΗ	G	È€€G	ì	FÈEÏÎ	Ï	OŒÎ G	Ϊ	FÈÌÎ	Τ̈́
HFÍ€		{ a	-	Œ€I	Н	ËËÎF	Ϊ	È€H	F	ÈΠ	T	È€Î	F
HFÍ F		{ æ¢	Ó	FËÍH	Ï	È€€G	Ì	FÈEÏÎ	G	GÈÎG	G	FÈÌÎ	G
HFÍ G		{ a		⊞E€I	Н	ËËÎF	G	È€€H	F	ÈII	J	È€Î	F
HFÍ H	ÚÌ €Î	{ æ¢	V	GEÎG	G	È€J	Ī	FÈ€ÍJ	Ï	GÆGÎ	Ï	ŒŒĴÏ	Ť
HFÍ I	<u> </u>	{ a	•	⊞€ì	J	ËGE ï	Ï	È€Í	F	<u>Œ</u> JG	i	È€€J	F
HFÍÍ		{ æ¢	Ó	GEÎG	Ï	È€J	J	FÈ€ÍJ	G	GEGÎ	G	ŒŒĴÏ	G
HFÍÎ		{ a		<u>⊞</u> €Ì	Ė	EGE Ï	G	È€Í	F	ÈEJG	J	È€J	F
HFÍ Ï	ÚÌ €Ï	{ æ¢	V	FÈ	J	ÈÏF	J	ĒĠΗ	i	FÈG	Ϊ	FĚH	
HFÍÌ	<u> </u>	{ a	•	i i	ĭ	ËĒF	ĭ	È€Í	Н	ÈG	i	È€È	H
HFÍ J		{ æ¢	Ó	FÊ	i i	ÈÏF	i	ĚСН	J	FÈG	G	FĚ H	J
HF΀		{ a		i i	J	ËĒF	J	È€Í	Н	ÈG	J	È€È	Н
HFÎ F	ÚÌ €Ì	{ æ¢	V	ŒIJ	ı	⊞E€H	Н	FÈH	J	FÊÎG	Ϊ	ŒĴ	J
HFÎ G	0, 0	{ a	V	ÈE€G	Н	ËEFF	J	È€H	Н		Ė	È€Í	Н
HFÎ H		{ æ¢	Ó	Œ€JJ	J	ËE€H	Н	FÈH	1	FÊÎG	G	ŒĠ	
HFÎI		{ a}		ÈE€G	Н	ËEFF		ÈE€H	Н		J	Œ€Í	Н
HFÎÍ	ÚÌ €J	{ 28¢	V	I È G		FEF		FĚ JÎ	J	FË Ï H	ï	HÈÏI	J
HFÎÎ	01 3	{ a	V	ËĒĒ	J	ËËF	J	EE€Î	Н	<u>r⊾iii</u> EiH	+	EFH	Н
		119		цшп	J	ппп	J	ECI	11			ELLI	11

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`ff/cbh]bi YXL

	1'11 A		1,1,1,1,0,4	ù~	ŏô	i).*.(Off ~	ŏô	\	ŏô	OT * IA 65* ° ′	ŏô	\(\(\) \(\) \(\) \(\) \(\) \(\) \(\) \(
u c î ï	Ú æe^		Ù*¦æ&^_	Ùãt{æFÁŽ•ãã	ŠÔ	Ùãt{æ€AX•ãa		Væ ÁTæçÁŽ•ãa	80	OB;* ^AŽanåá		X[}ÁTã^•ÁXÈ	±80
HFÎÏ		{ æ¢	Ó	I ÈGÏ G	J	FÈFÌ	J	FĚJÎ	1	<u>FËÏH</u>	G	HÈÏI	
HFÎÌ	·′) =c	{ a	.,	连连户 · · · · · · · ·		ËÈF		È€Î	H	<u>È</u> H	J	<u>È</u> FH	H
HFÎ J	ÚÌ F€	{ æ¢	V	HÈÏÍ	<u> </u>	ÈJ	<u> </u>	FĚF	J	<u>FÈG</u>	L.	HÈGJF	J
HFÏ€		{ a	<u> </u>	曲ì ï	J	ËHĚ€Ì	J	È€Í	Н	È I		È€J	H
HFÏ F		{ æ¢	Ó	HÈÏÍ	J	ÈJ	J	FĚF	1	FÈ G	G	HÈGJF	
HFÏ G	./3	{ a		<u>⊞ìï</u>		ËHĚ€Ì		È€Í	Н	<u>È</u>	Ĵ	È€J	Н
HFÏ H	<u>ÚÌ FF</u>	{ æ¢	V	GÊ€	l	ÈÎH		FEG H	J	<u>FÈ</u> €	Ш	ŒŢ Ì	J
HFÏ		{ a		⊞ÉGG	J	ËŒĠ	J	È€€G	Н	Œ€HÌ		È€Í	Н
HFÏ Í		{ æ¢	Ó	ŒÎ€	J	ÈÎH	J	FÉGÌ H	1	FÈ€	G	ŒŢ Ì	
HFÏ Î		{ a		⊞€ÎG		ˌ GJ		ÈEEG	Н	<u> </u>	J	È€Í	Н
HFÏŢ	ÚÌ FG	{ æ¢	V	<u>F</u> ÐÍ		ÈEFH		ΪΪĠ	J	<u>F</u> ÈH	ш	FÐÎF	J
HFÏ Ì		{ a	,	⊞ FH	J	ÏÎĠĦ	J	ÈE€G	Н	<u>⊞</u> ij j		È€€H	Н
HFÏJ		{ æ¢	Ó	FÐÍ	J	ŒFH	J	ΪΪĠ	1	<u>FÈ H</u>	G	FÐÎF	1
HFÌ€		{ a		Œ€FH		ËÈÎÏ		È€G	Н	Œ€ÌJ	J	È€H	Н
HFÌ F	ÚÌ FH	{ æ¢	V	FÈHGÌ	I	ŒŒH	Н	ĒÌΗ	J	FÈJF		FÈHÍ H	J
HFÌ G		{ a		€	F	ËÈH	J	È€G	Н	⊞ĘGJ	1	È€€H	Н
HFÌ H		{ æ¢	Ó	FÈHGÌ	J	ËE€H	Н	ĒÌΗ		FÈJF	G	FŒHÍ H	1
HFÌ I		{ a		€	F	ËÈH	1	È€G	Н	⊞GJ	J	ÈE€H	H
HFÌ Í	ÚÌ FI	{ æ¢	V	ĚÍH	G	ËŒF	Н	ÈFF	J	GÉFÎ	Ï	ĚÌF	Ï
HFÌ Î		{ a		€	ì	ШÍÎ	. —	È€F	Н	ËŒÏ	\perp	ÈE€G	Н
HFÌ Ï		{ æ¢	Ó	ĚÍH	Ϊ	ËŒF	Н	ÈFF	1	GÉFÎ	G	ĚÌF	G
HFÌ Ì		{ a		€	Ì	ШĬÎ	O	È€F	Н	ËŒÏ	J	È€G	Н
HFÌ J	ÚÌ GH	{ æ¢	V	FÈIH	J	ÈÎÏ	٦	ÈHÌ	J	FÈÉÎG	J	FËÎÍ	J
HFJ€		{ ā		⊞ìH	G	ËÈĤ		È€	ì	Ш́ÌН	G	È€ÈÌ	Ì
HFJF		{ æ¢	Ó	FÈIH	I	ÈÎΪ	Т	ÈHÌ	Ι	F È ÉÎ G	Т	FËÎÍ	I
HFJG		{ a		⊞ìH	Ϊ	ËÈĤ	J	È€	ì	⊞ÌH	Ϊ	È€ÈÌ	Ì
HFJH	ÚÌ G	{ æ¢	V	FÈH€J	G	ÈGFI	G	ĚJJ	J	ŒĤ	G	FÈGH	J
HFJI		{ a		⊞G€Í	Ϊ	ËÈ₩	Ϊ	È€€H	ì	ËΪGÍ	Т	È€Ê	ì
HFJÍ		{ æ¢	Ó	FÈH€J	Ϊ	ÈGFI	Ϊ	ĚJJ	П	ŒĤ	Ï	FÈGH	
HFJÎ		{ a		⊞G€Í	G	ËÈ₩	G	È€€H	ì	ËΪĠ	J	È€Î	ì
HFJÏ	ÚÌ Œ	{ æ¢	V	FÈFJ	I	ÈÈÌÏ	Ī	ĚŒ	J	GÈHFÍ	Ï	FÈÈÌF	J
HFJÌ		{ a		EE Í	J	ËÈFÎ	J	È€	ì	ĖĠ		È€È	ì
HFJJ		{ æ¢	Ó	FÈFJ	J	EÈÌÏ	J	ĚŒ	Ť	GÈHFÍ	G	FÈÈÌF	
HŒ€		{ a		EE Í	I	ËÈFÎ	Ī	Ì€€I	ì	ĖĠ	J	È€È	ì
HŒF	ÚÌ GÎ	{ æ¢	V	FÊ Œ	J	EEÏ Ì	J	ĒΪG	J	ŒEG	J	FĚÌI	J
HŒG		{ a	-	Œ€JF	Ī	ËĒF	Ť	È€Ï	Н	∰JÌ	ì	È€FG	Н
HŒH		{ æ¢	Ó	FÈG	ī	Eï Ì	Ť	ĖΪG	T	ŒE	T	FĚÌI	
HŒI		{ a		Œ€JF	J	ËĒF	J	Ì E €Ï	Н	∰JÌ	ì	ÈEFG	Н
HŒÍ	ÚÌ GÍ Œ	{ æ¢	V	GĚ Ì Î	G	ĖĞ	G	FÈ GJ	J	FEHEF	Ϊ	GË FG	J
HŒÎ	<u> </u>	{ a	•	iii iii ii ii ii ii ii ii ii ii ii ii i	ï	ËËF	Ï	È€€J	ì	EEG Ì	i	ÈEFÎ	ì
HŒÏ		{ æ¢	Ó	ŒĬÎ	i	ĖĠ	Ϊ	FÈGJ	i	F ÈIG F	G	Œ FG	Ti-
HŒÌ		{ a		iii iii ii ii ii ii ii ii ii ii ii ii i	G	ËËF	G	È€J	ì	EEG Ì	J	ÈEFÎ	i
HŒJ	ÚÌ GÏ	{ æ¢	V	FÈH	ı	ÈJÎ	G	ÈÍG	J	F É GIÌ	Ï	FÈÏI	J
HŒ€	<u> </u>	{ a	•	⊞-JI	i	ËÈIH	J	ÈE€H	ĭ	⊞G G	i	È€Í	ì
HŒFF		{ æ¢	Ó	FÈHH	J	ÈJÎ	Ï	ÈÍG	i	FÉGIÌ	G	FÈÏI	
HŒG		{ a		⊞-JI	G	ËÈIH	İ	È€€H	Ì	<u> </u>	J	È€Í	
HŒH	ÚÌ Ġ	{ æ¢	V	FËÍI	ī	⊞EEEI	ì	ΒFÍ	J	GEGFÏ	Н	FË JÏ	J
HŒTI	0. 0	{ a	V	€	ì	ËËÎG	J	ÈE€G	ì	<u>EG</u> F	1	È€Í	ì
HŒÍ		{ æ¢	Ó	FËÍI	J	⊞EE	ì	Β̈́FÍ		GEGFÏ	Н	FË JÏ	
HŒÎ		{ a}		€	ì	ËËÎG		EE€G	ì	<u>GG</u> F		EE€Í	
HŒÏ	ÚÌ GJ	{ æ¢	V	ŒÊÎ G		<u>⊞</u>	Н	FEGJ	J	GHG	Н	GH G	J
HŒÎ	OI GI	{ a	V	ŒF	ì	EGEGE	J	EFH €	ì	<u> </u>	1	ŒGH	
INI		119				LOCA .	J	וו ובו		шЮ		EGI	

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`fl7cbh]bi YXL

									~ .		~ .	, ,,	
	Ú æe^	-	Ù`¦æ&^	Ùãt{æĘÁŽt∙ãã		Ùãt{_æ6√£X •ãa		Væ`ÁT,æ¢ÁŽ•ãa	ŠÔ	Οξ}* ^ΑΣζαἀίά		X[}ÁTįãi^•ÁŽÈÈ	ÈŚÔ
HŒJ		æ¢	Ó	OŒFÌ G	Ţ	É FÎ	Н	FĚGJJ		<u>ÇİHG</u>	Н	Q Ì Ǵ	Ļ
HCG€	{	ą		ÈF	İ	ËG E GE	ı	È€FH	İ	ÈEG	J	ŒGH	İ
		æ¢	V	ΙΕ̈́Η̈́	G	FĚÍÍ	G	FÈ FG	Ų	FÊH	Ï	<u>l</u> ĚGHÎ	J
HCCC	{	ą	,	ËĚÎÌ	Ĩ	ËËÌĴ	Ĩ	Œ€Ì	İ	<u> </u>		<u>E</u> FI_	İ
HCCH		æ¢	Ó	ΙĖ̈́Η̈́	Ĩ	FĚÍÍ	Ĩ	FÈ FG	Ţ	FÊĤ	G	ΙĖΘΉ	ļ
HCG		ą		ŒĚÎÌ	G	ËËÌÎ	G	È€È	Ì	ŒŒFÍ	J	È€FI	Ì
		æ¢	V	GÊF		Œ€Í	Ì	FÈHF	J	FÈ€H	Ï	ŒijIJ	J
Hϔ	{	ą		ËE€F	Н	ËGË FJ	J	È€H	Ì	<u>H</u> eií	1	È€Í	Ì
Hϕ		æ¢	Ó	GÊF	J	Œ€Í	Ì	FÈHF		FÈ€H	G	ŒijIJ	I
HOGÌ		ą		ËE€F	Н	ËGË FJ	Ţ	È€H	ĺ	<u> </u>	J	È€Í	İ
		æ¢	V	<u>G</u> ÈÏÌ		Œ€Í.	İ	FŒÎF	Ų	GÉHIÎ	F	Q L FG	Į
HGH€	{	ą	,	⊞€€F	Н	ËEÈÌÎ	Į	È€H	ĺ	⊞ÌG	Н	È€Í	İ
HGHF		æ¢	Ó	QÈ ÏÌ	J	ËE€Í.	İ	FŒÎF	Ţ	GÉHIÎ	F	QÊ FG	Ţ
HGHG	/ \	ą		⊞€€F	Н	ËŒÈÌÎ		È€H		ËÌG	Н	Œ€Í	
		æ¢	V	IÈ€		ËĹΗ	1	FĒJJ	J	ŒŒGH	Н	<u>HÈ H</u>	J
HGHİ		ą	,	Щ́ÍН	J	ËÈÍ	J	ÆFG	Н	<u>E</u> Ë Ì	1	ŒŒ	Н
HGHÍ		æ¢	Ó	ıÈ€	J	ËÍΗ	J	FĮĒ JJ		ĞŒĞH	Н	<u> HÈH</u>	
HGHÎ		ą		Щ́ÍН		ËÈÍ		È€FG	Н	<u>E</u> Ë Ì	J	ÈEGG	Н
		æ¢	V	HĖG	G	Ëμ	G	FEH	Ĺ	<u>FÈÌJ</u>		<u>ÎÊ</u>	Į
HGHÌ		ą	,	⊞́(F		ËHÈIJ	Ï	È€Í		ĖĘĖ		<u>È</u> €Ì	
HGHU		æ¢	Ó	HÈG		ÜHU	<u> </u>	FÈH	Ĺ	<u>FÈÌJ</u>	G	H <u>E</u> ĴÎ	I
HG €	/ \	ą		⊞́ F	G	ËHÈIJ	G	È€Í		ÈFÌ	Ĵ	<u>Ì</u> €€Ì	
		æ¢	V	HÈ€F	<u> </u>	ŒJÏ	G	FĚIH	Ĺ	<u>FÈ FÏ</u>		<u>HÌ€Í Ï</u>	Ţ
HG G		ą	,	∰F		ËHÈ€Ĝ	Ĵ	È€G		È		<u>Ì</u> €€I	
HG H		æ¢	Ó	HÈ€F	J	<u>Ì</u> €JÏ		FĚIH	Ļ	<u>FÈ FÏ</u>	G	H E ÍÏ	Į į
HG I		ą		∰F	G	ËHÈ€Ĝ		ÈE€G		È	Ĵ	È€I	
		æ¢	V	<u>Q</u> ÈG	1	ËŒÌâ	Н	FĚFH	J	GŒĠ		<u>QĐÌG</u>	J
HG Î		ą	4	⊞€€Í	Н	EGÈ HÎ	J	ÈE€G	Н	⊞EEÈ	ļ	È€Ï	Н
HG Ï		æ¢	Ó	<u>Q</u> ÈG	J	ËŒÌ	Н	FĚFH		GŒĠ	1	<u>G</u> ÈÌG	
HG Ì		ą		⊞€€Í	Н	ËŒ)HÎ		È€G	Н	iii€€Ì	J	È€Ï	H
		æ¢	V	HÈGI		Ě€F	<u> </u>	FÈG	J	FBFJ	Н	<u>G</u> ÈIF	J
HGÍ €		ą	<u> </u>	∰€F	J	ËHÈÍJ	J	È€Î	Н	<u> </u>	1	ÈEFG	Н
HG F		æ¢	Ó	HÈGI	J	Ě€F	J	F <u>È</u> GJ	-	FÐFJ	H	<u>QÐIF</u>	
HG G	· /	ą	\ /	∰ €F		ËHÈÍ J	<u> </u>	È€Î	Н	EEF)	J	<u>È</u> FG	H
		æ¢	V	GÈÎÌ ⊞HI	G	ÈHÏ ËGÈÌÎ	G	FÈ Î	J	GÈ€F		<u>GÊH</u>	ì
HGÍ! HGÍÍ		ą	Ó	OEÈÎÌ	÷	ESE II	<u> </u>	<u>È</u> €H FÈEÏÎ		<u>E</u> FÍ C E €F		<u>ÈE€Í</u> CÈHH	
		æ¢	Ó	HIII	G	EGETÎ	G	FŒII	+	<u>GEG</u> ÈFÍ	G	<u>GE</u> EÍ	G
HGÎ HGÏ Û	^ ^	ą ~	V	ŒTI ŒĬÍH	_	ÈFÌ	ı	FEG	+	<u>Œŗi</u> FÐÎ	J	<u>Œ€I</u> GĚFH	-
HG Ì		æ¢ ā}	V	ŒTH ŒTGH	ij	ËŒÏG	J	EE€G	J	<u>r⊡ı</u> EEÌH	1	<u>GE</u> FI	J
HG J		9 æ¢	Ó	ŒĞÎ ŒÎÍH	J	<u>E</u> FÌ	J	FEG	+	FÐÎ	G	OÉ FH	
HG΀		ā	0	ŒFGH	G	ËŒÏĞ	ı	ÈE€G	+	<u> </u>	J	Œ€	ì
	/\	94 29¢	V	ŒÍF	_	<u>E</u> ÉÍÌ	+	FEG I	J	FÈÏH	ï	GĚ HJ	J
HG G		ā	V	ŒÎ G	J	ËŒÏ	J	È€H	Н	È€H	i	<u>Œ</u> €Ì	F
HG H		94 æ¢	Ó	ŒÍF	J	È	J	FEGI		FÈ Ï H	G	Œ HJ	
HGÎI		ā		ŒÎ G	ī	ËŒÏÏ	ī	È€H	Н	È€H	J	È€Ì	F
		94 29¢	V	ОĚСН	i	ÈÎI	i	FÈJ	J	FÈH	Ĭ	<u>G</u> ÈÎÏ	J
HGÎ		ą		Œî í	J	ËŒĬIÍ	J	È€H	Н	ŒŒGH	i	È€Î	Н
HGÎ Ï		æ¢	Ó	GĚ GH	J	ÈÎI	J	FÈJ	T	FÈ HF	G	<u>⊒⊒u.</u> GÈÎÏ	
HGÌ		ā		mî í	Ī	ËĞĚTÍ	Ī	ÈE€H	Н	ŒŒGH	J	È€Î	Н
		æ¢	V	FÈÌF	G	ÈFÌ	I	Δì	Ϊ	GEEÏI	Ϊ	FÐÏÏ	Ϊ
HGÏ€		ą		⊞FÌ	J	ËÈÙJΗ	Ϊ	È€€H	ì	ÈÌÍ	I	Ì E €Í	ì

9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`ff7cbh]bi YXL

	اراً ا		1`1" IOA	i)arc -Effr. =	čô	1)13*(-0/6*. =	čô	\/	ŏô	OT * IA 65-2 4	čô	VII Æ ≈ A Æ Æ	~~~
HG F	Ú æ^	(~~	Ù*¦æ&^ Ó	Ùãt{æFAŠt∙ãa FÈDÌF	ŠÔ	Ùãt{æ⊖Ãi∙ãa ÈFFÌ		Væ`ÁTæ¢ÁŽt∙ãã ÈùÌ	G	O5;* ^AŽanåá 		X[}ÁTã^∙ÁXÈ FÈÏÏ	$\overline{}$
		{ æ¢	U	F⊟IF ∰FÌ	ı		J		ì	<u>G</u> EEÎ I	G		G
HƠ G	10111	{ ā	1/		1	ËÐJH Èùì	G	È€H	÷		J	<u>È</u> €Í FÈ J	+ +
HG H	ÚÌ HJ	{ æ¢	V	FÈÌÌ ËÈÌJ	G	ÈÌÌ		ЩĖ	1	<u>GÈÉÍÎ</u>			1
HGI		{ a	Á		J	ËÈH	J	È€H	<u> </u>			È€Î	
HĠÍ		{ æ¢	Ó	FÈÌÌ		ÈÌ	J	ЩĖ	G	<u>GÈEÍÎ</u>	G	FÈJ	G
HĠÎ	·///	{ a	.,	⊞a J		ËÐH		È€H		<u>È</u> Í Ï	J	È€Î	
HĞÜ	ÚÌI€	{ æ¢	V	FÀFÍ	<u> </u>	È	<u> </u>	ÐΉ	J	<u>FÐJÎ</u>	1	FÈ€G	J
HG Ì		{ a	<u> </u>	⊞ê EÈ €	J	ËÐH	J	È€	F	ÈEGG		ÈEEÌ	F
HG J		{ æ¢	Ó	<u>FÈ</u> FÍ	J	<u>È</u> É Ì	J	ÐΉ		FÀJÎ	G	FÈ€G	
HĠ€	./3	{ a	.,	⊞êÎ — È		ËÐH		È€I	F	ÈGG	J	È€È	F
HĠ F	ÚÌIF	{ æ¢	V	<u>F</u> ÈI	<u> </u>	ÈEGU	1	ÈÎΗ	J	FÌЀ	1	FÈIG	J
HG G		{ a		⊞⊕H	J	苗道门	J	ÌŒ€H	Н	<u> </u>		È€Î	Н
HĞ H		{ æ¢	Ó	<u>F</u> ÈI	J	ÈGU	J	ΗÎĠ	1	<u>FĎÐ</u>	G	FÈIG	
HĞİ		{ a		Œ 		ËÈÏ	ĺ	Œ€H	H	<u> </u>	J	Ì€€Î	H
HĠÍ	ÚÌIFŒ	{ æ¢	V	<u>F</u> ÈÍÍ	G	€	Ţ	ΙĠ	Ų	Œ <u></u> J	Ш	FËÌF	
HĠÎ		{ a	,	ŒŒ€H	H	ËĒÎΗ	ĺ	È€G		<u>F</u> €∕II		È€Í	
HĞÏ		{ æ¢	Ó	<u>F</u> ÈÍÍ		€		įΒ́Ι	Ģ	Œ <u></u> j1	G	FĖÌF	Ğ
HQ Ì		{ a		ŒŒH	Н	ËÈÎH	G	È€G	<u> </u>	ŒIJ	J	È€Í	l l
HĠ J	ÚÌIG	{ æ¢	V	FÉ Ğ	G	Œ€Í		ĖĠ		QÊ Î I		FĚJÏ	1
HGJ€		{ ā	,	€	Н	ËĚH	Ĵ	ÈE€H	F	È€ÍJ	I	È€Î	F
HGJF		{ æ¢	Ó	FĚĞ	Ï	ËŒÍ	Ĺ	ĖĠ	G	QÊÊ Î I	G	F <u></u> ĚJÏ	G
HGJG		{ ā		€	Н	ËĚH	G	ÈE€H	F	<u>È</u> ÉÍ J	J	È€Î	F
HGJH	ÚÌTH	{ æ¢	V	FÈĤ Ì	G	ŒŒÎ	F	ËFÍ	Ϊ	OŒE GGG	Ï	FÈ€	Ï
HGJI		{ a		€	F	ËÈÏÏ	Ϊ	ÈE€H	F	È€Ì	1	È€Í	F
HGJÍ		{ æ¢	Ó	FÈĤ Ì	Ϊ	ËŒÎ	F	ËFÍ	G	OÈEGS	G	FÈ€	G
HGJÎ		{ a }		€	F	ËÈÏÏ	G	ÈE€H	F	È€È	J	È€Í	F
HGJÏ	ÚÌH	{ æ¢	V	FÈF	I	Œ€Í	Н	ΕÌÎJ	J	GÈEG	ΙÏ	FÈHGJ	J
HGJÌ		{ a		€	F	ËÈE	J	ÈE€H	F	EE Î	I	È€Î	F
HGJJ		{ æ¢	Ó	FÈF	J	ËŒÍ	Н	ĒÎJ		GŒG	G	FÈHGJ	
H H€ €		{ a		€	F	ËÈG	\perp	ÈE€H	F	ËEIÎ	J	È€Î	F
HH€F	ÚÌIIŒ	{ æ¢	V	F Ė ĖÌ J	G	ËE€G	F	ΗÌĠ	G	FËIH	J	FË€Ì	Ϊ
HH€G		{ a }		€	ì	ËÈUF	Ϊ	È€F	F	Η̈́Î	ΙÏ	È€€G	F
HH€H		{ æ¢	Ó	FÈÀÌJ	Ϊ	ËE€G	F	ΗÌĠ	Ϊ	FËIH	T	FË€Ì	G
HH€I		{ ā		€	Ì	ËÈUF	G	È€F	F	Η̈́Î	G	È€G	F
HH€Í	ÚÌTÍ	{ æ¢	V	FÈHF	G	ËE€G	F	ĒÌΗ	G	FÊÎG	J	FÈ G	Ϊ
HH€Î		{ a		€	ì	ËΈH	Ϊ	È€F	F	Ш̈́Н	Ϊ	È€G	F
HH€Ï		{ æ¢	Ó	FÈGHF	Ϊ	ËE€G	F	ĒÌΗ	Ϊ	FÊÎG		FÈ G	G
HH€Ì		{ a		€	ì	ËΈΗ	G	È€F	F	Ш̈́Н	G	È€G	F
HH€J	ÚÌ I Î	{ æ¢	V	FÈ€GH	G	ËE€G	F	Ē€Í	G	FĚÏJ	J	FÈG	ΪĪ
HHF€		{ a		€	ì	ËFÈ€GÍ	Ϊ	È€F	F	ĦΪΙÎ	Ϊ	È€G	F
HHFF		{ æ¢	Ó	FÈ€GH	Ϊ	ËE€G	F	Ē€Í	Ϊ	FĚÏJ	Т	FÈGÌ	G
HHFG		{ a		€	ì	ËFÈ€GÍ	G	È€F	F	ËΪΙÎ	G	È€€G	F
HHFH	ÚÌTÏ	{ æ¢	V	ĒΪJ	G	ËE€G	F	ÈG	Ϊ	GÈHGH	ΪÏ	ÈFG	Τ̈́
HHFI		{ a		€	ì	ËÌΓ	Ϊ	È€F	F	ËŒJÎ		È€€G	F
HHFÍ		{ æ¢	Ó	ĒΪJ	Ϊ	ËŒ€G	F	ÈG	G	GÈHGH	G	ÈFG	G
HHFÎ		{ a		€	ì	Η̈́ÌF	G	È€F	F	ËŒJÎ	J	È€€G	F
HHFÏ	ÚÌI€Ó	{ æ¢	V	ΙĖΙÌ	G	ÈF	G	ŒÎJ	G	G É G€H	T T	IĚ€Í	Ϊ
HHFÌ		{ a		⊞FÌ	Ϊ	ËĒÍÎ	Ϊ	È€€G	F	È€JG	J	È€Î	F
HHFJ		{ æ¢	Ó	I È I Ì	Ϊ	ÈF	Ϊ	ŒÎÎ J	ï	GÈG€H	ì	ıĚ€Í	G
HHG€		{ a		⊞FÌ	G	ËĒÍÎ	G	ÈE€G	F	ÈEJG	i	È€Î	F
HHGF	ÚÌ HFŒ	{ æ¢	V	ÎÈ	G	FĚJH	G	OŒHOH	Ï	GEH	F	ÍÈFI	İ
HHGG		{ a		ËĚJH	Ï	ÉÈHU	Ï	È€Î	ì	<u>E</u> FI	İ	ÈFH	
		7											



9bj Y`cdY'D`UhY#G\Y``Df]bW]dU`GhfYggYg`ff7cbh]bi YXL

Ú æ•^		Ùĭ¦æ&^	Ùãt{æFÁŽt∙ãã	ŠÔ	Ùãt{æ69ÃŽ•ãã	ŠÔ	Væ ÁTæg£ÁŽ•ãa	ŠÔ	OB;* ^ÆŽæåá	ŠÔ	X[}ÁTã^•ÁŽÈ	ÈŠÔ
HHGH	{ æ¢	Ó	ÎÈGÈÌ	Ϊ	F Ě JH	Ï	CIÈICH	O	GÈCHH	F	ÍĖ̈́FI	G
HHG	{ a		ËĒLJΗ	G	ËÈH	G	È€Î	Ì	ÈFI	J	ÈFH	Ì
HHGÍ ÚÌ HGÓ	{ æ¢	V	HË⊞H	G	ËHÌ	G	FÈ JÍ	Ϊ	GÈGÉÎ	Ï	HÈFÌ	Ϊ
HHGÎ	{ a		Η̈́Hı́	Ϊ	ËHĒĞ	Ϊ	È€Í	Ì	ÈHGÍ	1	ÈF	Ì
HHGÏ	{ æ¢	Ó	HË€H	:	ĔHÌ	Ϊ	FÈ JÍ	G	GÈGÉÎ	G	HÈFÌ	G
HHGÌ	{ a		Η̈́H	G	ËHĒĞ	G	È€Í	Ì	ÈHGÍ	J	ÈEF	Ì
HHGJ ÚÌ HHŒ	{ æ¢	V	GËIF	G	ĚGΗ		FÈH€G	Ϊ	GÈGF	Н	GÉÌG	Ϊ
H H €	{ a		⊞ĕG	7	ËGËÍÍ	Ϊ	ÈE€H	Ì	⊞ÌH	Ï	È€Ï	Ì
HHF	{ æ¢	Ó	GËIF	:	ĚGΗ	7	FÈH€G	G	GÈGF	Н	GÉÌG	G
HHG	{ a		⊞ĞG	_	ËGËLL	G	ÈE€H	Ì	⊞ÌH	G	È€Ï	ì
HHHH ÚÌ HŒ	{ æ¢	V	GÈIF	G	ÈFH		FÈÈÌ G	Ϊ	GÈHÏ	J	O∄ G	Ϊ
H-H-H	{ a		⊞FH	7	ËGÈLÏ	Ϊ	ÈE€G	Ì	⊞Ĥ	Ì	ÈE€H	Ì
HHHÍ	{ æ¢	Ó	GÈIF	:	ÈFH	7	FÈÈÌ G	G	GÈHÏ		GÊG	G
HHÎ	{ a		⊞FH	_	ËGÈLÏ	G	ÈE€G	Ì	⊞Ĥ	Ì	ÈE€H	Ì
HHÏ ÚÌ HÍ Ó	{ æ¢	V	OÉHÌH	G	€	Η	FÈIJ	Ϊ	FÈIÎ	F	ŒÎÏÌ	Ϊ
HH	{ a		€	ì	ËGÈÀI	Ï	€	F	ΗĤ	J	€	F
HHU	{ æ¢	Ó	GÉHÌ H	Ϊ	€	Н	FÈIJ	G	F₿IÎ	F	Œ∄ÏÌ	G
HH €	{ a		€	Ì	ËGËHÌI	G	€	F	ËΉ	1	€	F



Date: July 6, 2018
To: Hensel Phelps

Attention: Mr. Robert Saucerman

Subject: Lindsey Flanigan Glass Replacement Proposal.

Mr. Saucerman,

As per request from the City of Denver, we would like to offer the following budgetary costs for the demo and replacement of Stair 6, the Atrium Levels, 2, 3, 4 and 5, the East and West Elevations at Pedestrian Bridge, and designated Teller Glass Stations as identified:

Scope 1, Stair 6 Sloped Glass:

At Stair 6: Southwest Metalsmiths would like to offer the following GMP budgetary costs for the demo and replacement of the Stair 6 glass: As shown in the Southwest Metalsmiths shop drawings dated October 2nd, 2008. We propose to remove and replace approximately 2,522 square feet of 1/2" clear tempered monolithic glass at Stair #6 with 11/16" nominal thickness tempered laminate glass. The new glass make up will be (2) layers, one 1/4" clear tempered with an .070 interlayer and one 3/8" clear tempered with polished exposed edges. Please see Clarifications and Inclusions for further qualifying information.

The Cost for this work: \$589,553.00

Scope 2, Atrium Levels 2, 3, 4, and 5:

At Atrium Level 2, 3, 4 and 5: Southwest Metalsmiths would like to offer the following GMP budgetary costs for the demo and replacement of the Atrium Area glass. As shown in the Southwest Metalsmiths shop drawings dated October 2nd, 2008. We propose to remove an replace approximately 1,939 square feet of 1/2" clear tempered monolithic glass at the Atrium with 11/16" nominal thickness tempered laminate glass. The new glass make up will be (2) layers, one 1/4" clear tempered with an .070 interlayer and one 3/8" clear tempered with polished exposed edges. Please see Clarifications and Inclusions for further qualifying information.

The Cost for this work: \$400,641.00

Scope 3, East and West Elevations at Bridge Pedestrian Bridge:

At East and West Elevations of Pedestrian Bridge: Southwest Metalsmiths would like to offer the following GMP budgetary costs for the demo and replacement of the Pedestrian Bridge glass. As shown in the Southwest Metalsmiths shop drawings dated October 2nd, 2008. We propose to remove and replace approximately 376 square feet of 1/2" clear tempered monolithic glass at the Pedestrian Bridges with 11/16" nominal thickness tempered laminate glass. The new glass make up will be (2) layers, one 1/4" clear tempered with an .070 interlayer and one 3/8" clear tempered with polished exposed edges. Please see Clarifications and Inclusions for further qualifying information.

The Cost for this work: \$84,404.00

5026 EAST BEVERLY ROAD PHOENIX, ARIZONA 85044 TEL: (602) 438-8577 FAX: (602) 438-8579

www.swmetalsmiths.com

3140 POLARIS AVENUE, SUITE 40 LAS VEGAS, NV 89102 TEL: (702) 368-6760 FAX: (702) 368-6762

AZ 276218

AZ 072962

AZ 162433

CA 608755

HI C-16701



Scope 4, Back of the House Glass:

Based on the drawings for the window glass systems, we propose changing out approximately 1,282 square feet of the following windows to 11/16" clear tempered laminate with a sentry interlayer and exposed polished edges. The new glass make-up will be (2) layers, one 1/4" clear tempered with an .070 interlayer and one 3/8" clear tempered with polished exposed edges. See the below matrix for quantity, window type, and location.

_indsey Flanigan Coા	ırthouse	oppose and of the first that is a first to the foreign of the first to						
Floor#	Window Type	Location Grid Lines	Quantity	Width	X	Height		SHEET#
1	W64	4/B.6	1	8	X	6.5	For example, and a supplemental to the form of the contract the substitute of the contract the c	A-101A
	W65	8/B.8	1	20.25	x			A-101B
And the state of t	W65 ,	8/B.8	1	8.25	х	8		A-101B
The State of Contract of Contr	W65	8/B.8	1	15.75	Annual Control of the	8	126	A-101B
The second secon	W65	14/A.5	1	9.33		. 8	75	A-101B
And the second section of ection s	W65	14/A.5	1	4.75		8	38	A-101B
en eg en et daar de de mande en de de en de en de de en de	W55	12/B.3	1	16.1	x	7.5	121	A-101B
2	W64 ,	4/B.6	1	8	x	6.5	52	A-102A
**************************************	W66	11/A.9	1	5.8	x	6.5	38	A-102B
engangan ang pandapanan and a dan damatan ang pandapan and an ang ang a	W64	13/A	1	8	х	6.5	52	A-102B
Common to a reserve of the common of the common contracting to the contraction of the con	12	9.8/N. of A	1	12	х	3.5	42	A-102B
3	W64	4/B.6	1	8	X	6.5	52	A-103A
	W66	11/A.9	1	5.8	x	6.5	38	A-103B
en	W63	13/A	1	5.25	x	6.5	34	A-103B
7	12	9.8/N. of A	1	12	x	3.5	42	A-103B
4	W64	4/B.6	1	8	x	6.5	52	A-104A
$h_{2} = h_{1} h_{2} + h_{3} h_{4} + 1$ is a composite constant and $h_{2} = h_{3} + h_{4} + $	W66	11/A.9	1	5.8	x	6.5	38	A-104B
The second section of the second seco	12	9.8/N. of A	1	12	x	3.5	42	A103B
5	W64	4/B.6	1	8	x	6.5	52	A-105A
and a many SAN CO. HARMAN SAN CO. Sandy and sandy and say of the	W66	11/A.9	2	5.8	X	6.5	75	A-105B
an incommendation of the second secon	W63	13.5/ North of A	1	5.25	X.	6.5	34	A-105B
And the second s	Contact minutes and the second		22		1		1282	

The Cost for this work: \$104,403.00

Add Alternate for Detention Glazing:

The following budget number is provided for the (2) areas at the Detention Facility, there is approximately 64 square feet of ½ clear tempered glass to be replaced with 9/16" clear tempered glass. Each opening is approximately 32 square feet each and is in a captured condition on the vertical sides. Based on captured condition is believed we can not exceed the 9/16" thickness without changing the glass capture materials.

The Budget Cost for this work: \$ 5,800.00

5026 EAST BEVERLY ROAD PHOENIX, ARIZONA 85044 TEL: (602) 438-8577 FAX: (602) 438-8579

www.swmetalsmiths.com

3140 POLARIS AVENUE, SUITE 40 LAS VEGAS, NV 89102 TEL: (702) 368-6760 FAX: (702) 368-6762



Clarifications:

- Cost increases based on the Original GMP provided is based on the following items;
 - Increase in Labor Rates based on the Prevailing Wage determinations.
 - Material escalations
 - Determination made on the disposal of the glass.
 - Cost of Bond for the project.
 - Labor included on the daily take down and set up of temporary barricades for public safety.
- We have included the prevailing wage labor as described and outlined in the Memo for the City of Denver dated March 14th, 2018.
- This price is for the removal of the ½" clear tempered monolithic glass from the building includes the final disposal of the glass. Further discussion and logistics planning will be necessary to help facilitate safe and efficient disposal. We have accounted for the ability to use the designated empty spaces as identified on our March 1st, 2018 job walk. These spaces will be utilized for staging of gang boxes as well as the staging of glass both un-installed and installed for safe and efficient movements when disposing and installing.
- We have included a potential add alternate for the replacement of glass at (2) locations on the Detention Facility.
- There are areas at the bottom of stair 6 and at Level 2 that are in excess of the allowable manufacturing tolerance of 12'-9" for tempered laminate glass from our primary glass provider PRL Glass. These areas will require us to us a non-US Glass Manufacturer that has a large enough tempering oven to produce the 15'-0" tall glass at level 2. We have used this manufacturer in the past with great success. We will provide glass samples for approval prior to ordering. Payment terms with this manufacturer are 50% down and balance prior to shipping, that cost for the level 2 area is valued at \$61,901.00. It is not economically feasible to use them on the entire project with their payment terms.
- Southwest Metalsmiths assumes the risk of insuring that the tall span glass order to be correct for fit and function, as well as transit to the project for installation. There is no expectation that the City of Denver would be fiscally responsible beyond the one-time order of this glass.
- As a contingency, if the glass deposit requirements are not acceptable by the approver, a \$30,000 ROM should be added to cover the costs of reasonable design changes that keep inside the manufacturing limitations of our US based supplier.
- We anticipate a total of 24 to 26-week exposure to complete the work quoted. We will do our best to beat that duration if at all possible. We have included night shift work.

5026 EAST BEVERLY ROAD PHOENIX, ARIZONA 85044 TEL: (602) 438-8577 FAX: (602) 438-8579 3140 POLARIS AVENUE, SUITE 40 LAS VEGAS, NV 89102 TEL: (702) 368-6760 FAX: (702) 368-6762

www.swmetalsmiths.com

CA 608755

AZ 276218



Inclusions:

- Payment and Performance bond is included in this cost.
- Field Survey and dimensioning as necessary for execution of work.
- Templating of all custom notching of glass for proper fit and fabrication to insure notch location and hole placement.
- Replacement of all rubber washers and grommets for the glass re-installation.
- Re-finishing of damaged stainless-steel handrails and providing a "once over" for a like new appearance on all stainless-steel handrails, and physically re-tightening of each point supported attachment on all glass.
- At the location on the jail side, we have included the cost of the speaker hole cut out and stainless-steel glass clamps to minimize the defection of the glass in the opening at the (2) locations.
- Finish samples for approval prior to fabrication.
- Loading and unloading of materials on the job site.
- All equipment and scaffolding necessary to execute scope of work.
- All parking and employee transportation is included in this cost.
- The daily setting and re-setting of temporary barriers provided by Hensel Phelps to protect the public from potential hazards.

General exclusions:

- 1) Southwest Metalsmiths, Inc. will provide Errors and Omissions and Professional Liability Insurance on a second-tier basis only. These insurance coverage's will be provided by Southwest utilizing the services of subcontracted professional engineering firms properly licensed in the state the work will be performed for deferred submittals on stairs/rails or other defined design requirements. First tier Error and Omissions and Professional Liability Insurance is specifically excluded on all projects regardless if the requirement is stipulated in the instructions to bidders, contractual obligations, specifications or other documents.
- 2) Design calculations for effects of deferred submittal connections to supporting structure.
- 3) Surveys outside of this specific scope of work.
- 4) Cost for building department submittals if required.
- 5) Permits and/or fees.
- 6) Anchor bolts, embeds, holes or fasteners for other trades.
- 7) Structural steel or bracing supporting the work.
- 8) General liability insurance coverage in excess of \$ 5,000,000.00 & Workmen's compensation insurance in excess of statutory limits.
- 9) Acceptance of liquidated damage clauses
- 10) Any item of work not specifically mentioned in this proposal.
- 11) Retention of any kind.

5026 EAST BEVERLY ROAD PHOENIX, ARIZONA 85044 TEL: (602) 438-8577 FAX: (602) 438-8579

www.swmetalsmiths.com

3140 POLARIS AVENUE SUITE 40 LAS VEGAS, NV 89102 TEL: (702) 368-6760 FAX: (702) 368-6762

NV 029811



Terms and Conditions:

- 1. This proposal is subject to change if not accepted within 60 days
- 2. This proposal may be withdrawn without any liability to SMI Inc. if the buyers subcontract Terms and Conditions are not accepted.
- 3. We are not responsible for protecting our work after installation or repairing damage to our work caused by others.
- 4. Terms of payments are net 30 days.
- 5. No overtime is included in this proposal.
- 6. SMI will not proceed with any change order that adds cost to our contract without a written approval for this scope of work, value of the added work and any additional time required to complete the added Scope of work.
- 7. Written change orders are considered approved when issued and not subject to additional approvals
- 8. Notice of property damage caused by SMI must be submitted in writing within 24 hours of the occurrence.
- 9. We do not accept back charges for damages that are not caused by SMI.
- 10. Stored materials include fabricated and non-fabricated materials purchased for this project.
- 11. Progress Billings include stored materials; all Materials are to be stored in an off-site bonded warehouse for staging and consolidation prior to shipping to the jobsite.
- 12. This proposal is limited to the itemized scope of work described herein; the exclusions, terms and the Conditions listed above.

Thank you for the opportunity to quote this scope of work. Sincerely,

9-5

Jim Toney

Vice President - Sales

Southwest Metalsmiths Inc.

5026 EAST BEVERLY ROAD PHOENIX, ARIZONA 85044 TEL: (602) 438-8577 FAX: (602) 438-8579

www.swmetalsmiths.com

3140 POLARIS AVENUE, SUITE 40 LAS VEGAS, NV 89102 TEL: (702) 368-6760 FAX: (702) 368-6762



5026 EAST BEVERLY ROAD PHOENIX, ARIZONA 85044 TEL: (602) 438-8577 FAX: (602) 438-8579

www.swmetalsmiths.com

3140 POLARIS AVENUE, SUITE 40 LAS VEGAS, NV 89102 TEL: (702) 368-6760 FAX: (702) 368-6762



BID PROPOSAL

PROJECT:	Denver Justice Center Temp Walls	DATE:	06/21/18
FIRM:	Hensel Phelps Construction	ATTN:	Robert Saucerman
TYPE WORK:	Temporary Walls	CSS CONTACT:	Jim Kruse

BID INCLUSIONS:

- 1. This proposal is good for 30 days from the above date. Warranty period is figured at 1 Year date of substantial completion.
- 2. Our standard insurance limits are 2 Mil. Per occurrence and 5 Mil. Umbrella.
- 3. Coordination meeting prior to start of work required.
- 4. Material pricing good thru July 2018.
- 5. This bid is based on email dated 5/7/18.
- 6. Build 150 panels in our shop for temporary partitions. These panels are 3 5/8" x 20 GA studs with one layer of 4" white melamine sheathing on one side. Walls have a brace to the floor with carpet between the floor and track and the finished floor.
- 7. Panels are 4' wide x 6' tall. Since they are temporary; this will not look like a finished product. The panels will be uneven and there may be small gaps between panels.
- 8. We will deliver and setup the panels initially with two other moves during the project. We will remove the panels when the project is complete.
- 9. We have included the Davis Bacon wage rates in our bid.

General Notes:

- 1. Framing assemblies in conflict with MEP systems are figured to be constructed prior to MEP including top-out drywall and top of wall sealants where they apply. Add cost will apply for systems installed out of sequence.
- 2. Framed openings for other trades will need to be done during the framing process. Openings are to be laid out by the affected trade. Openings needed after the framing process will be done on a T&M basis.
- 3. No back charge will be accepted without 48 hours written notice and the opportunity for Copper Spring Solutions LLC to make the necessary corrections with our own forces.
- 4. Trash containers are to be within reasonable distance to the building, supplied and maintained by the General Contractor.
- 5. During cold weather, building needs to be maintained at a temperature of 55 degrees per the Gypsum Association's Guide to Cold Weather Finishing. This temperature needs to be maintained once finishing begins until final turnover of the building. Cracking or joint shrinkage caused by improper temperature is not covered by the warranty of this scope.

U4			management of the second secon	ter pelija, ange paljonga, majorak mengeleka karang pelij	and the second s	ومعاله ومعاوده ومستواله والمتابي معامر							
BID EXCLUS	SIONS:	See page two of this proposal.											
ADDENDA:	None		TAX:	INCLUDED	7.65%	Bond	Rate 2.75%						
BASE BID:													
ALTERNATE	ES:	Items b	elow are not fi	gured in base bid	above								
1.													
2.		r- *											
<i>3</i> .													
4.													
5.	والمنافعة المنافعة والمنافعة والمنافعة والمنافعة والمنافعة والمنافعة والمنافعة والمنافعة والمنافعة والمنافعة والمنافعة		ann an aireann ach a' naoigh bh'i ann ann a bhliann ann a' abh a se an bhliann.	and per section of the section of th									
TOTAL							73,082.00						

BOND - 2,010 - 4,010 -

BID PROPOSAL

PROJECT:	ويروني ووها والمهار والمالي والمالي والمالي والمالي والمالي والمراوي والمراوي والمالي		The street of th	DATE:			ikida ji piradayila ya ujirika katawa atin anatakigii atinan ataha kintakin PPP ara	and a second contract of the second contract
FIRM:	ar gan gamen variante et auto varia varia e nova e nava de autorio e e e e e e e e e e e e e e e e e e e	AND THE RESERVE OF THE PARTY OF		ATTN:			in description of the control of the	
TYPE WORK:	Meta	al Studs, Drywall ar	nd ACT	CSS CO	NTACT:			
BID EXCLUSIO	NS:		- Marine Management and proof by Early Annual State Committee of Committee C					
!. Heat, Water, Light;	110 & 220 F	Power; Wood Fram	ing, Blocking	& Plywood; Me	tal Strap Blockin	g; Layout; Ex	cisting Floor Pr	otection; Finish
Caulking; Waste Re	emoval from .	Jobsite; Trash Chu	tes & Trash Bı	ucket Equipped j	forklift; Thermal	insulation		
. Off-Hour And Over								
Installation of door	-	l hardware. Furnisi	h and installat	ion of access do	ors.			
4. All fire rated assem		•						
5. Drywall primer/sea					0.			
6. Level 5 finishes for	-							
7. Architectural trim 1			nts; Column C	'overs; Metal exc	ceeding 14ga			
8. Grid Ceiling; Tenti								
FRP & GFRG and	similar prodi	ucts unless specifica	ally included.					
10.								
11.								
12.								
<i>'</i> 3.								
14.								
16.								
17.								
18.								
19.								
20.								
21.								
22.								
23.								
24.								
25.								
26.								
27.								
28.								
29.								
<i>30</i> .								
<i>31</i> .								
32.								
33.								
34.								
35.								
36.								

BID PROPOSAL

FIRM: Metal Studs, Drywall and ACT CSS CONTACT: DESCRIPTION UNITS UNIT COST TOTAL COST	
DESCRIPTION UNITS UNIT COST TOTAL COST	
DESCRIPTION UNITS UNIT COST TOTAL COST	
PESCRITION CIVIL CIVIL COST TOTHE COST.	rage control of succession and other control decreases and on the
	,



Job Name

LFC - Glass Guardrail Replacement

Owner: City and County of Denver

Architect: GKK

Estimate Type: GMP Estimate

Current Date: 29-Aug-2018

Plains District Office

420 Sixth Avenue Greeley, CO, 80631 Phone: 970.352.6565 Fax: 970.352.9311

Estimator: RBS

EXHIBIT L

LFC - Glass Guardrail Replacement GMP Estimate

Owner: City and County of Denver

Architect: GKK

Drawing Date: 28-Aug-2015

Revision No: 00

PROJECT SECTOR: CONSTINUT OF MEASURE: CONDARY UNIT OF MEASURE: CON			Se	ctor A			
Contractor's FLOOR AREA: SECONDARY UNIT OF MEASURE: 1,000,000 GSF 1,000		PROJECT SECTOR:			1	「otal	
SEC. PARAMETER \$/GSF AMOUNT \$/GSF							
SEC. PARAMETER		GROSS FLOOR AREA:	1,000,	000 GSF			
C100							
C1010 Partitions	SEC.		\$/GSF	AMOUNT	\$/GSF	AMOUNT	%
Subtotal - INTERIORS 1.19	C10	INTERIOR CONSTRUCTION	{ 1.19 }	1,187,801	{ 1.19 }	1,187,801	67.34%
F101 Special Structures Subtotal - Special Structures Special Structures Subtotal - Special Structures Subtotal - Special Structures Subtotal - Special Structures Subtotal - Special Structures Special Str	C1010	Partitions	1.19	1,187,801	1.19	1,187,801	
Subtotal - SPECIAL CONST. D.10 95,431 D.10		Subtotal - INTERIORS	1.19	1,187,801	1.19	1,187,801	67.34%
Subtotal - SPECIAL CONST. 1.28 1,283,232 1.28 1,283,232 72.75%	F10	SPECIAL CONSTRUCTION	{ 0.10 }	95,431	{ 0.10 }	95,431	5.41%
Total - Building and Site GENERAL CONDITIONS General Conditions 0.20 203,454 0.20 203,454 11.53% 11.53% Vertical Hoisting 0.00 0.00 0.000 0.000% 0.000% Subtotal - GENERAL CONDITIONS INDIRECTS & RESERVES	F1010	Special Structures	0.10	95,431	0.10	95,431	
Seneral Conditions Ceneral Conditions Ceneral Conditions Ceneral Conditions Ceneral Conditions Ceneral Conditions Ceneral Conditions Ceneral Conditions Ceneral Conditions Ceneral Conditions Ceneral Conditions Ceneral Conditions Ceneral		Subtotal - SPECIAL CONST.	0.10	95,431	0.10	95,431	5.41%
Z1010 General Conditions D.20 203,454 D.20 203,454 D.20 D.00		Total - Building and Site	1.28	1,283,232	1.28	1,283,232	72.75%
Vertical Hoisting 0.00 0 0.00 0 0.00% Subtotal - GENERAL CONDITIONS INDIRECTS & RESERVES		GENERAL CONDITIONS					
Vertical Hoisting 0.00 0 0.00 0 0.00% Subtotal - GENERAL CONDITIONS INDIRECTS & RESERVES	Z1010	General Conditions	0.20	203,454	0.20	203,454	11.53%
Subtotal - GENERAL CONDITIONS INDIRECTS & RESERVES	Z1015	Vertical Hoisting	0.00	0	0.00		0.00%
NDIRECTS & RESERVES Contractor's Bonds 0.01 9,702 0.01 9,702 0.55%				203.454		203.454	
Z1020 Contractor's Bonds 0.01 9,702 0.01 9,702 0.55% Z1025 Subcontractor & Supplier Bonds 0.00 In COW 0.00 In COW Z1030 Builder's Risk Insurance 0.00 1,806 0.00 1,806 0.10% Z1040 General Liability Insurance 0.01 9,555 0.01 9,555 0.54% Z1050 Permits 0.01 12,261 0.01 12,261 0.70% Z1070 A & E Design Costs 0.00 By Owner 0.00 By Owner Z1080 Professional Liability Insurance 0.00 By A/E 0.00 By A/E Z1090 Gross Receipts Tax 0.00 Not Reqd. 0.00 By A/E Z1100 Utility Development & Tap Fees 0.00 By Owner 0.00 By Owner Z1110 Hazardous Material Abatement 0.00 By Owner 0.00 By Owner Z1120 Testing & Inspections 0.00 By Owner 0.00 By Owner							
Subcontractor & Supplier Bonds D.00	Z1020	Contractor's Bonds	0.01	9.702	0.01	9.702	0.55%
Z1030 Builder's Risk Insurance 0.00 1,806 0.00 1,806 0.10%							
Z1040 General Liability Insurance 0.01 9,555 0.01 9,555 0.54% Z1050 Permits 0.01 12,261 0.01 12,261 0.70% Z1070 A & E Design Costs 0.00 By Owner 0.00 By Owner Z1080 Professional Liability Insurance 0.00 By A/E 0.00 By A/E Z1090 Gross Receipts Tax 0.00 Not Reqd. 0.00 Not Reqd. Z1100 Utility Development & Tap Fees 0.00 By Owner 0.00 By Owner Z1110 Hazardous Material Abatement 0.00 By Owner 0.00 By Owner Z1120 Testing & Inspections 0.00 By Owner 0.00 By Owner Z1130 Escalation 0.00 None 0.00 None Z1140 Contractor Contingency 0.04 35,280 0.04 35,280 2.00% Z1150 Preconstruction Costs 0.00 0 0.00 0 0.00% Z1160 Textura 0.01 5,850 0.01 5,850 0.33% Z1190 G & A - Corporate 0.04 44,100 0.04 44,100 2.50% Subtotal - INDIRECTS & RESERVES 0.12 118,554 0.12 118,554 6.72% FEES Contractor's Fee 0.16 158,760 0.16 158,760 9.00%		• •					0.10%
Z1050 Permits		General Liability Insurance		· ·		·	
Z1070		1		·		*	
Z1080 Professional Liability Insurance 0.00 By A/E 0.00 By A/E 21090 Gross Receipts Tax 0.00 Not Reqd. 0.00 Not Reqd. 0.00 Not Reqd. 21100 Utility Development & Tap Fees 0.00 By Owner 0.00 By Owner 0.00 By Owner 21110 Hazardous Material Abatement 0.00 By Owner 0.00 By Owner 21120 Testing & Inspections 0.00 By Owner 0.00 By Owner 21130 Escalation 0.00 None 0.00 None 21140 Contractor Contingency 0.04 35,280 0.04 35,280 2.00% 21150 Preconstruction Costs 0.00 0 0.00 0 0.00% 21160 Textura 0.01 5,850 0.01 5,850 0.33% 21190 G & A - Corporate 0.04 44,100 0.04 44,100 2.50% Subtotal - INDIRECTS & RESERVES 0.12 118,554 0.12 118,554 6.72% EES Contractor's Fee 0.16 158,760 0.16 158,760 9.00% 3.				·		·	
Z1090 Gross Receipts Tax 0.00 Not Reqd. 0.00 Not Reqd. Z1100 Utility Development & Tap Fees 0.00 By Owner 0.00 By Owner Z1110 Hazardous Material Abatement 0.00 By Owner 0.00 By Owner Z1120 Testing & Inspections 0.00 By Owner 0.00 By Owner Z1130 Escalation 0.00 None 0.00 None Z1140 Contractor Contingency 0.04 35,280 0.04 35,280 2.00% Z1150 Preconstruction Costs 0.00 0 0.00 0 0.00% Z1160 Textura 0.01 5,850 0.01 5,850 0.33% Z1190 G & A - Corporate 0.04 44,100 0.04 44,100 2.50% Subtotal - INDIRECTS & RESERVES 0.12 118,554 0.12 118,554 6.72% FEES Z1060 Subtotal - FEES 0.16 158,760 0.16 158,760 9.00% Subtotal - FEES 0.16 158,760 0.16 158,760 9.00% Subtotal - FEES 0.16 158,760 0.06 0.06 0.00%		_		•		-	
Z1100 Utility Development & Tap Fees 0.00 By Owner 0.00 By Owner Z1110 Hazardous Material Abatement 0.00 By Owner 0.00 By Owner Z1120 Testing & Inspections 0.00 By Owner 0.00 By Owner Z1130 Escalation 0.00 None 0.00 None Z1140 Contractor Contingency 0.04 35,280 0.04 35,280 2.00% Z1150 Preconstruction Costs 0.00 0 0.00 0 0.00 0 0.00% Z1190 G & A - Corporate 0.01 5,850 0.01 5,850 0.33% Z1190 G & A - Corporate 0.04 44,100 0.04 44,100 2.50% FEES Z1060 Contractor's Fee 0.16 158,760 0.16 158,760 9.00% Subtotal - FEES 0.16 158,760 0.16 158,760 9.00%		-		•		-	
Z1110 Hazardous Material Abatement 0.00 By Owner 0.00 By Owner Z1120 Testing & Inspections 0.00 By Owner 0.00 By Owner Z1130 Escalation 0.00 None 0.00 None Z1140 Contractor Contingency 0.04 35,280 0.04 35,280 2.00% Z1150 Preconstruction Costs 0.00 0 0.00 0 0.00% Z1160 Textura 0.01 5,850 0.01 5,850 0.33% Z1190 G & A - Corporate 0.04 44,100 0.04 44,100 2.50% Subtotal - INDIRECTS & RESERVES FEES 0.12 118,554 0.12 118,554 6.72% Z1060 Contractor's Fee 0.16 158,760 0.16 158,760 9.00%		•		-		· ·	
Z1120 Testing & Inspections 0.00 By Owner 0.00 By Owner Z1130 Escalation 0.00 None 0.00 None Z1140 Contractor Contingency 0.04 35,280 0.04 35,280 2.00% Z1150 Preconstruction Costs 0.00 0 0.00 0 0.00% Z1160 Textura 0.01 5,850 0.01 5,850 0.33% Z1190 G & A - Corporate 0.04 44,100 0.04 44,100 2.50% Subtotal - INDIRECTS & RESERVES FEES 0.16 158,760 0.16 158,760 9.00% Z1060 Contractor's Fee 0.16 158,760 0.16 158,760 9.00%				•		-	
Z1130 Escalation 0.00 None 0.00 None Z1140 Contractor Contingency 0.04 35,280 0.04 35,280 2.00% Z1150 Preconstruction Costs 0.00 0 0.00 0 0.00% Z1160 Textura 0.01 5,850 0.01 5,850 0.33% Z1190 G & A - Corporate 0.04 44,100 0.04 44,100 2.50% Subtotal - INDIRECTS & RESERVES FEES 0.12 118,554 0.12 118,554 6.72% Z1060 Contractor's Fee 0.16 158,760 0.16 158,760 9.00%				•		-	
Z1140 Contractor Contingency 0.04 35,280 0.04 35,280 2.00% Z1150 Preconstruction Costs 0.00 0 0.00 0 0.00% Z1160 Textura 0.01 5,850 0.01 5,850 0.33% Z1190 G & A - Corporate 0.04 44,100 0.04 44,100 2.50% Subtotal - INDIRECTS & RESERVES 0.12 118,554 0.12 118,554 6.72% FEES Z1060 Contractor's Fee 0.16 158,760 0.16 158,760 9.00% Subtotal - FEES 0.16 158,760 0.16 158,760 9.00%				•		•	
Z1150 Preconstruction Costs 0.00 0 0.00 0 0.00% Z1160 Textura 0.01 5,850 0.01 5,850 0.33% Z1190 G & A - Corporate 0.04 44,100 0.04 44,100 2.50% Subtotal - INDIRECTS & RESERVES FEES 0.12 118,554 0.12 118,554 6.72% Z1060 Contractor's Fee 0.16 158,760 0.16 158,760 9.00% Subtotal - FEES 0.16 158,760 0.16 158,760 9.00%							2 00%
Z1160 Textura 0.01 5,850 0.01 5,850 0.33% Z1190 G & A - Corporate 0.04 44,100 0.04 44,100 2.50% Subtotal - INDIRECTS & RESERVES 0.12 118,554 0.12 118,554 6.72% Z1060 Contractor's Fee 0.16 158,760 0.16 158,760 9.00% Subtotal - FEES 0.16 158,760 0.16 158,760 9.00%							
Z1190 G & A - Corporate 0.04 44,100 0.04 44,100 2.50% Subtotal - INDIRECTS & RESERVES 0.12 118,554 0.12 118,554 6.72% Z1060 Contractor's Fee 0.16 158,760 0.16 158,760 9.00% Subtotal - FEES 0.16 158,760 0.16 158,760 9.00%				•		_	
Subtotal - INDIRECTS & RESERVES 0.12 118,554 0.12 118,554 6.72%							
Z1060 FEES Contractor's Fee 0.16 158,760 0.16 158,760 9.00% Subtotal - FEES 0.16 158,760 0.16 158,760 9.00%	21100	1					
Z1060 Contractor's Fee 0.16 158,760 0.16 158,760 9.00% Subtotal - FEES 0.16 158,760 0.16 158,760 9.00%			0.12	110,004	0.12	110,004	J.12/0
Subtotal - FEES 0.16 158,760 0.16 158,760 9.00%	<i>7</i> 1060		0.16	158 760	0.16	158 760	9 00%
	2.000						
1317.2 301101101010101010101010101010101010101				· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
SECONDARY UNIT COST 17,640 EACH 17,640 EACH							100.0070

The information contained in this estimate is the proprietary property of Hensel Phelps and may be used only by the authorized recipient. Any reproduction or other reuse of this estimate or portions thereof without the express consent of Hensel Phelps is strictly prohibited.



Estimator: RBS, Estimate Checker: CC Current Date: 29-Aug-2018

Workbook: DJC GMP Estimate - 20180824.xlsrr

Boeckh's Data: City, State / Usage / Construction Type / 2000 / Jul - Aug 2018

EXHIBIT L

			ss Guardrail Estimate		ss Guardrail Estimate	Diffe	rence - increas	e / (decre	ease) from previous Estimate
	Estimate Comparison:	GSF U	nit Costs	GSF Unit Costs 1,000,000 GSF		GSF	Unit Costs	%	
	Listimate Companison.	1,000,	000 GSF) GSF	100%	Comments
		100 EACH		100 EACH		0	EACH	100%	
		\$/GSF	AMOUNT	\$/GSF	AMOUNT	\$/GSF	AMOUNT		
	INTERIOR CONSTRUCTION	{ 1.19 }	1,187,801	{ }	1,202,313	`	(14,512)	99%	
C1010	Partitions	1.19	1,187,801		1,202,313	1.19	(14,512)	99%	
	Subtotal - INTERIORS	1.19	1,187,801		1,202,313	1.19	(14,512)	99%	
F10	SPECIAL CONSTRUCTION	{ 0.10 }	95,431	, ı	0	{ 0.10 }	95,431	0%	
F1010	Special Structures	0.10	95,431	1 1	0	0.10	95,431	0%	
1 1010	Subtotal - SPECIAL CONST	0.10	95,431		0	0.10	95,431	0%	
	Total - Building and Site	1.28	1,283,232		1,202,313	1.28	80,919	107%	
	GENERAL CONDITIONS	1.20	1,203,232		1,202,313	1.20	60,919	107 /6	
Z1010	General Conditions	0.20	203,454		155,124	0.20	48,330	131%	
Z1010	Vertical Hoisting	0.00	203,434		155,124	0.20	40,330	0%	
21013	Subtotal - GENERAL CONDITIONS	0.20	203,454		155.124	0.00	48,330	131%	
	INDIRECTS & RESERVES	0.20	203,434		133,124	0.20	40,330	131/0	
Z1020	Contractor's Bonds	0.01	9,702		8,800	0.01	902	110%	
Z1025	Subcontractor & Supplier Bonds	0.00	In COW		20,000	0.00	(20,000)	0%	
Z1030	Builder's Risk Insurance	0.00	1,806		1,579	0.00	227	114%	
Z1040	General Liability Insurance	0.01	9,555		9,317	0.01	238	103%	
Z1050	Permits	0.01	12,261		0,017	0.01	12,261	0%	
Z1070	A & E Design Costs	0.00	By Owner		Ö	0.00	0	0%	
Z1080	Professional Liability Insurance	0.00	By A/E			0.00	0	0%	
Z1090	Gross Receipts Tax	0.00	Not Regd.			0.00	0	0%	
Z1100	Utility Development & Tap Fees	0.00	By Owner			0.00	0	0%	
Z1110	Hazardous Material Abatement	0.00	By Owner			0.00	0	0%	
Z1120	Testing & Inspections	0.00	By Owner			0.00	0	0%	
Z1130	Escalation	0.00	None			0.00	0	0%	
Z1140	Contractor Contingency	0.04	35,280		24,046	0.04	11,234	147%	
Z1150	Preconstruction Costs	0.00	0		0	0.00	0	0%	
Z1160	Textura	0.01	5,850		ő	0.01	5,850	0%	
Z1190	G & A - Corporate	0.04	44,100		39,477	0.04	4,623	112%	
	Subtotal - INDIRECTS & RESERVES	0.12	118,554		103,219	0.12	15,335	115%	1
	FEES		, , ,		, · ·]				
Z1060	Contractor's Fee	0.16	158,760		118,432	0.16	40,328	134%	
	Subtotal - FEES	0.16	158,760		118,432	0.16	40,328	134%	1
	TOTAL CONSTRUCTION COST	1.76	1,764,000		1,579,088	1.76	184,912	112%	1
	SECONDARY UNIT COST	17,640	EACH		, , ,	17,640	EACH		1



LFC - Glass Guardrail Replacement Back-Up Estimate Detail

Owner: City and County of Denver

Architect: GKK

Drawing Date: N/A Revision No: 00

	PARAMETER / ITEM OF WORK	FSR	USER 1	USER 2	USER 3	USER 4	QUANTITY	UNIT	\$/UNIT	TOTAL
,	A - Glass Replacement					(1,000,000	GSF)	
82	10 - INTERIOR CONSTRUCTION					-				
83	C1010 - Partitions									
84	SC 1 - Replace Stair 6 Sloped Glass - SWM						2,522	SQFT	233.76	589,553
85	SC 2 - Replace Atrium Levels 2, 3, 4 and 5 Glass Handrail - SWM						1,939	SQFT	206.62	400,641
86	SC 3 - Replace East and West Glass Elevations at Pedestrian Bridge -	SWM					376	SQFT	224.48	84,404
87	SC 4 - Replace Back of House Glass - SWM						1,282	SQFT	81.44	104,403
99	SC 5 - Replace Jail Glazing - Allowance						1	LSUM	5,800.00	5,800
	SC 6 - Glass Down payment Cost - 90 Day Line of Credit						1	LSUM	3,000.00	3,000
101							-	-	-	0
102							C1010 Subtotal		1.19	1,187,801
305	10 - SPECIAL CONSTRUCTION									
306	F1010 - Special Structures									
307	Fabricate, Deliver, Set Up and Remove Temporary Walls - Copper Spri	ngs Solu	tions				3,600	GSF	20.86	75,092
308	Additional Scaffold Rental - Preconstruction Estimate included cost the	rough Se	ptember.				8	MO	2,542.31	20,338
309		•					-	-	-	0
310							F1010 Subtotal		0.10	95,431

JOB NAME: LFC - Glass Guardrail Replacement PROJECT SIZE: 1,000,000

PROJECT DURATION: 6 Mo. START DATE: Nov 2018

ITEM	ITEM	QTY	UNIT	MATE	RIAL	EQUIP.	/SUBS.	LABOR		TOTAL	
CODE	I I EIVI	QII	UNII	\$/UNIT	AMOUNT	\$/UNIT	AMOUNT	\$/UNIT	AMOUNT	TOTAL	
•	SUPERVISION & ADMINISTRATION										
100.100	PROJECT MANAGER	2.50	MO	600.00	1,500	675.00	1,688	17,044.00	42,610	45,798	
100.101	OPERATIONS MANAGER		MO	550.00	0	675.00	0	19,469.00	0	0	
100.105	GENERAL SUPERINTENDENT		MO	550.00	0	675.00	0	19,525.00	0	0	
100.110	PROJECT SUPERINTENDENT		MO	550.00	0	675.00	0	17,822.00	0	0	
100.120	AREA SUPERINTENDENT	6	MO	600.00	3,600	700.00	4,200	15,535.00	93,210	101,010	
100.130	PROJECT ENGINEER	2.50	MO	700.00	1,750		0	13,643.00	34,108	35,858	
100.138	SAFETY MANAGER		MO	550.00	0	675.00	0	16,206.00	0	0	
100.139	SAFETY ENGINEER		MO		0		0	13,258.00	0	0	
100.140	OFFICE ENGINEER		MO		0		0	11,595.00	0	0	
100.145	OFFICE MANAGER		MO		0		0	7,032.00	0	0	
100.148	INTERNS		MO		0		0	4,606.00	0	0	
100.150	FIELD ENGINEER		MO		0		0	11,250.00	0	0	
100.155	RODMAN & HELPERS		MO		0		0	7,903.00	0	0	
100.160	FIELD ENGINEERS EQUIPMENT		MO	130.00	0	250.00	0	0.00	0	0	
100.161	PROFESSIONAL SURVEYOR		HR		0	125.00	0	0.00	0	0	
100.162	DRAFTSMAN - DETAILERS		MO		0		0	7,903.00	0	0	
100.163	SECRETARY		MO		0		0	6,376.00	0	0	
100.165	TIMEKEEPER - CHECKER		MO		0		0	5,291.00	0	0	
100.170	QC MANAGER		MO	550.00	0	675.00	0	17,574.00	0	0	
100.171	QC LEAD		MO		0	-	0	15,168.00	0	0	
100.172	QC ENGINEER		MO		0		0	12,627.00	0	0	
100.173	MEP COORDINATOR		MO		0		0	15,168.00	0	0	
100.174	LEAD VDC ENGINEER		MO		0		0	14,754.00	0	0	
100.175	VDC ENGINEER		MO		0		0	13,222.00	0	0	
100.176	SENIOR ESTIMATOR		MO	550.00	0	675.00	0	18,020.00	0	0	
100.176	LEAD ESTIMATOR		MO	-	0		0	14,754.00	0	0	
100.177	DESIGN MANAGER		MO	550.00	0	675.00	0	18,071.00	0	0	
100.177	SCHEDULER		MO	550.00	0	675.00	0	15,125.00	0	0	
100.178	ESTIMATOR (BUYOUT)		MO		0		0	14,754.00	0	0	
100.179	JOBSITE ACCOUNTANT		MO		0		0	7,884.00	0	0	
100.180	BUSINESS EXPENSES		MO	1,000.00	0		0		0	0	
100.181	BUSINESS TRAVEL		TRIP		0	3,500.00	0		0	0	
100.182	HOME OFFICE TRAVEL (HNL TO JOBSITE)		MO	-	0	100.00	0		0	0	
100.183	TRAINING/SEMINAR TRAVEL		TRIP	-	0	3,500.00	0		0	0	
100.184	ESTIMATING TRAVEL		TRIP		0	3,500.00	0		0	0	
100.500	MOVING & RELOCATE (PM/PS)		EACH		0	25,000.00	0		0	0	
100.501	MOVING & RELOCATE (AS)		EACH		0	25,000.00	0		0	0	
100.502	MOVING & RELOCATE (PE)		EACH		0	17,000.00	0		0	0	
100.503	MOVING & RELOCATE (FE/OE)		EACH		0	17,000.00	0		0	0	
100.504	MOVING & RELOCATE (QC/SAFETY)		EACH		0	17,000.00	0		0	0	
100.505	SHIP VEHICLES		EACH		0	1,250.00	0		0	0	
100.600	PARTNERING		LSUM	 F 0F	0	10,000.00	0		0	<u>0</u> 58	
	HEAD TAX	11	MMO	5.25	58		0		-		
	TOTAL SUPERVISION & ADMINISTRATION				6,908		5,888		169,928	182,723	
	ENGINEERING & SURVEY WORK										
110.920	ADDITIONAL PLANS		SET	350.00	0		0		0	0	
110.930	DRAWING PRINTING		LSUM	5,000.00	0		0		0	0	
110.931	CADD FOR AS-BUILTS		MIL	100.00	0		0		0	0	
100.932	PRINTS FOR AS-BUILTS		SHTS	1.25	0		0	-	0	0	

JOB NAME: LFC - Glass Guardrail Replacement PROJECT SIZE: 1,000,000

PROJECT DURATION: 6 Mo. START DATE: Nov 2018

ITEM	ITEM	QTY	UNIT	MATE		EQUIP.	/SUBS.	LABOR		TOTAL	
CODE	HEM	QIT	UNII	\$/UNIT	AMOUNT	\$/UNIT	AMOUNT	\$/UNIT	AMOUNT	IOIAL	
10.940	OPERATION & MAINTENANCE MANUALS	2		500.00	1,000		0		0	1,000	
10.950	LASER SCANNING		LSUM		0		0		0	0	
10.951	3-D MODELING SERVICES		LSUM		0		0		0	0	
	TOTAL ENGINEERING & SURVEY WORK				1,000		0		0	1,000	
	SAFETY & FIRST AID										
120.000	PRE-EMPLOYMENT SCREENING - SALARIED		EACH		0	200.00	0		0	0	
120.005	SAFE TRAINING (HPCC & SUBS)		EACH		0	25.00	0		0	C	
120.100	SAFETY EQUIPMENT - SALARIED		MNMO	20.00	0		0		0	C	
120.110	SAFETY AWARDS - SALARIED		MNMO	26.00	0		0		0	C	
20.150	AED		EACH	2,000.00	0		0		0	C	
20.200	FIRST AID CABINETS	1	EACH	200.00	200		0		0	200	
20.210	FIRST AID SUPPLIES - SALARIED	6	MNMO	32.75	197		0		0	197	
20.300	FIRE PROTECTION		LSUM	5,000.00	0		0		0	C	
20.310	FIRE EXT (1 EACH/5,000 SQFT) + 1 REFILL	5	EACH	100.00	500		0	50.00	250	750	
20.400	BACKRAILS	763	LNFT	1.50	1,145		0	1.50	1,145	2,290	
20.410	REMOVE STEEL SAFETY CABLE		LNFT		, 0		0	0.50	0	C	
20.420	HORIZ OPENING PROTECTION		SQFT	2.00	0		0	1.50	0	C	
20.450	BARRICADES		LNFT	1.00	0		0	0.50	0	(
20.451	SWPP		LSUM		0		0		0	(
					0		0		0	(
	TOTAL SAFETY & FIRST AID				2,041		0		1,395	3,436	
	TEMPORARY FACILITIES	•	•		•	•	•		•		
130.100	OFFICE TRAILER 24'x60' (INCL FRT/UP&DOWN)		MO	50.00	0	10,000.00	0		0	0	
30.102	OFFICE TRAILER 12' x 60' (INCL FRT/UP&DOWN)		MO	50.00	0	4,000.00	0		0	0	
30.105	OFFICE TRAILER 8'x30' (INCL FRT/UP&DOWN)		MO	50.00	0	3,000.00	0		0	(
30.108	OFFICE TRAILER - OWNER/ARCH/ENG		MO	50.00	0	4,000.00	0		0	(
30.109	RAMPS, DECKS, SKIRTHING @ TRAILERS		SQFT	25.00	0		0	10.00	0	(
30.110	OFFICE FURNITURE	1	PRSN	700.00	700		0		0	700	
30.120	STORAGE & SAW SHEDS (20' CONTAINER)		EACH		0	2,500.00	0		0	(
30.130	TEMPORARY TOILETS		MO		0	175.00	0		0	C	
30.131	WASH STATIONS		MO		0	175.00	0		0	C	
30.140	PROFESSIONAL PHOTOS		EACH		0	500.00	0		0	C	
30.142	PRECONSTRUCTION PHOTO SURVEY		LSUM		0	5,000.00	0		0	(
30.144	MISC PHOTOS FOR HPCC		MNMO		0	35.00	0		0	(
30.150	BULLETIN BOARDS		EACH	500.00	0		0	300.00	0	(
30.151	MISC JOBSITE SIGNS		LSUM		0	5,000.00	0		0	(
30.152	PROJECT SIGN		EACH	500.00	0	200.00	0	3,000.00	0	C	
30.160	OFFICE SUPPLIES & EQUIPMENT		MNMO	200.00	0		0		0	(
30.161	COPIER/FAX/SCANNER RENTAL	6	MNMO	25.00	150	45.00	270		0	420	
30.162	FAX MACHINE		EACH	1,500.00	0		0		0	(
30.163	JOBSITE COMPUTERS		MNMO	60.00	0		0		0	C	
30.164	BIM COMPUTER		EACH	5,000.00	0		0		0	(
30.165	JOBSITE PRINTERS/PLOTTER/SERVER		EACH	50.00	0	2,000.00	0		0	(
30.166	IPAD/TABLET		EACH	750.00	0		0		0	(
30.167	JOBSITE SOFTWARE & MISC		MNMO	50.00	0		0		0	(
30.174	OFFICE SUPPLIES - O/A/E	6	MO	100.00	600		0		0	600	
30.175	POSTAGE & SHIPPING		MNMO		0	80.00	0		0	0	
30.180	CELLULAR PHONE CHARGES	11	MNMO		0	125.00	1,375		0	1,375	
130.100											

JOB NAME: LFC - Glass Guardrail Replacement

PROJECT SIZE: 1,000,000

PROJECT DURATION: 6 Mo. START DATE: Nov 2018

ITEM			MATERIAL EQUIP./SU				/SUBS.	LAE	BOR	TOTAL
CODE	ITEM	QTY	UNIT	\$/UNIT	AMOUNT	\$/UNIT	AMOUNT	\$/UNIT	AMOUNT	TOTAL
130.182	TELEPHONE & INTERNET SERVICE TO TRAILERS		LSUM		0	2.500.00	0		0	0
130.183	TELEPHONE EQUIP PURCHASE - SWITCH		LSUM		0	5.000.00	0		0	0
130.185	TELEPHONE EQUIP PURCHASE - HANDSETS		EACH		0	150.00	0		0	0
130.186	TELEPHONE EQUIP - SETUP		LSUM		0	1.250.00	0		0	0
130.187	NETWORK CABLING IN TRAILER		LSUM		0	1.250.00	0		0	0
130.190	WATCHMAN SERVICE	BY OWNER	WEEK		0	5.000.00	0		0	0
130.200	BOTTLED WATER SERVICE - OFFICE	1	MO	100.00	100		0	0.00	0	100
130.210	LADDERS & STAIRS		EACH	500.00	0		0	500.00	0	0
130.220	TEMP. ROADWAYS & ACCESS		LSUM		0		0		0	0
130.230	TEMPORARY FENCING		LNFT		0	100.00	0		0	0
130.240	TEMPORARY WALKWAYS		LNFT		0	250.00	0		0	0
130.250	TEMP. WATER SERVICE		LNFT		0	100.00	0		0	0
130.252	TEMP. WATER USAGE COST		MO		0	1.000.00	0		0	0
130.260	TEMP POWER (BY ELEC. SUB)		LSUM		0	1,000.00	0		0	0
130.262	TEMP. POWER EQUIP/SUPPLIES		LSUM		0	10.000.00	0		0	0
130.264	TEMP. POWER USAGE COST		MO		0		0		0	0
130.265	TEMP POWER COSTS - TRAILERS		MO		0		0		0	0
130.266	TEMP POWER COSTS - TRAILERS TEMP POWER COSTS - BUILDING		MO		0		0		0	0
130.267	TEMP POWER COSTS - BOILDING TEMP POWER COSTS - START UP		MO		0		0		0	0
130.270	TEMP PARKING AREA		LSUM		0		0		0	0
130.270	EMPLOYEE PARKING FEES - SALARIED	3	MNMO		0	200.00	600		0	600
130.273	EMPLOTEE PARKING PEES - SALARIED	3	IVIINIVIO		0	200.00	000		0	000
+					0		0		0	0
-							-		-	
	TOTAL TEMPORARY FACILITIES				1,550		2,245		0	3,795
	BUILDING SERVICES & CLEAN-UP						•	<u> </u>		
140.100	WEEKLY CLEAN-UP (8MH/WK)		WEEK	25.00	0		0	480.00	0	0
140.105	DUMPSTERS		DUMP	23.00	0	1,000.00	0	400.00	0	0
140.105	JANITORIAL SERVICES - JOBSITE OFFICE		WEEK		0	1,000.00	0		0	0
140.110	FINAL CLEAN-UP ESTIMATE -BLDG	5	TRIPS		0	2,000.00	10,000		0	10.000
140.110	FINAL CLEAN-UP ESTIMATE - PARKING	5	SQFT		0	0.50	0,000		0	0
140.115	HAULING TO & FROM JOB		LOAD		0	3,000.00	0		0	0
140.120			LSUM		0		0		0	0
	PROJECT HAULING WORK		_						0	
140.140	HOISTING FOR SUBS		MO		0		0			0
140.141	PEST CONTROL		LSUM		0	5,000.00	0		0	0
140.142	WARRANTY COST (\$0.08/GSF OR MIN \$15,000)		GSF		0	0.08	0		0	0
					0		0		0	0
	TOTAL BUILDING SERVICES & CLEAN-UP				0		10,000		0	10,000
<u> </u>			I						L	
	INSPECTION & QUALITY CONTROL									
150.000	QUALITY CONTROL SYSTEM		LSUM		0		0		0	0
150.001	TESTING (BY OWNER)		LSUM		0		0		0	0
150.100	CONCRETE TESTING WORK		LSUM		0		0		0	0
150.120	SOILS TESTING WORK		LSUM		0		0		0	0
	ASPHALT TESTING WORK		LSUM		0		0		0	0
150.122			LSUM		0		0		0	0
150.122 150.124	STEEL TESTING WORK		LOOW							
	STEEL TESTING WORK SPRAYED FIREPROOFING TESTING WORK		LSUM		0		0		0	0
150.124				600.00	0	1,500.00	0	650.00	0	0
150.124 150.126	SPRAYED FIREPROOFING TESTING WORK LEAK TEST STRUCTURES	1	LSUM							
150.124 150.126 150.140	SPRAYED FIREPROOFING TESTING WORK	1	LSUM EACH	600.00	0	1,500.00	0	650.00	0	0

PROJECT DURATION: 6 Mo.

START DATE: Nov 2018

JOB NAME: LFC - Glass Guardrail Replacement

PROJECT SIZE: 1.000.000

170.310

170.320

170.330

170.340

ALIMAK DUAL 6.000

CHAMP DUAL 6,000

HOIST ANCHORS

82 CHAMPION MATERIAL HOIST

ITEM **MATERIAL** EQUIP./SUBS. LABOR ITEM QTY UNIT **TOTAL** \$/UNIT AMOUNT \$/UNIT AMOUNT CODE \$/UNIT AMOUNT 15.000.00 150.145 PUNCHLIST SOFTWARE, TABLETS, PROGRAMMING LSUM 0 0 0 0 0 0 0 0 TOTAL INSPECTION & QUALITY CONTROL 2.500 0 2.500 **TEMPORARY HEAT & PROTECTION** 160.100 CONCRETE HEATING & PROT. МО 3.000.00 0 5.000.00 0 7.500.00 0 0 160.105 MASONRY HEATING & PROT. MO 3.000.00 0 5.000.00 0 7.500.00 0 0 160.120 BUILDING HEATING (TEMP.) MO 0 0 0 0 160.140 **BUILDING HEATING (PERM.)** MO 0 0 0 0 0 0 0 0 ___ **TOTAL TEMPORARY HEAT & PROTECTION** 0 0 0 0 **EQUIPMENT & TRANSPORTATION** 170.100 **CRANES** 0 0 0 0 TOWER CRANE SK 315 W/ 237' JIB MO 170.110 0 12.000.00 0 0 0 170.112 TOWER CRANE SK 405 W/ 240' JIB MO 0 17,000.00 0 0 0 ------170.120 TOWER CRANE SK 575 W/ 262' JIB MO 0 24.000.00 0 0 0 170.121 **TOWER CRANE ANCHORS** EACH 0 0 0 0 170.122 **TOWER CRANE FOUNDATION EACH** 0 0 0 0 ---------170.123 TOWER CRANE UP / DOWN **EACH** ---0 ---0 ---0 0 TOWER CRANE JUMP EACH 0 170.124 0 0 0 170.125 **TOWER CRANE TIE-OFFS** MO 0 0 0 0 170.126 **TOWER CRANE FREIGHT** LSUM 0 0 0 0 ---------0 170.127 TOWER CRANE ELEC SERVICE LSUM ---0 ---0 ---0 170.128 TOWER CRANE ELEC BILL MO 0 0 0 0 ------МО 0 TOWER CRANE OPERATOR 0 0 0 170.129 170.130 70 TON CRAWLER CRANE MO 1.200.00 0 8.500.00 0 0 0 170.135 100 TON CRAWLER CRANE 338 210' MAIN BOOM MO 1.200.00 0 5.500.00 0 ---0 0 170.137 150 TON CRAWLER CRANE МО 1,200.00 0 12,500.00 0 0 0 ---MO 850.00 170.140 35 TON TRUCK CRANE 0 4.500.00 0 0 0 170.150 45 TON TRUCK CRANE MO 1.000.00 0 3.500.00 0 0 0 ---170.160 70 TON TRUCK CRANE MO 1.200.00 0 6.500.00 0 0 0 ---170.170 82 TON TRUCK CRANE МО 1.200.00 0 7.500.00 0 0 0 MO 170.175 90 TON TRUCK CRANE 1.200.00 0 8.000.00 0 0 0 МО 0 170.180 15T ROUGH TERRAIN CRANE 900.00 0 2,200.00 0 0 18T ROUGH TERRAIN CRANE MO 1,000.00 3,500.00 0 170.190 0 0 0 170.200 20T ROUGH TERRAIN CRANE MO 1.200.00 0 0 0 0 2.800.00 170.210 30T ROUGH TERRAIN CRANE MO 1,400.00 0 4,500.00 0 0 0 ---170.220 35T ROUGH TERRAIN CRANE MO 1.400.00 0 4.600.00 0 0 0 40T ROUGH TERRAIN CRANE 0 170.230 MO 1,400.00 0 5,000.00 0 0 MO 0 0 170.240 50T ROUGH TERRAIN CRANE RT 750 136' MAIN BOOM 1,400.00 0 0 6,000.00 170.250 60T ROUGH TERRAIN CRANE RT 760E 136' MAIN BOOM MO 1,400.00 0 7,000.00 0 0 0 ---LSUM 170.290 CRANE FREIGHT IN / OUT. SETUP 0 0 0 0 ---170.296 RIGGING / LIFTING DEVICES LSUM 0 0 0 0 ---170.297 CRANE RIGGER / COORDINATOR МО 0 0 0 0 170.298 CRANE OPERATOR MO 0 0 0 0 ---------170.299 CRANE OILER MO 0 0 0 0 ---------170.300 **HOISTS & LANDINGS** ---0 0 0 0 MO

МО

MO

EACH

1.500.00

0

0

0

0

13.000.00

13,000.00

1,100.00

0

0

0

0

0

0

0

0

0

0

0

0

JOB NAME: LFC - Glass Guardrail Replacement PROJECT SIZE: 1,000,000

PROJECT DURATION: 6 Mo. START DATE: Nov 2018

ITEM	ITEM	OTV	LINUT	MATE	MATERIAL		/SUBS.	LAE	BOR	TOTAL
CODE	ITEM	QTY	UNIT	\$/UNIT	AMOUNT	\$/UNIT	AMOUNT	\$/UNIT	AMOUNT	IOIAL
170.341	HOIST FOUNDATION		EACH	400.00	0	150.00	0	400.00	0	0
170.342	HOIST UP / DOWN		EACH	2,000.00	0	5,000.00	0		0	0
170.343	HOIST JUMPS		EACH	500.00	0	1,000.00	0		0	0
170.344	HOIST PLATFORMS		EACH	500.00	0	500.00	0	500.00	0	0
170.345	HOIST FREIGHT IN / OUT		LSUM		0	12,000.00	0		0	0
170.346	HOIST ELEC SERVICE		LSUM		0		0		0	0
170.347	HOIST ELEC BILL		MO		0		0		0	0
170.348	HOIST OPERATOR (1 CAGE)		MO		0		0		0	0
170.349	HOIST OPERATOR (2 CAGE)		MO		0		0		0	0
170.400	**FORKLIFT RENTALS**				0		0		0	0
170.430	LULL - 8000# FORKLIFT		MO	1,000.00	0	2,200.00	0		0	0
170.440	GRADALL - 9000# FORKLIFT 45' REACH		MO	1,000.00	0	2,200.00	0		0	0
170.450	CASE - 4000# FORKLIFT		MO	700.00	0	2,500.00	0		0	0
170.500	**AUTOMOBILES & PICKUPS**				0		0		0	0
170.510	1/2 TON PICKUP		MO	225.00	0	575.00	0		0	0
170.520	3/4 TON PICKUP		MO	225.00	0	575.00	0		0	0
170.540	4 WHEEL DRIVE PICKUP		MO	325.00	0	700.00	0		0	0
170.542	PASSENGER VAN		MO	325.00	0	900.00	0		0	0
170.545	JOHN DEERE GATOR / KAWASAKI MULE		MO	500.00	0	400.00	0		0	0
170.550	SEDAN		MO	250.00	0	575.00	0		0	0
170.555	PE CAR ALLOWANCE		MO		0	500.00	0		0	0
170.600	**TRUCK RENTAL**				0		0		0	0
170.610	1 TON TRUCK		MO	350.00	0	850.00	0		0	0
170.620	2 TON TRUCK		MO	350.00	0	900.00	0		0	0
170.630	WATER TRUCK, 2500 GAL		MO	750.00	0	2,000.00	0		0	0
170.640	WATER TRUCK, 6000 GAL		MO	1.000.00	0	3.000.00	0		0	0
170.645	WATER TRUCK 613		MO	2.000.00	0	2.500.00	0		0	0
170.650	8 YARD MIXER TRUCK		MO	800.00	0	4,500.00	0		0	0
170.700	GENERATOR UNIT RENTAL		MO	400.00	0	1.500.00	0		0	0
170.800	**AIR COMPRESSOR RENTAL**				0		0		0	0
170.810	125 CFM (G) COMPRESSOR		MO	600.00	0	300.00	0		0	0
170.820	150 CFM (G) COMPRESSOR		MO	600.00	0	325.00	0		0	0
170.830	175 CFM (G) COMPRESSOR		MO	600.00	0	410.00	0		0	0
170.840	185 CFM (D) COMPRESSOR		MO	400.00	0	410.00	0		0	0
170.850	250 CFM (D) COMPRESSOR		MO	500.00	0	550.00	0		0	0
170.860	375 CFM (D) COMPRESSOR		MO	700.00	0	850.00	0		0	0
170.880	750CFM (D) COMPRESSOR		MO	1,400.00	0	1,500.00	0		0	0
170.900	**WELDING MACHINE RENTAL**				0		0		0	0
170.910	200 AMP (G) WELDER		MO	500.00	0	185.00	0		0	0
170.920	250 AMP (D) WELDER		MO	400.00	0	225.00	0		0	0
170.930	350 AMP (D) WELDER		MO	400.00	0	250.00	0		0	0
170.940	400 AMP (D) WELDER		MO	400.00	0	300.00	0		0	0
170.950	MISC WELDING SUPPLIES		LSUM	500.00	0		0		0	0
171.000	DEWATERING EQUIPMENT RENTAL		MO		0		0		0	0
171.050	RADIOS BASE STATION		EACH		0	2,500.00	0		0	0
171.051	RADIOS		EACH		0	750.00	0		0	0
171.120	CONCRETE POWER BUGGY		MO	100.00	0	250.00	0		0	0
171.150	56' MORGAN CONVEYOR		MO	500.00	0	2.500.00	0		0	0
170.200	FINISHING MACH. & BLADES		EACH	2,500.00	0		0		0	0
171.300	CONCRETE VIBRATORS		EACH	1.000.00	0		0		0	0
171.400	MISC. POWER EQUIP. @ 3% x LAB		LSUM		0		0		0	0
171.500	SMALL TOOLS @ 3% x LAB		LSUM		0		0		0	0
17 1.000	21411 YEE 100F0 (# 370 Y FUD		LOUIVI		U		U		U	U

JOB NAME: LFC - Glass Guardrail Replacement PROJECT SIZE: 1,000,000

PROJECT DURATION: 6 Mo. START DATE: Nov 2018

ITEM	ITEM	QTY	UNIT	MATE	ERIAL	EQUIP.	/SUBS.	LABOR		TOTAL
CODE	IIEW	QIT	UNII	\$/UNIT	AMOUNT	\$/UNIT	AMOUNT	\$/UNIT	AMOUNT	IOIAL
171.600	REPAIRS & MAINTENANCE @ 10% x EQPT		LSUM		0		0		0	0
	TOTAL EQUIPMENT & TRANSPORTATION				0		0		0	0
	SUMMARY									
	SUPERVISION & ADMINISTRATION		LSUM		6,908		5,888		169,928	182,723
	ENGINEERING & SURVEY WORK		LSUM		1,000		0		0	1,000
	SAFETY & FIRST AID		LSUM		2,041		0	-	1,395	3,436
	TEMPORARY FACILITIES		LSUM		1,550		2,245		0	3,795
	BUILDING SERVICES & CLEAN-UP		LSUM		0		10,000		0	10,000
	INSPECTION & QUALITY CONTROL		LSUM		0		2,500		0	2,500
	TEMPORARY HEAT & PROTECTION		LSUM		0		0		0	0
	EQUIPMENT & TRANSPORTATION		LSUM		0		0		0	0
	SUBTOTAL				11,499		20,633		171,322	203,454
	USE TAX - CONSUMABLES			0.00%	0	0.00%	0			0
	GENERAL EXCISE TAX			0.00%	0	0.00%	0	0.00%	0	0
	FRINGE BENEFITS - SALARIED	169,928	\$					W/Above	0	0
	FRINGE BENEFITS - HOURLY	1,395	\$					W/Above	0	0
	MEDICAL, LIFE & DISABILITY - SALARIED (PER MO)	11	MO					W/Above	0	0

LFC - Glass Guardrail Replacement

Owner: City and County of Denver

Drawing Date: N/A

Architect: GKK

Revision No: 00

Clarifications and Assumptions

- The following Assumptions and Clarifications are provided to convey the basis of the estimate and general approach taken by Hensel Phelps in the preparation of the estimate. The detailed estimate backup provided for each area of the project shall serve as a reference for all scope of work (work activity, assumed quantity and level of quality) which has been taken into account in this estimate. Work not specifically indicated in this detailed backup should be considered Not Included (NIC).
- 2 The estimate is based on five, eight hour workdays per week. All work will be performed at night.
- 3 The estimate does not include an cost associated with contaminated or hazardous materials, soil or water.
- 4 The estimate is based on Shop Drawings prepared by Southwest Metalsmiths.
- 5 The estimate includes an Allowance of \$5,800 for the replacement of Glass Panels in the Jail.
- 6 The estimate includes the rental of Scaffolding from September through the completion of the project.
- 7 The estimate includes access to the site through the main entrance of the Facility. Owner agrees to provide areas within the facility where materials and tools can be stored.
- 8 It is assumed that all materials will be either staged on site or be stored in an off site location. Owner agrees to payment of materials stored off site in a bonded warehouse.
- 9 The 12'-9" glass requires prepayment prior to fabrication. The value of this material is \$61,901. The cost of the glass is included in the cost of work and the finance charge for 90 days is included as a separate line item.
- 10 The estimate includes replacement of all rubber grommets and washers for the glass reinstallation.
- 11 The estimate includes Re-finishing of damaged stainless steel handrails and providing a "once over" for the like new appearance on all stainless steel handrails, and physically re-tightening of each point supported attachment on all glass.
- 12 The estimate includes temporary partitions to protect the public while the glass handrail has been removed.
- 13 This estimate does not include any special disposal requirements. Subcontractor will dispose of waste per all applicable Federal, State, and Local laws.
- 14 Preconstruction costs are not included in this GMP.
- 15 Contractor Contingency shown in this GMP is for use by the Contractor. It is understood that the Owner is carrying its own contingency for its use.
- 16 Schedule includes 222 calendar days from NTP to Substantial Completion. In order to meet the NTP start date the following activities need to be achieved:

Executed Contract

Building Permit

Final Design Documents submitted for permit to City of Denver from GKK

Date Printed: 05-Aug-2001

EXHIBIT M



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 5/4/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

certificate floider if	i ilea di sacii e				
PRODUCER			CONTACT Rebekkah McGuire		
Flood and Peter	rson		PHONE (A/C, No, Ext): (970) 356-0123	FAX (A/C, No): (970) 33	80-1867
PO Box 578			E-MAIL ADDRESS: RMcGuire@FloodPeterson.com		
			INSURER(S) AFF ORDING COVERAGE		NAIC #
Greeley	CO	80632	INSURERA : Zurich American Insurance	Company	16535
INSURED			INSURER B American Guarantee and Lia	ability	26247
Hensel Phelps C	Construction	n Co.	INSURER C:Steadfast Insurance Compar	ny	26387
420 Sixth Avenu	ie		INSURERD:XL Insurance America, Inc.	•	24554
			INSURER E :		
Greeley	CO	80631	INSURER F:		

COVERAGES CERTIFICATE NUMBER:CL1841922908

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL	SUBR		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
LIK		INSD	WVD	PULICY NUMBER	(MMIDDIYYYY)	(MM/DD/YYYY)		5 000 000
l	X COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE DAMAGE TO RENTED	\$ 5,000,000
A	CLAIMS-MADE X OCCUR						PREMISES (Ea occurrence)	\$ 300,000
		.		GL0369726413	1/1/2018	1/1/2019	MED EXP (Any one person)	\$
l							PERSONAL & ADV INJURY	\$ 5,000,000
l	GEN'L AGGREGATE LIMIT APPLIES PER						GENERAL AGGREGATE	\$ 10,000,000
l	POLICY X PRO-						PRODUCTS - COMP/OP AGG	\$ 10,000,000
	OTHER							\$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$ 5,000,000
A	X ANY AUTO					5	BODILY INJURY (Per person)	\$
^	ALL OWNED SCHEDULED AUTOS AUTOS			BAP369726113	1/1/2018	1/1/2019	BODILY INJURY (Per accident)	\$
l	X HIRED AUTOS X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	\$
								\$
В	X UMBRELLA LIAB X OCCUR			AUC928038416	1/1/2018	1/1/2019	EACH OCCURRENCE	\$ 50,000,000
$ _{D}$	EXCESS LIAB CLAIMS-MAD	E					AGGREGATE	\$ 50,000,000
Ļ.	DED RETENTION \$			US00068961LI18A	1/1/2018	1/1/2019		\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			-	· · · · · · · · · · · · · · · · · · ·		X PER OTH-	
ı	ANY PROPRIETOR/PARTNER/EXECUTIVE	71					E L EACH ACCIDENT	\$ 1,000,000
A	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	JN/A		WC369726514	1/1/2018	1/1/2019	E L. DISEASE - EA EMPLOYEE	· ·
l	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	
C	Professional and Pollution			E0C937461714	1/1/2018	1/1/2019	Each Occurrence	\$50,000,000
١٢				E0093/401/14	1/1/2018	1/1/2019		, ,
	Liability						Aggregate	\$50,000,000
		1						

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: Lindsey-Flanigan Courthouse - Glass Guardrail Replacement Project

The City and County of Denver, its elected and appointed officials, employees and volunteers are included as Additional Insured as respects General Liability and Auto Liability. Waiver of subrogation applies.

CERTIFICATE HOLDER	CANCELLATION
City and County of Denver Department of Public Works 201 West Colfax Avenue	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
Denver, CO 80202	AUTHORIZED REPRESENTATIVE
	Kelly Urwiller/KURWIL Kally T. Kariller

CANCELLATION

© 1988-2014 ACORD CORPORATION. All rights reserved.

CERTIFICATE UOI DER